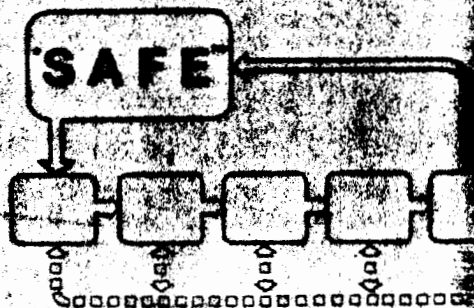


EDUCATION FOR MANAGERS

Guaranteeing Effective Results
by Our System

Billy G. Corbin, M.S.



*Systematic Approach for Effective

SAFE Learning Systems, Inc.
Post Office Box 5089
Anaheim, California 92804

A CALL FOR INDUCATIONAL COUNCILS

Education should be centered on the learner-centered support system. Until the learner succeeds, we have failed. Until the learner's needs are met, we must change our methods and our means of serving that learner.

We must replace existing methods which are failing with those practices which will deliver success and meet the quality educational goals. We must use these more effective practices in order to guarantee success.

We must all commit to the application of these practices, assuring continued success for all learners. Where these commitments will not be made, we must change the people involved.

Ward Corrigan, 1979
Vice President, Corrigan and Associates
(Deceased 1980)

THE PRIMARY COMMITMENT OF EDUCATION MUST BE THE DELIVERY OF
PREDICTABLE LEARNING SUCCESS FOR ALL LEARNERS

AN APPEAL TO ALL EDUCATIONAL PARTNERS

(School Board Members, Parents, Community Leaders, Administrators, and Teachers)

The current educational crises set forth on page one force each one of us to re-evaluate practices that we are currently applying in our schools. Also, where necessary, we must select and apply more effective professional practices to overcome these crises.

An initial and crucial step to be taken is to realize that the professional practices currently applied by our administrators and by our teachers have not delivered success for our learners.

Our present schooling practices are primarily TEACHING-CENTERED. These TEACHING-CENTERED practices focus on the question "What will our teachers teach?" This TEACHING-CENTERED approach, by its design, has not and can not deliver predictable success for our learners.

There is, however, substantial evidence demonstrating the effectiveness of a PROVEN LEARNING-CENTERED TECHNOLOGY which can guarantee the delivery of and the management of quality learning outcomes for ALL LEARNERS.

Therefore, the reported crises in the delivery of successful learning results are based on political not technical factors. The learning technology does exist which can guarantee success for our learners.

Rather than focusing on what a teacher will teach, we must shift our focus to the delivery of predictable success for our learners. This is done through a LEARNING-CENTERED approach; an approach that focuses on answering the question, "What do we do so that our learners will succeed?"

A LEARNING-CENTERED educational approach redirects all efforts to achieving predictable learning success and to applying those professional practices by teachers and administrators required to deliver guaranteed successful learning outcomes.

Refocusing on predictable learning results redefines curriculum design, curriculum implementation, and the nature of the management process (both for the administrator — and — for the teacher as the classroom manager of learning results).

To overcome the previously stated crises we must shift from ineffective professional practices to those practices which have been proven effective to succeed for learners.

We would appeal to educational partners, (parents, school board members, senior school administrators, principals, and teachers) to take the time and to make the effort to learn about LEARNING-CENTERED practices and their proven capability to deliver predictable success for our learners through more effective management of learning results.

The final achievement derived from an understanding and the application of LEARNING-CENTERED practices will be that everyone (as a team) can refocus and, in turn, can commit to, and be assured of the delivery of success for our learners.

With such a commitment by each school district, these crises will become a forgotten threat.

Of greatest importance will be the regaining of the public's confidence in our ability to deliver quality results for our learners.

Dr. Leon Lessinger, Superintendent
Beverly Hills School District, Beverly Hills, CA

Dr. Jack Ward, Associate Superintendent
Mendocino County, California

Dr. Robert Kane, Consultant
Teacher Preparation & Licensing Committee
State of California

Dr. Nolan Estes, Professor of Education, University of Texas

Dr. James McPhail, Chairman, Department of
Educational Administration & Supervision
University of Southern Miss.

Dr. Hosea Grisham, Superintendent
North Panola County School, Mississippi
President, Mississippi Association of
School Administrators

Dr. Hines Cronin, Superintendent
Moss Point School District, Moss Point, Mississippi

Dr. Mel Buckley, Superintendent
Newton Public School, Newton, Miss.

Dr. Robert Morgan, Director
Learning Systems Institute, Florida State University
Tallahassee, FLA

Dr. Roger A. Kaufman, Professor of Education
Florida State University
Tallahassee, FLA

Dr. Homer Coker, Teacher Corp. Program
Georgia State University, Atlanta, GA

Dr. Annette Kearney, Assistant Director
National Council for Negro Women
New York, New York

Dr. John Picton
Beaverton, Oregon

Dr. Louis Zeyen
Deputy Executive Director
American Association of School Administrators

Dr. William Spady, Director
National Center for Improvement of Learning
Arlington, VA

Dr. Gene Gelsert, Professor of Education
St. Johns University, Jamaica, New York

Dr. Al Hoye
Minneapolis Unified School District, Minnesota

Dr. Wilfred Landrus
Chapman College, Professor of Education
Orange, CA

Dr. Robert Corrigan
Corrigan and Associates, Anaheim, California

Mrs. Betty Corrigan
Corrigan and Associates, Anaheim, California

Dedicated to the School Boards of America

This book is dedicated to all the present and future school board members of our schools who, through leadership, can establish the predictable success of today's learners; tomorrow's graduates; the quality of life for future citizens and, indeed, the quality life of every community in America.

"If a nation expects to be ignorant and free, it expects what never was and never will be."

Thomas Jefferson

EDUCATION-FOR-RESULTS: In Response To: A NATION AT RISK

VOLUME I: GUARANTEEING EFFECTIVE PERFORMANCE BY OUR SCHOOLS

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PROLOGUE

Committing to the Feasible Delivery of Effective Educational Results (Nolan Estes, Prior Commissioner of Education)

On April 26, 1983, the National Commission for Excellence in Education presented to President Ronald Reagan its report* on the status of quality education in the United States. This commission was formed by Secretary of Education, Dr. Terrel Bell, in August 1981, to evaluate the current status of our national educational system in terms of its overall performance effectiveness; and, where appropriate, to propose changes in policy, practices, and programs to increase the effectiveness of our schools.

The 20 month evaluation of our national educational system's effectiveness presented by this commission was, to say the least, most disheartening. The "bottom line" of this report presents a picture of our schools as an actual RISK to the future of our nation based on the existing level of mediocrity and ineffectiveness of our schools.

Many areas of ineffective performance were reported with priority focus being on the continuing decline of learning effectiveness (test scores) for high school graduates from 1960 until today.

Also reported was the lack of required skills and knowledge for large percentages of graduates to be qualified to fill jobs in key areas of high technology (science and mathematics) representing the key future arena of commercial

*A Nation at Risk - Report by the National Commission for Excellence in Education.

competition internationally. Problems of discipline with students were discussed as a focus for ineffective performance in our schools.

The beginning of this reported decline in the performance effectiveness of our schools began in the 1960's. As Commissioner of Education (1965-1969), along with other Commissioners, we made substantial investments in grants and programs to develop more effective professional practices to replace those then in operation. We concentrated our investments in two major programs, namely:

A. To increase learning effectiveness (mastery scores) for all learners; and

B. To increase the management effectiveness of the delivery system to increase the measured success for learners.

Several major multi-million dollar programs were initiated in the 1960's consistent with the achievement of the goals stated above. The major focus on development of more effective management-for-results practices and application was OPERATION PEP, State of California. This was a multi-year program involving several hundred senior educational administrators across the state. Dr. Robert E. Corrigan, as director of the training programs, offered to these administrators skills in management-for-results practices encompassed in his Systematic Approach for Effectiveness (SAFE). The acceptance of these practices by these senior educational practitioners is evidenced by the fact that they were applied by Title III management centers across the state of California AFTER the federal funds were removed.

A second key thrust by the Department of Education (1965-1968) was to support the development of new teaching practices which would prove more effective in the delivery of success for learners. A major program was funded for the installation of a Teacher Fellowship program at Chapman College, Orange, California. This program was headed by

Dr. Robert E. Corrigan to develop a Masters Degree in Instruc-
tional system design (ISD). This developing program focused
on the design of a new learning-centered technology developed
by the Corrigans to assure predictable mastery by all learners
of all relevant skills and knowledge in the curricula offered
in our schools.

Since the initiation of these federally supported
programs (1960's), the Corrigans have continued as private
consultants to develop and to extensively field-test their
SAFE practices as applied both to the delivery of more effective
performance results by educational managers and the delivery
of predictable mastery-learning results for all learners.

In these two Volumes presented herein by the Corrigans,
you are offered the PROOF of these most effective results-
focused practices by many school districts both large and
small, both urban and rural, in a variety of areas across
our country over a period of 22+ years (1960-1983).

Since the 1960's, these effective management-for-
results practices have expanded to include the required
use of micro computer management systems to control for
the delivery of cost-effective results for learners, for
the educational practitioners, and the taxpayers.

These publications (Volumes I and II) offer to all
educational partners (including teachers, learners, adminis-
trators, boards of education, parents, and the community
at large) proven ways and means to deliver effective performance
by our schools -- a "business-like" approach to manage the
achievement of established priorities for action and actual
"how to" steps to implement the installation of these successful
educational practices in the schools of America.

The combined results presented by many educational
practitioners offer proven, practical, predictable, and

feasible means to change successfully from the less than satisfying level of performance effectiveness currently reported for our schools to an assured WINNING model for all educational partners -- present and future.

In the final analysis, the decision to install these more effective educational practices in our schools will rest on the leadership and commitment by boards of education. The requirements to be met to achieve more effective performance by our schools; the models to be used to deliver predictable successful results; and the proven and more effective teaching, learning, and management practices to be applied are presented in detail in Volumes I and II.

We are required NOW to make only the necessary minimal investments in time and/or money by each member of the educational partnership in order to turn our currently reported mediocre performance effectiveness as presented by the Commission on Excellence into a shining success story for all concerned in particular for the future citizens of this nation and the survival and growth of our nation as a whole.

Dr. Nolan Estes
Professor of Education
University of Texas
Austin, Texas

Contributing Practitioners

VOLUME I: GUARANTEEING EFFECTIVE PERFORMANCE BY OUR SCHOOLS

1. Dolores T. Aaron, Assistant Superintendent, Child Advocacy Unit, New Orleans Public Schools, New Orleans, Louisiana
2. Solomon Bonds, Chief Administrative Officer, Jasper County Schools, Ridgeland, South Carolina
3. Betty O. Corrigan, Vice President, SAFE Learning Systems, Inc., Garden Grove, California
4. Robert E. Corrigan, Sr., President, SAFE Learning Systems, Inc., Garden Grove, California
5. Robert E. Corrigan Jr., Vice President, SAFE Learning Systems, Inc., Garden Grove, California
6. Ward L. Corrigan, Deceased, Vice President, SAFE Learning Systems, Inc., Garden Grove, California
7. Nolan Estes, Professor of Education, University of Texas, Austin, Texas
8. Shirley Fenstermaker, Prior School Board Member, Dayton Public Schools, Dayton, Ohio
9. Gene Geisert, Professor of Education, St. Johns University, Jamaica, New York
10. Richard Handley, Prior Assistant Dean, Vocational Education, Fresno City College, Fresno, California
11. Merton H. Johnson, Director, Metro II, St. Paul, Minnesota
12. Wilfred Landrus, Professor of Education, Chapman College, Orange, California
13. John Picton, Prior President, Alaska Methodist University, Anchorage, Alaska
14. C. Hines Cronin, Superintendent, Moss Point Separate and Independent School District, Moss Point, Mississippi

Contributing Practitioners

VOLUME II: DELIVERING PREDICTABLE SUCCESS FOR OUR LEARNERS

1. George Bailey, Prior Superintendent of Schools, Northglenn Colorado
2. Mary Ellen Blanton, Assistant Superintendent for Instruction, Orange Unified School District, Orange, California
3. Mel Buckley, Superintendent, Newton Public Schools, Newton, Mississippi
4. John R. Champlin, Professor of Education, Texas Tech, Lubbock, Texas
5. Betty O. Corrigan, Vice President, SAFE Learning Systems, Inc., Garden Grove, California
6. Robert E. Corrigan Sr., President, SAFE Learning Systems, Inc., Garden Grove, California
7. Ward L. Corrigan, Deceased, Vice President, SAFE Learning Systems, Inc., Garden Grove, California
8. C. Hines Cronin, Superintendent, Moss Point School District, Moss Point, Mississippi
9. Harvie L. Guest, Executive Director for Curriculum and Instruction, School District No. 12, Adams County, Northglenn, Colorado
10. Donald W. Johnson, Prior Assistant Superintendent for Instruction, Duval County Schools, Jacksonville, Florida
11. Charlayne Lamb, Teacher, South Panola School District, Batesville, Mississippi
12. Jim C. Moore, Assistant Superintendent, Moss Point School District, Moss Point, Mississippi
13. Robert M. Morgan, Director, Learning Systems Institute, Florida State University, Tallahassee, Florida
14. Gale Pattison, Superintendent, Orange Unified School District, Orange, California
15. Homer Coker, Professor of Education, Georgia State University, Atlanta, Georgia

Guide to the Reader

DEFINING PROVEN EDUCATION-FOR-RESULTS PRACTICES

You are offered the following publications entitled Education-For-Results: Volume I: GUARANTEEING EFFECTIVE PERFORMANCE BY OUR SCHOOLS and Volume II: DELIVERING PREDICTABLE SUCCESS FOR OUR LEARNERS. These publications have been designed to be read by every educational partner including parents, school board members, superintendents, administrators, teachers, counselors, learners, and the community-at-large including legislators (state and federal).

This stated requirement is based on the fact that everybody has an important stake in the success of our national system of education; and, each is accountable to perform an important function to deliver success for our schools.

We must think of ourselves as being an educational partnership!

As it exists today, too often responsibility for success in education is placed primarily on one of the partners (teachers) without a realistic understanding that all partners are accountable for delivering success for our schools.

Volume I is dedicated to the school boards of America. However, Volume I should be read by every educational partner in order that each partner concisely understands the stated REQUIREMENTS for the design and delivery of predictable success for our schools in the light of the current national crises reported by the Commission on Excellence in Education.

Volume I is divided into several independent but interconnected sections in order to provide each educational partner a structured yet logical set of building blocks leading to

these outcomes:

- (A) A concise understanding of the challenges we currently face - and - the requirements to be achieved in order to be successful in future years (Section I)
- (B) A concise understanding of the requirements to be met in order to build an effective business-like educational enterprise. These requirements must be understood by all concerned -- namely, those who pay the bills (parents, and community members), and those responsible for performing effectively to deliver required quality results (administrators, teachers, school board members, learners, and parents). (Section II)
- (C) An understanding of required education-for-results practices to be applied by educational managers (every level) in order to deliver predictable quality results for a school district including:
 - (1) Those lessons learned from business and industry to be most effective managers-for-results;
 - (2) Those proven Learning-Centered instruction and learning practices to be applied by teachers and curriculum directors in order to deliver PREDICTABLE Learner Mastery Results. These practices are based on 20+ years of proven effectiveness of results for learners delivered by multiple school districts in various educational applications (Sections II and III).
- (D) An understanding of the design requirements for a Learning-Centered Performance System installation which can assure success for all learners in every school district nationally. (Sections III and IV)

- (E) Those proposed steps to be taken to install a successful Learning-Centered Performance System in a school district applying the Systematic Approach for Effectiveness (SAFE) practices. (Sections III and IV)
- (G) The requirement to look at our educational system as a major producer of the quality life for every future citizen and for our nation. (Section V)
- (G) The absolute demand to invest required resources in our educational system to guarantee a future for all concerned. We must all understand the requirement to establish an investment policy which will pay dividends for our schools; and not to continue with planning which is based on spending (costs) without linking resources to delivery of most cost-effective results. (Section V)

Thus, Volume I presents:

- (1) Important requirements for change to be understood and, in turn, be accomplished by every partner in education in order to substitute current failure with success;
- (2) Those proven results-focused means and practices which can deliver predictable success for our schools;
- (3) The proven Learning-Centered Performance System proposed to be installed in every school district to assure future success for all learners and all educators;
- (4) The realization by the parents (the payer of the bills) that the delivery of success for our schools is feasible for each school district while requiring a reasonable ONE-TIME financial investment.

Hopefully, upon completion of the reading of Volumes I and II, every school board and superintendent will act to seriously investigate proposed education-for-results practices which can guarantee more effective performance by each school district nationally.

DESIGN OF VOLUME II:

DELIVERING PREDICTABLE SUCCESS FOR OUR LEARNERS

Volume II is dedicated to the teachers of America as THE HOPE for the delivery of success for all current learners and future citizens.

Volume II argues the case for a new and more effective relationship between teachers and the community by replacing the current industrial union model with a more professional QUID PRO QUO relationship wherein teachers monitor their own performance effectiveness similar to the medical profession.

In Volume I the reader is presented the REQUIREMENTS for success by learners, teachers, and administrators, and given the blueprint for successful implementation.

In Volume II we focus on those LEARNING CENTERED PRACTICES to be used by teachers in the classroom in order to deliver predictable success for all learners (a proven capability).

These Learning-Centered practices have been extensively proven through applications by teachers over a 20 year development program involving multiple school districts which are large and small, urban and rural, highly minority learner concentrated, and for rich and poor districts. You are presented in Volume II the actual case histories of dramatic success by teachers applying these more effective learning-centered practices.

One immediate report of great significance is the demonstrated capability in two school districts in the state of Mississippi to have collapsed the normally reported negative relationship between RACE (socioeconomic status) and levels of learning achievements. In these districts they can no longer differentiate between achievements of black and white students. In applying these proven learning-centered practices, EVERY kid is a WINNER (high achiever).

The educational partners are presented in Volume II the challenge to apply these most effective Learning-Centered instructional, learning, and management practices as the proven means to deliver predictable success for learners, parents, and each professional educator in the immediate future.

Through application of these practices we can assure a secure nation.

Volume II must be read by every educational partner so that each will understand concisely the basic HOW-TO's (practices) to deliver the promised shining success stories in every school district nationally.

Interested educational partners are referred to audio tapes with appropriate visuals and video tapes which can provide further significant information by practitioners to better understand discussed Learning-Centered education-for-results practices.

The desired objective to be achieved following the reading of Volumes I and II (Education-For-Results) and the review of the available orientation audio and/or video tape sequences is that all responsible educational partners will have the required knowledge necessary to make the decision to commit to deliver PREDICTABLE success for learners in their school district -- our first national priority for educational results.

SECTION I:

**WHERE WE ARE AND WHERE WE SHOULD BE GOING:
CHALLENGES**

Chapter 1

Telling It Like It Is: Our Current Realities

Chapter 2

Preparing a District Report Card

Chapter 3

Education as a Business Enterprise

Chapter 4

Delivering Predictable Success for Learners: Our First Priority for Educational Results

Chapter 5

A Bill of Rights for Parents (Dolores T. Aaron)

Chapter 6

Bill of Rights for Learners (Robert E. Corrigan, Jr.)

Chapter 7

Are School Boards and Policy Makers the Problem? Yes! (Merton H. Johnson)

Chapter 1 Telling It Like It Is: Our Current Realities

Setting the Stage for Compromise

Perhaps one of the most difficult acts to perform is to be totally honest, candid, and forthright with people. The consequences can be disastrous to the deliverer of truth, particularly when it is bad news. In fact, in days of old the fate of the messenger bearing bad news was swift and final -- off with his head.

Each of us has learned to be selective in expressing the truth when and where negative consequences are predictable. This is understandable. There are times, however, when it is crucial that the truth, the whole truth, and nothing but the truth be stated in spite of potential risks to the deliverer of said truths. Usually the risk is taken by the deliverer(s) because he/she cares.

I propose that we are at a point when the whole truth about our schools must be told. At stake is the future quality of education which affects the quality of lives of students, our future citizens. We are NOW experiencing serious crisis in our schools. We are all contributors to this crisis. To resolve this crisis we must admit selective truths - and - commit to work together as an effective collaborative partnership to resolve stated problems.

Before we can act together reasonably and constructively to assure quality education in our schools, we must first face these elements of truth; second, accept them as being the truth based on the facts presented; and third, act positively together as collaborating partners to resolve the problems which exist. These elements of truth apply to all of us, namely the public (parents and community), the educators, and the learners:

1. Our public school system has progressively and consistently deteriorated over the past 20 years in two primary areas of performance effectiveness:

- (a) The delivery of quality learning results for our learners. The rate of decline in learning performance increases yearly. The prognosis for the future is worse;
- (b) The management of our schools. Most effective business-like management practices are generally not used by educational managers.

2. The public has lost confidence in the leadership of our educators to manage and deliver results for the children and the community.

3. There has been a steady decline in the image of the educator as a caring professional. The public views the professional educator differently than they viewed them 20 years ago.

4. Teachers' unions are often perceived as a group of persons interested more in increased wages and benefits than success for children; i.e., a group with total resistance to being accountable for successful learning for children.

5. Rightfully, teachers believe it is unrealistic for only teachers to be held accountable for the success of learners in their classrooms. They are establishing the requirement for mutual accountability between each of the educational partners to assure success for learners (parents, administrators, learners, community).

6. Many professional teachers and administrators are resistive to the acceptance of the truth that the practices they are applying today are ineffective for the delivery of required, successful learning results; and for the effective management of results. When failure occurs for learners, teachers and administrators often point to other forces as the causes for consistent failure.

The performance record is unfortunately one of continuous failure for learners in our schools. Yet teacher training institutions (universities) totally resist accepting new and proven practices which will deliver predictable learner mastery results. This resistance is based on political grounds (Phi Delta Kappan Oct. 1980). The great majority of individual professionals (teachers and administrators) resist changing their ways in spite of growing failure by teachers and their schools. This resistance is expressed through rejection of accountability requirements for teachers to deliver predictable mastery results for learners.

7. The majority of parents/community-partners fail to accept a positive and active role to aid in delivering success for their children. They allow teachers to become surrogate parents, thus leaving the authority in the hands of the teachers. Yet when failure occurs with their child, the blame is placed unrealistically on the teachers.

8. The community loads onto schools unrealistic demands. No performance-based planning process to assure feasible commitments for success is employed.

9. The community/parents fail to vote required funds for operating our schools, yet they hold educators responsible for the less than quality results delivered for the children. Legislative representatives establish requirements for increasing the quality of education (accountability standards for effective learner mastery results) but do not, in most cases, provide the critical financial resources required to train educational professionals in the skills/knowledge and practices which enable them to increase their existing competencies.

10. Each educational partner blames the other for the failures in our schools. Bias rather than real standards usually operate, thus eliminating the possibility of entering into a collaborative, rational, constructive, feasible, accountable and caring process

for delivering success for our learners, our communities, and, our professional educators.

It is proposed that all of the statements presented above are true. It is further proposed that we must move immediately to change these truths by replacing them with a more practical, reasonable, business-like, accountable, and systematic approach to a collaborative working partnership among all educational partners in order to reverse the predictably negative future for education in general, and our children in particular.

A Critical Beginning For Change

All of us, as protective beings, defend ourselves against the pains of threat, loss, insult, etc. This is a natural and necessary process. We are most proficient as self defenders to:

- A. Ward off the acknowledged awareness of danger and/or threat coming from afar by ignoring its presence; or
- B. If the danger comes closer to the point where we cannot ignore it, we are skilled in distorting it so that we will not recognize it in its REAL form.

We call this the act of rationalization, our way of deceiving ourselves that there really is no danger present to be dealt with. A final act occurs in each of us at some point when we can no longer rationalize the real danger which exists. We must recognize it for what it is - and in doing so, we often react with PANIC.

The truth is that we are very near the point of PANIC in dealing with ineffective performance in education. But this panic need not become a reality. It can be controlled through an admission of the apparent dangers - and through initiation of more appropriate and PROVEN practices which will predictably increase the effectiveness of performance by our schools.

It is postulated that professional teacher training institutions and/or individual education professionals have been threatened by the continuous decline in performance of learners in our schools. They are interpreting the act of acceptance of new and more effective instruction/learning and management practices as an admission of failure of methods they have previously advocated. Therefore, they resist change.

I propose that the term "failure" be immediately replaced with the term "effective practices". The medical profession has moved over the past decades from a most crude medical technology to an advanced set of practices representing remarkable advances. In these patient-centered developments the referent was not failure. The referent was increased effectiveness of professional practices through the acceptance of new and better practices derived from research.

The educational profession should define and accept a professional accountability model tied to proven and effective professional practices for delivering predictable success (mastery results) for learners. This professional accountability model should also be accepted by the parents/community partners. In this way a rational "Quid-Pro-Quo" model can be designed wherein each partner does what he/she is accountable to accomplish, their contribution, in delivering success for learners. In turn, effective performance should be tied to realistic incentives for those who deliver quality results.

This book offers a way to proceed together as a working and collaborating educational partnership to deliver predictable success for all learners at all levels while assuring satisfaction for teachers, parents, administrators and learners.

Proven and guaranteed professional practices required to assure the delivery of effective performance (Quality Results) in our schools are discussed. And it is these proven management, instruction and learning practices which can resolve the national

crises in education and deliver immediate success for all
concerned -- particularly our learners -- the ultimate focus
for our schools.

Chapter 2 Preparing a District Report Card

Two significant reports have been presented recently to the nation at large describing our educational system as a national disaster.

So critical are these reports of the mediocrity of performance of our schools that they declare our nation to be currently at risk.

These reports are: (A) A Nation at Risk* by the National Commission for Excellence in Education; and (B) Action for Excellence** by the Task Force on Education for Economic Growth.

The overriding theme of both reports is as follows:

- (A) WHAT IS NOW: A profile of failure at all levels of our educational system by all involved -- failure in equipping the majority of our students with skills and knowledge to survive and to contribute in our high technology society; and
- (B) WHAT SHOULD BE: Comprehensive educational reforms to replace current failure with success -- a national requirement for economic growth and success in a competitive world market.

School board members and superintendents can rightfully question whether their schools are at that level of ineffectiveness of performance to warrant the serious consideration of a commitment to a multi-year investment to install the district-wide Learning-Centered Performance System and to establish those policies requiring that all professionals (teachers and administrators) become qualified to deliver predictable success for learners.

*A Nation At Risk: The Imperative for Educational Reform: A report to the nation and the Secretary of Education by the National Commission on Excellence in Education; U.S. Department of Education, Washington D.C., April 1983.

**Action for Excellence: A Comprehensive Plan to Improve Our Nation's Schools, Task Force on Education for Economic Growth; Education Commission of the States; Denver, Colorado, June 1983.

It is proposed that the school board members and the superintendent first complete a District Performance Report Card to best evaluate the requirement to proceed or not to proceed as recommended in Volumes I and II. This performance report card will display the current level of success of learners in one's school district. The data can offer the concise performance profile defining the measured SUCCESS or failure by learners (grades K-12).

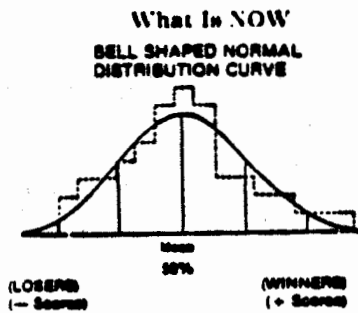
Following a review of the performance data in your district report card, the choice to commit or not to commit to the installation of the proposed Learner-Mastery Delivery System will logically follow. Under any circumstances the proposed decision would follow a thorough investigation of all relevant factors to deliver predictable success for learners including the orientation of all professionals and their required commitment to proceed as directed by the board and superintendents.

PREPARING A DISTRICT PERFORMANCE REPORT CARD

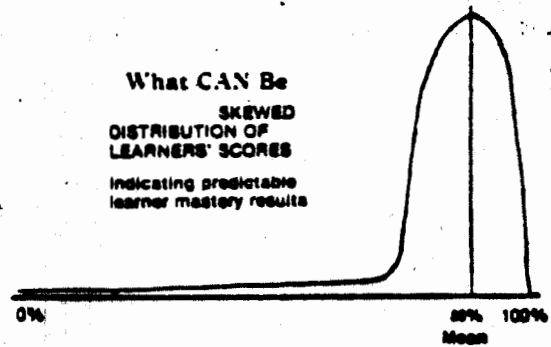
For a district and its staff to commit to the changes proposed, convincing evidence must be provided as a rationale for improvement.

Achievement is frequently measured by norm-referenced tests (CAT, CTBS, Stanford, etc.) administered at various grade levels. Data from these norm-referenced tests provide information as to how the district's students are achieving in relation to all other learners in the nation for that grade level. Most districts report mean percentile scores for grades as: 1st grade scores are at the 32%ile, 50%ile, or 60%ile, etc. Some district staffs are quite satisfied when the mean achievement is at the 50%ile, the national norm.

TRADITIONAL TEACHING TECHNOLOGY



NEW & PROVEN LEARNING-CENTERED TECHNOLOGY



How these data are interpreted makes a difference in revealing actual student achievement.

If the data reveals that all students are at or above national norms, that is good information. All these students are achieving what is average achievement for that grade level. The question the district should ask is, "Do we think our students can improve if we apply more effective practices which will raise performance to the 80% percentile as shown in the skewed curve above?"

In reporting mean data, it must be remembered that some students are scoring higher than the mean and some lower. If the mean is at the 50%ile, approximately half the students are at or above national norms and half are below. A meaningful question to ask is "What percentage of students are scoring in the 1st, 2nd, 3rd, and 4th quartiles?" A small percentage of learners might be scoring high thus pulling up the mean, whereas a larger percent might be scoring below national norms. Such data reveals that improvement is required at least for those below national norms. A teacher, previously satisfied because the class mean was at the 50%ile, has second thoughts when presented quartile data that 58% or more of the class is below national norms. Please see Figures 1, 2, and 3 as an example of achievement reported in quartiles for a district that had previously used means as a reporting measure.

FIGURE 1

% of Population per Quartile - Total Battery: CAT

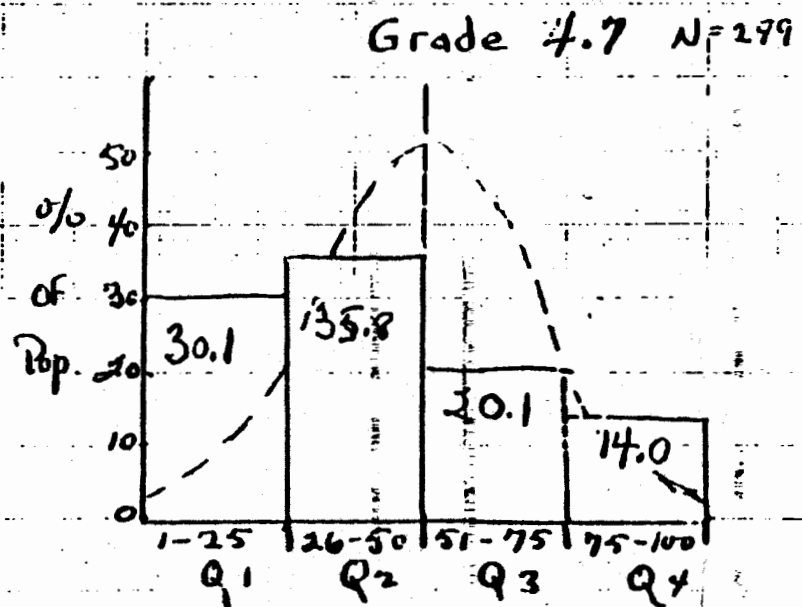
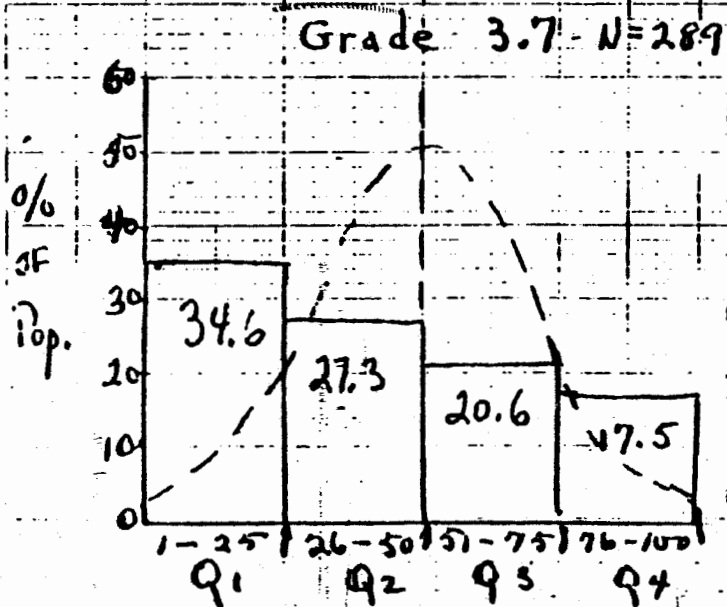
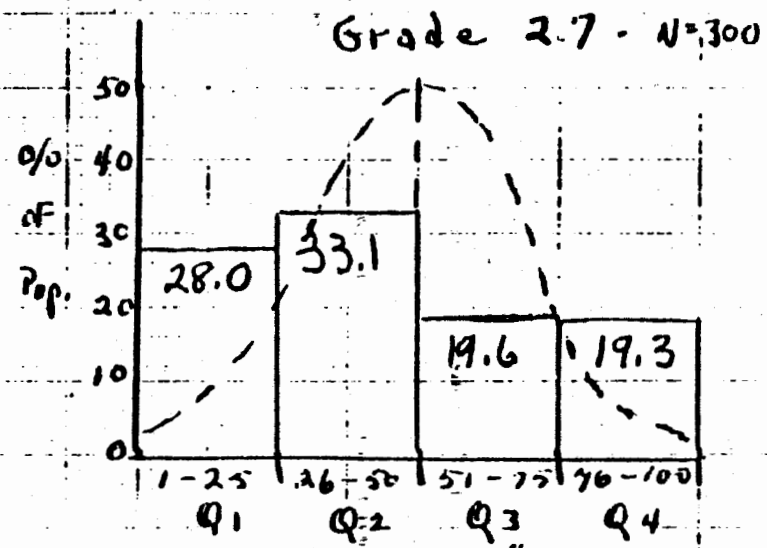
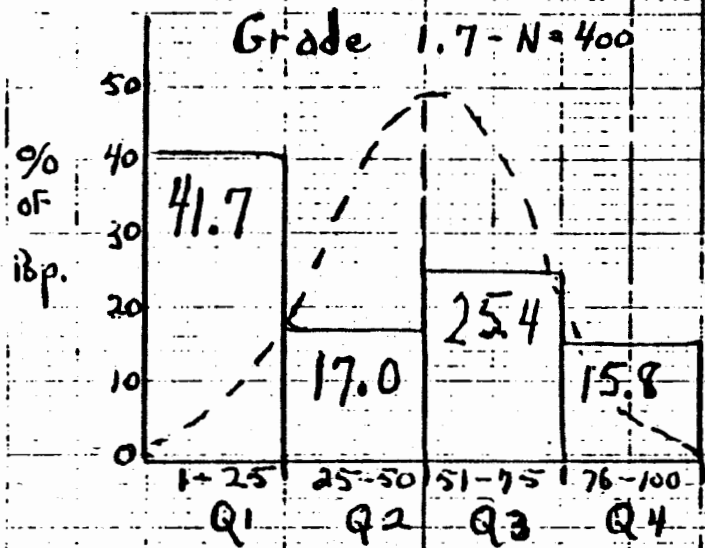


FIGURE 2.

% of Population per Quartile - Total Battery: CAT

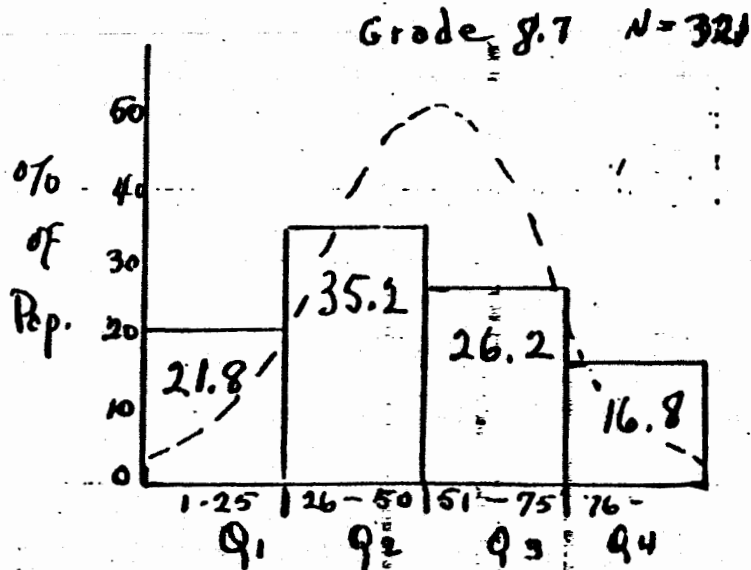
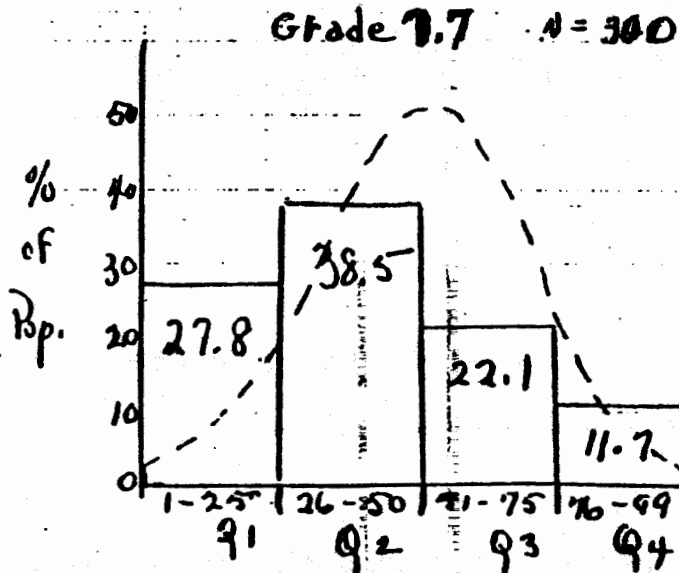
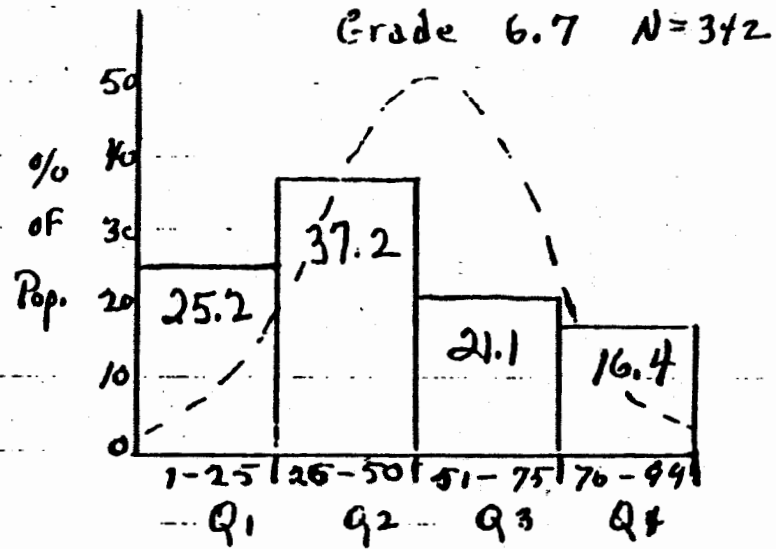
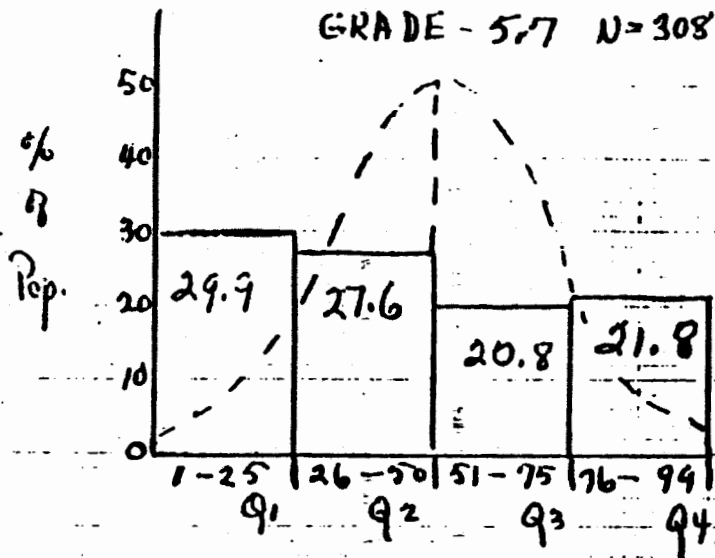
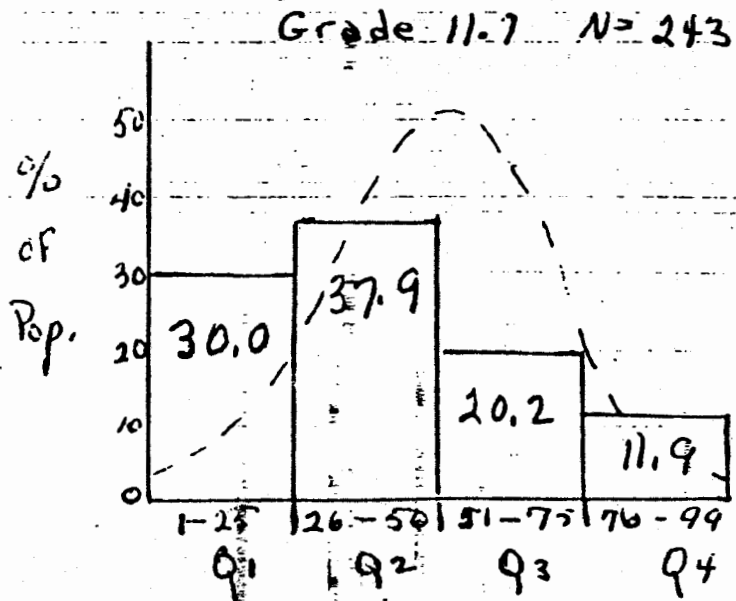
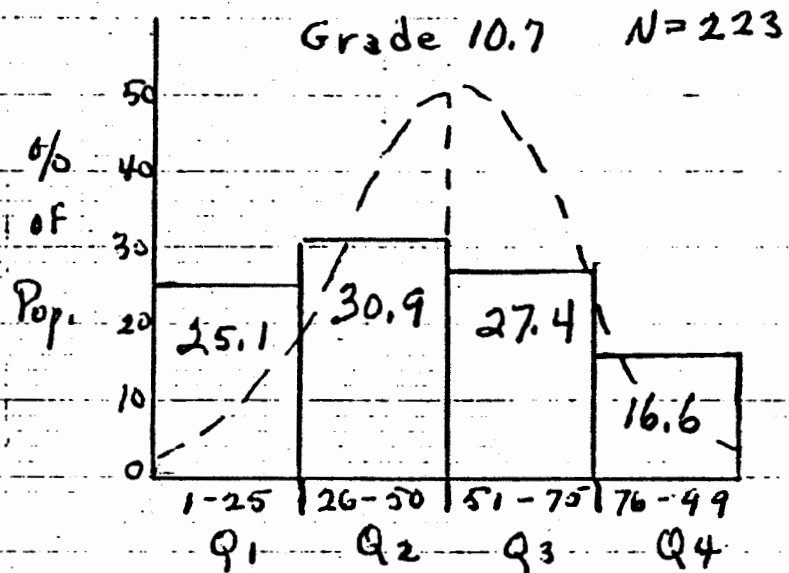
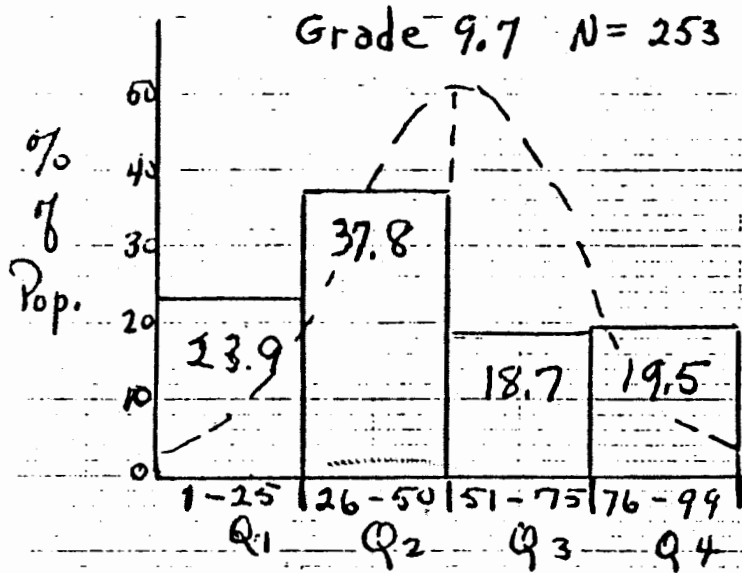


FIGURE 3.

% of Population per Quartile - Total Battery: CAT



Grade	% Below 50th % Tile	% Above 50th % Tile
1.7	58.7	41.2
2.7	61.1	38.9
3.7	61.9	38.1
4.7	65.9	34.1
5.7	57.5	42.6
6.7	62.4	37.5
7.7	66.3	33.7
8.7	57.0	43.0
9.7	61.7	38.2
10.7	56.0	44.0
11.7	67.4	32.1

You might wish to develop a district profile similar to Figures 1, 2, and 3, which will show that there is or is not a requirement to be more effective. If so, you might use the following questions to develop your district "report card".

I. STANDARDS AND PRACTICES - Learner Achievements

1. Are the learners in the district performing successfully as measured by test scores?
 - (a) each grade level
 - (b) as a student progresses from grade 1 to grade 12
2. Is there a negative statistical relationship between RACE and learning achievement - and/or Cultural SOCIO-ECONOMIC groups and learning achievement?
 - (a) each grade level
 - (b) as a student progresses from grade 1 to grade 12

If your performance data for your learners is similar to those shown in Figures 1, 2, and 3, you must accept continued predictable failure or commit to reverse the failure pattern.

II. MANAGEMENT FOR RESULTS PRACTICES

1. Are there Planning, Management, and Performance Evaluation Practices which assure the delivery of the most COST-EFFECTIVE results for:
 - (a) Instruction, learning, and learners
 - (b) Management for all levels of administration
(Reference: Performance Audit Evaluation Standards)

III. ACCOUNTABILITY STANDARDS

1. Are there established ways and means to link each person's performance to the delivery of desired learning results; and the means of evaluating all components of the district's

mastery learning delivery system (management, instruction, learning, counseling, and support functions).

If your district is achieving the skewed curve representing all students achieving above national norms, there might be no requirement for change. As one successful superintendent says, "If it ain't broke, don't fix it." Many districts, applying mastery learning techniques have achieved these results.

If, however, your data reveals a skewed curve indicating poor achievement for a majority of learners, or even a bell-shaped curve indicating 50% required improvement, you will have data which can convince personnel of the requirement to install more effective mastery learning practices.

PROPOSED COMMITMENT BY EACH EDUCATIONAL PARTNER

The causes for the continued and dangerous threat to our nation, our learners, our citizens, and all communities (nationally) can be identified, and the problem causes can be solved.

If you are a BOARD MEMBER, you have the power and the responsibility to commit schools to policies and performance practices capable of delivering success for our schools. You must provide the required leadership NOW that will lead to successful schools; i.e., schools which produce successfully educated learners in a business-like environment.

If you are a PROFESSIONAL EDUCATOR, you have the responsibility to put aside personal feelings and replace less than effective educational practices with proven, effective practices of instruction and learning; and to develop proven management skills for instruction and learning which deliver predictable and COST-EFFECTIVE success for all learners

and all citizens.

You must commit to use those PROVEN effective Management-For-Results practices in order to deliver success for all learners.

This requirement applies to all practicing professionals in our schools and in our universities.

If you are a LEARNER, whichever grade level, you have the responsibility to "play the game" by committing to do your job, that is, to learn as directed and to succeed for your personal gain! And that of your community!

If you are a PARENT or a COMMUNITY MEMBER, you have the responsibility to be accountable leaders and supporters of your schools. You must provide the required resources to organize and to implement successful schools -- and through your personal involvement, assure quality results for all learners.

If you are a LEGISLATOR, you must be responsible for providing the legislation, along with the required resources, to make the planned success of our schools both feasible and practical.

It is not sufficient merely to require effective and efficient schools. You must invest in these schools; and you must invest to qualify professionals with proven competencies and practices required for their success and the success of learners they are teaching.

IS THERE A PRECEDENT TO USE THE PROPOSED
LEARNING-CENTERED MANAGEMENT-FOR-RESULTS PRACTICES?

Response nationally by state legislatures to the decline in test scores by learners has been both negative and punitive.

In over 38 states, legislation has focused on increasing the accountability for more effective performance by educators. Unfortunately, the ultimate measure of accountability has not been tied to the level of measured performance results achieved by individual learners in the classroom.

This latter requirement is now law in the state of Mississippi. This new legislation, entitled the Mississippi Educational Reform Act of 1982 offers a significant educational mandate for consideration by other state governments.

The prerequisites of this legislation focuses on the only meaningful target for professional accountability -- namely, mastery results achieved by learners. This legislation requires a continuous (annual) performance audit of the measured achievement by learners, professionals and the overall performance effectiveness in each school district. Accreditation for each school is linked directly with actual levels of performance achieved in each district and the amounts of money provided to operate those schools. No effective results for learners means no money for the schools involved.

The Mississippi legislation is not punitive by design. It is based on the postulate that success or failure of Mississippi schools is the business of all educational partners including parents, community members, teachers, school board members, administrators, and learners.

No longer is the teacher the sole partner accountable for the delivery of successful mastery learning results.

This legislation is concerned with assuring the delivery of only feasible results. It requires that every professional educator be qualified with more effective management, instruction, and learning practices which assure required success for all learners and, in turn, all professional educators,

parents, and the community at large in all school districts of Mississippi.

Of great significance are success stories reported by school districts demonstrating the measured capability for delivering Predictable Learner Mastery results for all learners when applying the Systematic Approach For Effectiveness (SAFE) practices.

Two Mississippi school districts have already reported the collapse of the negative statistical relationship between RACE and levels of learner achievement. No longer do these schools report the traditional bimodal distribution of test scores between white and black students.

The Mississippi Education Reform Act of 1982 establishes the required legal commitments for the future success of all learners in Mississippi; the commitment to provide financial resources and vehicles to qualify educational professionals to be more effective teachers and administrators resulting in "painless accountability" to deliver desired results; the means to focus on the performance effectiveness of all schools as measured by the mastery learning results for learners; and to reward only effective performance (Quality Results).

The reported measured successful performance by the two Mississippi school districts over the past five years to deliver predictable mastery results for learners will guarantee the capability for the Mississippi Education Reform Act of 1982 to be predictably successful in the foreseeable future.

Combining the positive and pragmatic legislative requirements provided in the Mississippi Education Reform Act of 1982 with the application of those proven Learner-Centered educational practices discussed herein establishes the proven installation model for all other State Departments

of Education and school districts in our country.*

Can a school district or state department of education afford to do less for their learners, their teachers and administrators, their communities, and their parents?

*Appendix B presents a digest of the Mississippi Education Reform Act of 1982

Chapter 3 Education as a Business Enterprise

Any solution, to be successful, must involve people working together applying an orderly, systematic approach to achieve defined outcomes or results. Such a systematic approach, to be successful, must be objective and responsive to prejudice, to bias, and to "real-world" feasibility limitations for implementation. This systematic process must involve people in a process of rational compromises derived by establishing logical objectives and the use of unbiased "ground rules" in the analysis and decision-making stages.

This interactive process between people should also allow for the dignification of all participants and their contributions as they strive to define and solve priority problems when working in collaboration.

These steps define the DEMOCRATIC approach to our national commitment to survival and growth.

Planned Educational Effectiveness: A Top National Priority

National survival and growth will depend directly on the skills, knowledge, values and attitudes of people. These people, working together, must plan, implement, evaluate and revise as they strive to establish and sustain changes in their communities. To be successful, these people must apply the most effective planning, managing and evaluation skills and knowledges available in order to install relevant, efficient and effective practices for delivering desired results.

The school system in our communities has been established to fulfill these requirements. The primary mission of our

schools is to develop in students the necessary skills, knowledge, attitudes and values to achieve success in the "real-world" for which they are being prepared. Achievement in this context applies to both the learner and the community at large. Indeed, the national educational system promotes and produces the democratic society - as such its role encompasses the quality of our national defense.

The Real World of Education Today

The requirement exists now for increased Educational Effectiveness¹ at every level of involvement including the community, state and the nation.

If we are to concentrate on the fulfillment of this requirement, we must first ask: Why is this priority for increased Educational Effectiveness so important in view of other significant and crucial social change requirements?

The answer is simple, direct and profound; namely, that the level of Educational Effectiveness and productivity over time will define the actual and measurable level of survival and growth of the individual, the local community, and our nation.

The educational process should produce people skilled and qualified to implement required changes necessary for survival and growth. Those competencies and procedures learned through an effective schooling process will be the foundation for defining and solving present and future social change priorities.

¹Educational Effectiveness: The ACTUAL achievement of INTENDED accomplishments specific to PRIORITY NEEDS of learners, educators and the community through the democratic process of mutual collaboration of those ACCOUNTABLE for delivering results.

If we are going to develop an effective schooling process qualified to prepare citizens for a quality life, we must (a) develop a collaborative working relationship among all educational partners, and, (b) apply more effective business-like practices assuring delivery of effective results for all learners in our schools.

Comparing Industry With Education

With commercial enterprises, the PRODUCTS² to be produced or developed are often more easily defined than the PRODUCTS of the education enterprise. Some may disagree with joining the terms EDUCATION and ENTERPRISE. Yet is it not true that education IS an enterprise consisting of PEOPLE and THINGS organized and working together to develop SPECIFIC PRODUCTS? In the case of education THE PRIMARY PRODUCTS are the skills, knowledge, attitudes and values of LEARNERS representing results achieved through the schooling process. The educational organization accountable for delivering these PRODUCTS (Learner mastery results) consists of policy-makers, managers, administrators, staff, teachers, learners and COMMUNITY MEMBERS.

As in any commercial enterprise, there is a PROFIT INCENTIVE for education. In education, actual profits may be defined through terms of short and long-range benefits accrued by the "stockholders" - namely, all those members of the educational COLLABORATIVE partnership.

With commercial ventures, the "stockholders" buy shares of an enterprise for which they expect a reasonable return on their investment. The stockholders elect a board of directors which establishes policy directives for management and staff.

²PRODUCTS: those things produced or services performed (or delivered) representing the final outcome or results achieved through a process of planned implementation. (EXAMPLES: In industry, an automobile; in Education, a successful learner.)

The management and staff are assigned authority and responsibilities; and are held accountable by the board of directors to plan, design, implement and evaluate those programs which (a) produce and sell the products, and (b) produce "reasonable" returns consistent with resources invested. The board of directors are accountable to the owners or stockholders for final success.

In the event of failure to perform (products, sales, and profits), the stockholders have the right, and at times exercise the right, to change board members; and board members have the right, and exercise the right, to change management, staff or anything else affecting the desired level of organizational productivity.

THIS MODEL OF COMMERCE AND INDUSTRY IS A REAL WORLD MUTUAL ACCOUNTABILITY SYSTEM for delivering required PERFORMANCE ACHIEVEMENT (quality results or products) and required profits earned. If we cannot achieve these requirements, we go out of business. This is the real-world relationship between "producers" and "consumers". It is the foundation of our capitalistic and democratic society. Every enterprise must work according to these rules, including the schools of our country.

Should these accountability system requirements apply to the education enterprise? Let's analyze the interactions involved in organizing for and the delivery of educational results/outcomes and draw your own conclusions.

As with any commercial enterprise, the educational enterprise has stockholders (COMMUNITY MEMBERS) who have the responsibility for providing required resources (taxes). They, as stockholders, elect school board members who carry out their desires to "establish policy directives, leading to a reasonable return for their investment (successful learners)." These stockholders (COMMUNITY MEMBERS) also elect legal representatives (LEGISLATORS). Legislative representatives represent the interests of the community by establishing educational performance standards

and/or requirements through LAWS. These legislators have the authority and responsibility for allocating required resources to schools (Federal and State levels) in order to accomplish priority educational GOALS and OBJECTIVES set for the schools.

BOTH Legislative bodies (general) and school board members (specific) establish priorities and ACCOUNTABILITY REQUIREMENTS for evaluating the success or the failure of the Educational Enterprise. For education, the PRODUCT should be related to the delivery of predictable success for learners (learner mastery results). Educational programs would be planned, designed and implemented by the professional educators to result in each LEARNERS' PREDICTABLE achievement of skills, knowledge, values and attitudes (mastery learning objectives and associated performance measures) assuring the capability of each learner to survive, to grow, and to contribute to the community in their future roles as citizens upon graduating from our schools.

The achievement of policy directives representing the desires of the educational "stockholders" (COMMUNITY MEMBERS) is entrusted to a management team (administrators) who hire and assign appropriate staff (teachers, counselors). The educational management and staff are provided policy directives and RESOURCES to achieve established program GOALS and OBJECTIVES in each school. The teachers have the responsibility for producing the desired PRODUCTS (successful mastery by each learner of pre-established learning objectives and measures).

The educational partners are accountable for planning, designing, implementing, evaluating and revising instructional/ learning programs which (a) deliver priority products (predictable learner mastery results) and (b) produce reasonable returns (profits) consistent with resources invested (taxes).

With the commitment to educational accountability for successful performance, the management and staff are mutually accountable to the board for success; and the board and legislative

representatives are mutually accountable to the community members who elected them.

In turn, the community members are mutually accountable to school boards, educational management and staff for providing the required resources assuring feasible accomplishment of priority needs, goals and objectives.

In the event of failure by the educational professionals to perform as planned, the owners or stockholders have and do exercise their right to change board members or legislators; and board members have and do exercise their right to change management (administrators), and staff (teachers and counselors) or anything else affecting the quality of the final results delivered.

Unique to education, the products (learners) of this system are both recipients and partners of the educational partnership. As the recipient, the learner can hold other members of the partnership accountable for resolving his/her priority learning needs. However, as an accountable and participating member of the partnership, he too is accountable for his/her sole and/or shared responsibilities. The learner's prime job is to learn. His/her shared responsibilities can be:

- (a) to assist in assessing priority needs;
- (b) to assist in the design of relevant programs of instruction and learning (particularly high school/college students); and
- (c) to assist in evaluation of the effectiveness of instruction/learning activities and programs to deliver mastery learning results (achievement by each learner of predefined learning objectives and measurement standards).

Accountable Educational Effectiveness

The definition of Educational Effectiveness presented on page 14 stresses three significant factors:

- Factor 1: Actual accomplishment of intended results specific to the priority needs of learners and of the community.
- Factor 2: Positive collaboration between those who display the need(s) and those responsible for resolving the need(s). This collaboration would require the mutual and positive commitment by, and the involvement of ALL groups responsible to achieve agreed upon relevant action priorities (Needs, Goals, Objectives and Associated Performance Standards).
- Factor 3: ACCOUNTABILITY standards are a must for all those involved in accomplishing desired results for the educational enterprise.

Accountability may be defined as "the commitment to responsibility of self and of others (1) to perform as pre-agreed or negotiated, (2) to achieve what one sets out to achieve, and (3) to revise when and where necessary to perform more effectively.

A collaborative effort would involve the mutual and positive commitment by, and the organized involvement of, responsible persons leading to the achievement of mutually defined accountability standards appropriate for delivering the intended results.

The proposed concept of MUTUAL or TWO WAY accountability among all educational partners (teachers, learners, parents, administrators) for delivering maximum productivity is a prerequisite for an effective schooling process.

This concept of mutual accountability between educational partners is at the very heart of our democratic process. Let us examine the implications of this critical commitment to increased educational effectiveness in our schools as measured by success for all learners at all levels.

Disenchanted community representatives have often communicated that "education is too important to be left in the hands of educators". This quotation might be interpreted to mean that the professional educator is the SOLE and PRIME agency responsible for delivering Educational Effectiveness. It must be further interpreted to mean that OTHERS should have shared responsibility to plan and direct functions performed in the educational process.

A third interpretation might be that total responsibility for failures in achieving Educational Effectiveness (success for our learners) rests primarily on the shoulders of the EDUCATOR. This interpretation is not true or accurate. WE ALL ARE ACCOUNTABLE MEMBERS.

The term EDUCATIONAL EFFECTIVENESS stresses three significant factors. Factor 2 states the requirement for the collaborative efforts of all who are accountable for delivering intended results. The word ALL refers to "those who provide, who receive, and who perform to produce measurable results." They may be identified as COMMUNITY MEMBERS, LEARNERS, and EDUCATORS - the partners of the educational collaborative partnership.

Each partner will have unique contributions to make; unique performances or ACTIONS to fulfill IF Educational Effectiveness is to be achieved. Each is thereby accountable for specific required contributions. Each contribution must be carefully defined in measurable terms.

In the definition of Educational Effectiveness, Factor 3 stated that each member of the educational partnership

would be accountable for assigned responsibilities to deliver committed results. The requirements of each partner in this collaborative partnership should be pre-defined; and then be completed by each partner in order to achieve priority results for our schools.

Thus educational performance accountability is not a "one-way street," that is, accountability FROM the Learners, Parents, and community members placed on the shoulders of the Educator. Rather, the "real-world" would require the establishment of a mutual or two-way accountability commitment by every partner of the partnership to each other. Only in this way can this PLANNED and ACCOUNTABLE Educational Effectiveness be achieved both SHORT and LONG RANGE.

Perhaps a more realistic re-phrasing of the prior statement might be: that education is too important to be left in the hands of a NON-ACCOUNTABLE member of the educational collaborative partnership, whoever that might be!

Establishing a Positive Educational Collaborative Partnership

The statement has been made, "Unless we 'hang together', we will hang separately". This expresses the requirement for a structured partner's relationship to increase Educational Effectiveness at every level of involvement. The many problem indicators, expressing dissatisfaction by COMMUNITY MEMBERS and LEARNERS with EDUCATORS, specific to the past and present performance of our schools are very real. They are, in many instances, valid.³ It must be remembered, though, that our educational system has produced people who, over time, have established the most effective and FUNCTIONAL democracy in history; the highest standard of living in the world; and the greatest technological advances in history which provides for

³Neglected Imperatives in Education: U.S. Chamber of Commerce
Leon Lessinger

the needs of millions here and abroad.

It is true that we have, in certain cases, missed the mark of superior performance. Yet, is it realistic to hold EDUCATORS singularly accountable for all failures?"

A realistic self appraisal by each member of the educational partnership will hopefully result in the self admission of deficiencies in each partner's past performance -- all having contributed to the present condition in our lack of educational success.

In order to achieve maximum Educational Effectiveness for our schools in the future, it is proposed that the past deficiencies by each partner should be de-emphasized. In their place we should make the POSITIVE commitment to establish a workable and harmonious educational partnership. This partnership should include the Community Members, Educators, and Learners as MUTUALLY ACCOUNTABLE partners for delivering success in our schools.

Achieving Planned Educational Effectiveness:
Installing A Collaborative Partnership Approach

Educational planning requires the involvement of all members of the collaborative partnership to assure the delivery of RELEVANT and PRACTICAL educational accomplishments. Each member of this partnership will have SHARED responsibilities and SOLE responsibility for specific contributions in the achievement of planned Educational Effectiveness. Each partner would perform as ONE part of a composite team committed to the delivery of quality educational results for learners.

Table 1 presents a digest statement of the educational partnership composition and the proposed jobs (functions) to be performed by EACH. ALL must perform their jobs in an accountable manner to deliver the desired results. Figure 4 displays

the contribution of the members of the educational partnership specific to required actions including (a) Assessment of Needs, (b) Statement of Goals and Objectives, Planned Performance for Results, and Performance (Accountability) Evaluation.

Educational PRODUCTIVITY⁴ is the referent which sets the measures for evaluating accountable achievements by every partner.

What is most important is the way we organize our schools to deliver maximum productivity for our learners, the community, and the professional educators.

Educational Management Requires that EVERY participant be involved as an ACCOUNTABLE partner of the collaborative partnership to assure the delivery of precision results for learners.

⁴Educational PRODUCTIVITY: ACTUAL results achieved as compared with INTENDED results specific to these EVALUATION criteria:

- a) RELEVANCE OF ACHIEVEMENTS: Specific to priority NEEDS of Learners, Educators, and Community Members;
- b) EFFECTIVENESS: Quality of performance or accomplishments;
- c) COSTS: Efficiency of use of resources allocated for achieving INTENDED results.

TABLE 1

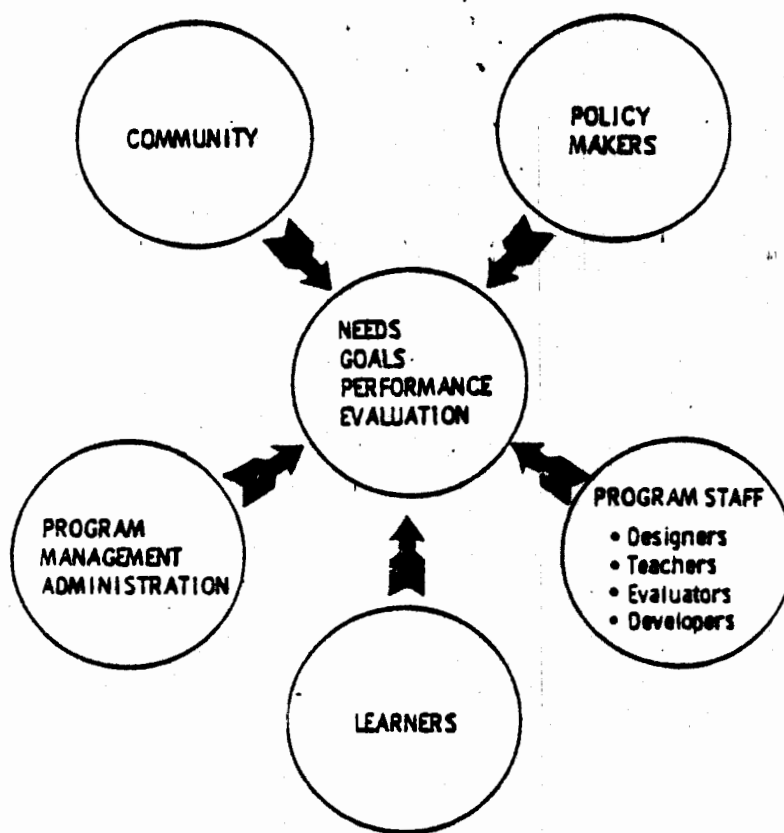
EDUCATIONAL PARTNERSHIP: COMPOSITION AND JOBS

- COMMUNITY REPRESENTATIVES:
 - assessment of educational NEEDS
 - providing resources
 - assessing end achievements
- PARENTS:
 - support learners and teachers
- EDUCATIONAL POLICY-MAKERS:
 - responsible for assessing needs
 - selecting priority goals, and objectives
 - selecting PROGRAMS providing maximum BENEFITS consistent with COSTS (allocation of resources)
 - establishing multi-year projections
 - establishing operational and evaluation policies
- PROGRAM MANAGEMENT: (Administration)
 - direct planning and design of most COST-EFFECTIVE programs for implementation
 - direct achievement of priority PROGRAM Objectives with Implementation
- PROGRAM STAFF:
 - Designers
 - Teachers
 - Evaluators
 - Developers
 - assessment of needs
 - development of COST-EFFECTIVE and COST-BENEFIT PROGRAM plans
 - development of VALIDATED learning systems
 - implementation of learning systems
 - evaluation and revision of learning systems
 - achieving POSITIVE learner acceptance
- LEARNERS:
 - assessment of NEEDS
 - development of learning systems
 - implementation of learning systems
 - evaluation and revision of learning systems
 - COMMITMENT TO LEARN and SUCCEED!

Figure 4

Educational Partnership Contributions
To Delivery of Most Effective Performance Results

TASK FORCE REQUIREMENTS



To establish an effective two-way accountability system for delivery of required results, all educational partners who have in-put to the educational system should be involved according to established roles to be performed.

Once the commitment for performance accountability has been established, the educational partners should be involved in varying degrees of performing the required functions of assessing needs; defining goals and objectives with measurement standards; developing plans of action to deliver precise, business-like quality results; implementing the plans; evaluating the effectiveness of the schooling process (as planned) by actual performance (results) achieved; and revising as required to deliver more effective results.

Delivering Maximum Educational Productivity

Steps and Tools for Success

Determination of MEANINGFUL or RELEVANT NEEDS:

The Focus for Change

In industry, the practice of assessment of needs is a common first planning step. It may be called different names such as MARKETING ANALYSIS or PRODUCT ANALYSIS. The end is the same, however. The first concern in planning is to establish priority targets for commercial opportunity.

The results of a needs assessment will set development priorities for considered commercial development. These priorities would be established based on two critical factors:

- A. the RELEVANT NEEDS (buying priorities) of CONSUMERS;
and
- B. the FEASIBILITY or practicality for filling these
NEEDS.

SOUND practical planning rests on the initial derivation of priority NEEDS. This concept applies for industry.

The requirement for a formal Assessment of Needs applies equally to educational planning for delivery of priority results in our schools.

Planning How To Get From Here To There
With Predictable Success: Focusing on Results

We are all accustomed to hearing the term "planning" as used in everyday experiences. When asked, "What are your plans...?" we often provide answers which express our action intent. "I plan to develop X set of commercial products or instructional materials this spring;" or "We plan to implement a management system for our division, or school commencing March 1."

As an expression of ACTION INTENT these answers might be appropriate. As an expression of commitments to accomplish specific PERFORMANCE results, these answers are incomplete. The commitment to a specific outcome requires the application of precision planning tools to achieve those defined results.

It is proposed that a basic distinction exists between an action INTENT and an action COMMITMENT. The expression "intent" connotes a desire to achieve or carry out a specific course of action. The expression "commitment" connotes the end product of a rigorous and detailed analysis of all the steps to be performed with the focus on the delivery of specific outcomes or results to be achieved (with associated measurement standards defined for that successful result).

When discussing planned Educational Effectiveness, the partnership members must carefully distinguish between planning intents and planned commitments for ACTION. (ACTION is defined as the actual doing or implementation of accountable plans to achieve priority performance results.)

Unfortunately, the professional educator has been the recipient of much negative criticism specific to past deficiencies as an effective manager-for-results in the day-to-day schooling process. Future performance effectiveness will be significantly enhanced by establishing a careful distinction between the

two terms stated -- and by applying those management planning-for-results processes required for predictable success as used in industry. These precision results-focused managerial planning processes are also used to determine the feasibility for achieving desired results prior to commitment to action.

One may interpret the prior statement as meaning that a planned commitment to ACTION is not always appropriate for implementation. This is the exact meaning intended. Often it is as important to know what not to do, as what to do. Such a decision should be based only on relevant performance data -- not on planning assumptions. This performance data can only be obtained through the application of results-focused systematic analysis, design and evaluation processes, as used by successful industrial managers.

The objective of any results-focused planning process is to derive complete, valid and reliable performance data required for making appropriate decisions: (a) to commit to or (b) not to commit to implement a specific action plan.

In making commitments to action, four primary questions must be asked:

- 1) Why select this problem, target and/or opportunity from among all others possible? (Derived through setting needs for possible action and selecting only the priority ones for action.)
- 2) Is it feasible to achieve the selected goal or objective based on complete analysis of ALL management requirements to be performed in order to deliver desired outcome/results. (Defining all the Whats to be done, and the Whos, the Hows, the Timing to do the Whats.)
- 3) Does the implementation plan represent the most efficient and effective way to assure PREDICTABLE success while allowing each person to achieve his/her accountability standards? (Defined ways of checking

quality performance during implementation applying Quality Control procedures.

4) Does the plan selected assure the delivery of MAXIMUM PRODUCTIVITY?⁵

These stated Results-focused PLANNING REQUIREMENTS are not new to industrial planners. They are, however, new to many educational planners. Without the correct application of this planning stage all soon would be out of business. These planning questions and associated requirements reflect the precise LOGICAL PROGRESSION of things to do to deliver committed results. These requirements ARE EQUALLY APPLICABLE to industry, to education, and even to government agencies.

It is believed that the commercial enterprise, the educational enterprise, and any social or governmental enterprise follows common accountability and organizational principles.

The mutual accountability by each member to every other member is required to assure the delivery of predictable successful performance (results) for the organization.

If one member of the Educational Collaborative Partnership fails to perform accountability requirements, success for all and, thus, the predictable achievement of the results desired will be jeopardized.

Success in the educational enterprise will be solely dependent upon: (A) The commitment by all partners to the prime outcome of the educational enterprise, namely, successful learners; (B) The rigor, precision and discipline of the results-focused processes applied in planning, managing, and evaluation

⁵ MAXIMUM PRODUCTIVITY: The actual delivery of priority results; consistent with most efficient use of limited resources; by persons accountable to deliver results within appropriate timely schedules.

for results; and (C) The skills and competencies of all partners working together in the educational collaborative partnership to deliver predictable success for learners, community members and educational professionals.

Chapter 4

Delivering Predictable Success for Learners: Our First Priority for Educational Results

A classic discussion often heard between teachers, administrators and laypersons pertains to the open resistance by educational professionals to the idea of a "child" being looked upon as the PRODUCT of an enterprise. The professional educators express concerns about developing robots; eliminating the dignification of the "total child"; about it not being realistic to apply engineering concepts to develop the "total child"; and, about the intrusion of the public into the "sacred area of the professional teacher and/or administrator" (about which the lay person is considered to be totally unqualified to recommend more effective teaching, managing, and learning processes).

This resistance by professional educators to challenges presented by the lay public might be warranted if they (the professional educators) were delivering success for learners. The truth, however, is that educational professionals are NOT delivering success for learners. This truth applies at every grade level (K-12 grades), in community colleges, and in all universities. The record of continuous failure by learners at all levels has been the stimulus for the public to question the effectiveness of professional practices applied by teachers and administrators. This concern is being expressed by the parents of the children -- namely, those people who are the BOSS and who provide the taxes to operate the schools to prepare their children to be successful citizens upon graduation.

A special edition of the most prestigious educational journal, Phi Delta Kappan (Oct. 1980) presents the unvarnished truth about the ineffectiveness of our teacher-colleges in preparing teachers who are qualified to deliver success for our learners. The title of this special edition "Teacher Reform" sets the stage for required reform in teaching preparation institutions.

The truth of the matter is that current teacher-training institutions will NOT change because of political reasons. The data further shows that the practices taught to teacher trainees in these institutions have a "0" to negative (-) relationship with actual delivery of effective results in the classroom.

As hard as the truth may be it is still the truth (as presented by the courageous editors of Phi Delta Kappan). This reality must not be allowed to continue.

The resistances stated by educators to those who propose new practices are NOT realistic. Either the educational professionals must admit these realities and seek more effective professional practices, or they will be replaced with a more effective and efficient schooling model, i.e., the organized shift to private educational institutions, offering a guaranteed success program for a specified dollar amount (or your money back).

This latter schooling alternative can become an absolute reality. This alternative school system could be supported by national or state voucher systems presently being proposed by advisors to President Ronald A. Reagan. The voucher system would offer each parent a single check from the state government which they can use to buy their child's education program from any school they would choose. If the school selected by the parents does not deliver pre-defined mastery learning results (success) for one's child, the parents can take their child to another school which will deliver quality learning results.

This proposed alternative to ineffective practices by educators is beyond the drawing board stage. It is being currently recommended to President Reagan for implementation during his administration (1981-1985). Accountability requirements for delivering success for learners is defined above in the most realistic of terms threatening the future of our public schools. This reality focuses also on the future life of each educational professional based on (a) the continuing ineffectiveness of

current educational practices; and (b) the lack of a concerted effort by all educators to seek more effective practices for delivering predictable success for learners. The voucher proposal might be perceived positively as the solution by the consumer or parent. The only way this movement can be slowed down or stopped is for public schools to demonstrate more effective professional teaching, learning, and management practices than those currently applied. The only measure of success in such a shift to more effective performance will be the delivery of mastery by learners at all levels (K-12 grades) for established learning objectives and measurement standards in all schools.

Currently available are proven Learning-Centered practices to design and establish a district-wide learner mastery delivery system. In less than 5 years, installing these effective professional practices for teachers, administrators, learners, school boards and parents/community partners can guarantee the delivery of a winning model for all educational partners.

Where Do We Go From Here⁶

The frank statements expressed above -- defining WHAT IS NOW -- are not intended to accuse nor to threaten the members of the educational partnership. They are stated: (1) to establish a basis for defining the focus for change, i.e., WHAT SHOULD BE, expressed as needs for change; and (2) to establish requirements and appropriate means to be applied to reverse the continuing and PREDICTABLE decline in the effectiveness of performance by our public schools.

There is currently available to professional educators and community leaders an effective educational technology for defining and solving problems which, when applied to the current

⁶The contents of the following pages are extracted from an article by Robert E. Corrigan, Ph.D. in a Special Edition of Educational Technology, April 1980, entitled "Delivering Learner Success: Our First Educational Priority"

crisis in our public schools, will deliver:

1) A proven process to deliver predictable learner-mastery results for any learning objective, in any subject area, for any type of learning, and for any student;

2) A proven rational and precise Planning, Management, and Evaluation for Results (PME/R) process for the delivery of effective priority results for learners, the community, and the individual professional (all levels). This Systematic Approach for Effectiveness (SAFE) is designed to establish quality controls to deliver the predictable achievement of priority results within the framework of a workable, humane, collaborative relationship among all educational partners;

3) A proven process to derive and establish "painless" MUTUAL accountability performance standards and commitments by and between the individual professional and his/her peers, and between the professional team members and the community membership (the resource providers); and

4) A proven rational and valid process for teachers which, when correctly applied, will deliver PREDICTABLE Learner-Mastery results with the added fringe benefit of developing in students personal satisfaction derived from their success, followed by continued commitment to learning and continued schooling because of this success.

Focusing on Delivery of Positive Results

It is proposed that there are several propositions which should be established as the basis for reversing the reported negative projections for the future:

Proposition 1

Our local school districts, state and county offices, and the Office of the Secretary of Education are operated by PEOPLE. In view of this reality, we must install processes which, while responsive to the feelings and sensitivities of people, will focus on the SYSTEM-WIDE responsibility "to deliver success for our learners". This proposed requirement shifts

the focus initially to SYSTEM-WIDE ACCOUNTABILITY, then to INDIVIDUAL PROFESSIONAL ACCOUNTABILITY, and finally, to PERSONAL ACCOUNTABILITY for delivering successful learner results.⁷

The requirements for change cited in Proposition 1 shift the focus from a selfish "ME FOR ME" agenda to a selfless district-wide "US FOR US" commitment to learner success by establishing learner needs for action as the first concern, to be followed by the delivery of mastery results for learners. This will be achieved based on a commitment among all partners to a model of mutual accountability. The proven, rational and systematic (SAFE)*PME/R (Planning, Management and Evaluation for Results) process involves these steps:

Step A. Enter into a common and rational collaborative problem solving process for selecting priorities for ACTION based on a formal and objective needs assessment process and the mission of the district.

Step B. Organize the schools so that each educational partner's job is carefully defined in advance (boards, community, administrators, teachers, and learners); with performance standards established to define accountability for each partner's job or function(s).

Step C. Establish measurable learning and management objectives derived from and consistent with priority needs and goals arrived at through collaborative interaction between all educational partners.

Step D. Derive and install results-focused ACTION PLANS offering the highest probability of achieving the defined performance objectives consistent with the most efficient use of limited resources. Herein we see the focus on

⁷Lessinger, Leon M. "The Exercise of Due Care in Education: Toward Standards of Professional Practice," Educational Technology, XX, No. 4 (April, 1980), pp. 15-19.

*Systematic Approach For Effectiveness

MAXIMUM PRODUCTIVITY consistent with FEASIBLE plans of action and limited resources (cost-effective action).

Step E. Install a continuous process for evaluating and modifying the performance of the district's program and all the partners prior to, during, and following the delivery of desired results.

Step F. Report successful results to the community (education performance audit) on an annual basis to obtain continuous public commitment.

Step G. Revise the on-going schooling process based on performance data indicating required corrections. These data would be gathered "along the way" through performance evaluations of the quality of outcomes achieved; and the performance effectiveness of those involved in delivering results (teachers, administrators, parents, learners).

Following the proposed recommendations above will come the focus on the PERFORMANCE of the school district and on priority RESULTS to be achieved.

The steps as proposed will require:

! 0 (a) That each individual educational partner enter into a process of compromise in the selection of priority programs for action (NEEDS, GOALS, and OBJECTIVES);

(b) That all performers commit themselves to accountable performance standards defining one's job or function; and

!! (c) That they be willing to be evaluated accordingly, and to change, as required, for the better to deliver quality outcomes.

The formal technology to successfully install Results-Focused management methods, as discussed above, is immediately available; and this technology has a proven success story of delivering predictable management results.

The proven management-for-results technology offered here is new to most educators. In the past decades, professionals have read about MBO and PPBS (management-by-objectives and planning-programming-budgeting systems). In limited cases they have applied these methods. These methods are discussed in detail in Section II

In the past there have been partial applications representing more of a "Band-Aid" approach to management. What is offered here is the technology for successful, comprehensive and controlled system-wide change, in order to plan for and resolve the political and technical conflicts operating in many school districts.

Proposition 2

It is not sufficient to install only the discussed performance-based (results-oriented) management practices. A critical ingredient must be added to assure delivery of learner results; namely, the commitment to the principle of DISCIPLINED CARING as discussed by Dr. Leon Lessinger⁸ which is presented in the following condensed version.

Viewing education as a PEOPLE system, it becomes critical that each partner cares that our learners succeed and, in turn, commits to work toward this accomplishment.

Simple caring is not sufficient.

⁸ Ibid., Lessinger

In order that caring 'produces desired results' each participating member of the team must be DISCIPLINED; i.e., have the required and proven skills and competencies to deliver effective caring. Each must then apply these caring skills continuously to assure success for ALL concerned.

By committing ourselves to apply the principle of DISCIPLINED CARING as prescribed by Dr. Lessinger, to effective school management-for-results and to learning/instructional management, the relation between System-wide Accountability, Individual Professional Accountability, and Personal Accountability becomes more apparant. Each individual partner agrees to commit to achieve the goals and objectives of the district as the prime focus rather than to one's personal priorities. Each partner commits to being accountable for his or her performance; and to being evaluated periodically so that one's performance effectiveness may be assessed, critiqued, and changed if appropriate.

Proposition 3


It is proposed that the prime job of our schools be the 'delivery of predictable, accountable, and most effective Learner-Mastery results for all learners'. The single focus for system-wide results should be to assure that each learner, consistent with his or her inherent capabilities to perform, be capable upon graduation to be self-sufficient in providing for his or her physical, social, and psychological needs.

The accomplishment of this commitment will first require the achievement of Propositions 1 and 2 as previously discussed. Without these commitments to system, professional, and personal accountability, the accomplishment of Proposition 3 is not feasible.

Delivery of Predictable, Accountable and Effective LEARNER-MASTERY Results

The delivery of predictable learner mastery results must focus on the characteristics of the instructional/learning practices

applied by teachers and curriculum designers, and the quality of the administrative support provided to assure feasible implementation in each classroom.



In Figure 5 the reader is directed to the center, the focus of the educational system -- the instructional/learning process, involving guided and structured interactions between the teacher, the student(s), and instructional/learning materials. Surrounding the center (the classroom) are management support functions which must be performed to support the teacher in the delivery of predictable Learner-Mastery results.

In today's world these planning, management, and evaluation functions, which are crucial to assure maximum effectiveness for instruction and learning in the classroom, are not usually formally planned nor performed systematically.

In the future they MUST be interrelated and delivered in a controlled and accountable manner to assure the achievement of more effective instruction and learning outcomes under the guidance of the teacher.

What goes on IN THE CLASSROOM through the interactions between instructor, learners, and materials becomes, in the final analysis, the critical concern for delivering predictable learner success.

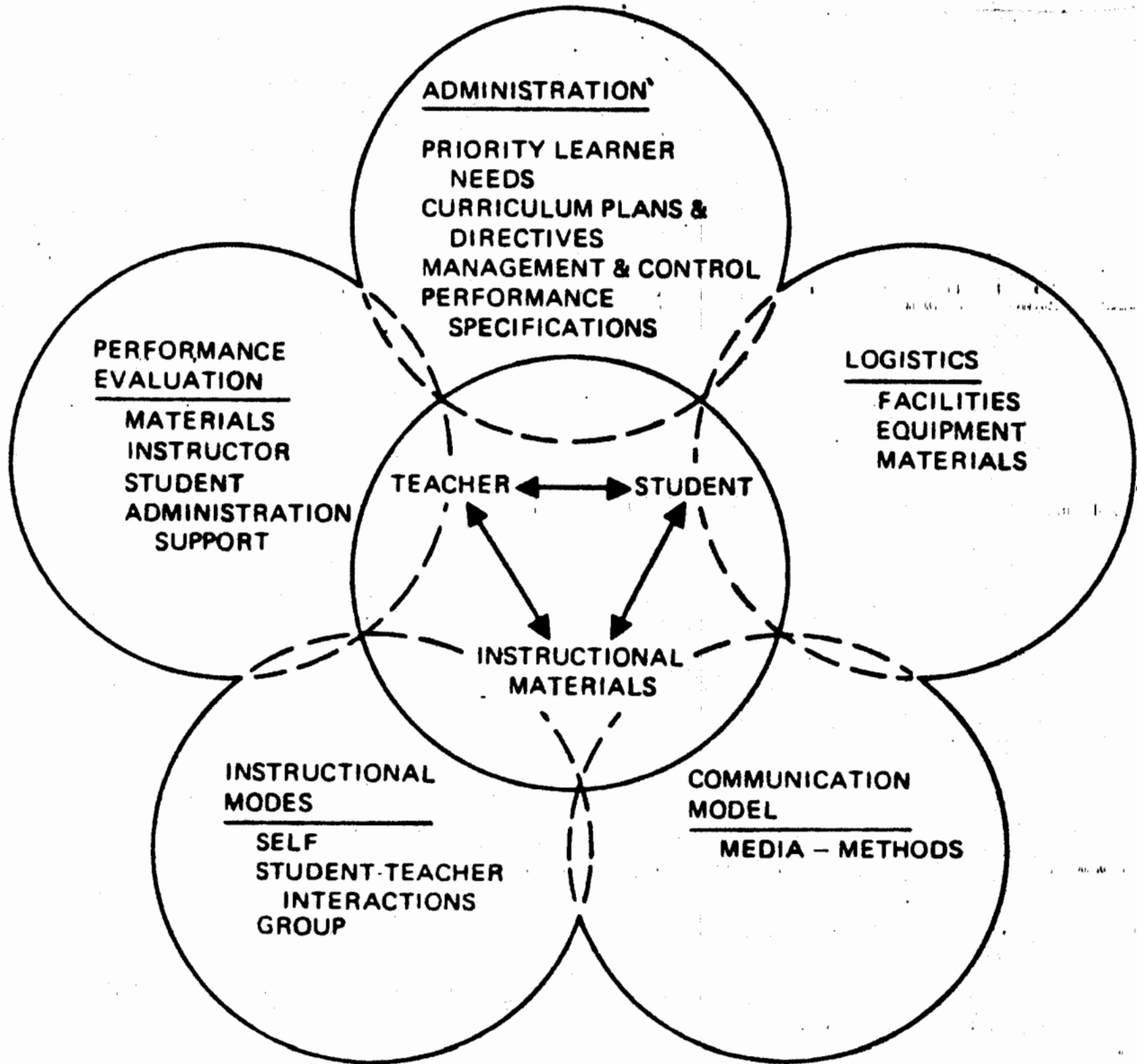
Comparing Quality of Instruction and the
Management of Instruction with Quality of Learning
and the Management of Learning

There is a most critical question which teachers must ask themselves concerning their professional activities in the classroom: "Is your commitment PRIMARILY to what must be taught or to what must be learned?" The ramifications of the answer to this question are discussed in Section III.

Figure 5

*Education Planning Requirements Include
ALL Parts of the Educational System*

Planning must be applied
to be certain that **ALL THE PARTS** are
working alone and together assuring
predictable and effective results for **LEARNERS**



11-10-80

Developing Qualified Personnel to Perform Successfully
in the Delivery of Precision Educational Results

The achievement of the three propositions presented through the application of the discussed results-focused technology for management, instruction, and learning will depend directly on the skills of the educational partners.

It will not be possible to succeed without acquiring new competencies in these proven practices by all those involved.

Accountability standards can only be realistically achieved after formal skills training is completed (teachers, administration, community leaders and school board members).

In the past, administrators have loaded on teachers work assignments to be completed in unrealistic time frames, assignments for which specific skills are required but without providing training in those skills; and/or assignments with unrealistic resource requirements. Given proper training, feasible achievement will be the rule, not the exception. Such an accomplishment will be the critical commitment defining SUCCESS or FAILURE for our schools in the future.

The Benefits of Successfully Implementing
the Recommended Propositions

It is pointed out in the beginning of this section that the critical requirement exists NOW to establish more EFFECTIVE and EFFICIENT management, instruction, learning, and student service practices to reverse the current decline in confidence for our public schools and declining success in learners.

Becoming committed to and skilled in the installation of the results-oriented processes presented will deliver the desired learner results consistent with the best use of limited resources (dollars, people, time, facilities, equipment and materials).

The final results will be a people system; working together in the most humanistic and harmonious manner; resolving learner needs while delivering maximum productivity (minimum costs consistent with quality results delivered).

When successfully accomplished, the major benefits external to the school district will be the beginning of confidence and positive commitment and support of the community.

This is critical for the continued long-term support of education.

The major benefits internal to the school district can be stated as follows:

°Learners will be predictably successful. They will be provided with competencies that are relevant to the achievement of their personal and educational objectives required for their success in society.

°Top-level decision makers are assured feasible and quality results. They are provided required data to properly plan for, manage, and evaluate success in terms of products achieved, quality-assured controls, and the resulting optimal use of limited resources, i.e., most cost-effective quality results for our learners.

°Teachers, administrators, parents and community members will derive only feasible action plans to deliver quality results consistent with disciplined caring practices applied by all professionals.

°Data necessary to maintain programs ON-TRACK through preplanned quality control and quality assurance check points.

°The key resource -- PEOPLE -- operating efficiently and effectively with reduced frustrations specific to WHO does

WHAT, WHEN, WHY and HOW.

°An institution-wide commitment to priority performance results by personnel at every level.

Making the commitment to more business-like results-focused, system-wide application of the principles, concepts, models, techniques, and tools presented in this document will produce the required results: (a) To restore the confidence of the community and, in turn, (b) Their commitment to provide the required resources for delivering priority results for learners.

Chapter 5
A Bill of Rights for Parents (Dolores T. Aaron)

"WHY A BILL OF RIGHTS FOR PARENTS?"

The Bill of Rights for the United States of America clearly establishes reasonable expectations for all of its citizens. A Bill of Rights for Parents is offered in this paper to establish an understanding of the basic elements of education that all parents must have regarding the ability of schools to deliver a successful program of education for their children.

Schools have been set up by the public to provide educational opportunities for its citizenry and to serve the community. Parents, as taxpayers, help to finance the schools. Although Educational Codes specify in detail the rights and responsibilities of schools, rights of parents in this relationship are frequently assumed or taken for granted. Many parents do not demand their rights for various reasons: 1) they are not aware of them; 2) they are in awe of educational institutions; or 3) they are intimidated by educators when requesting their rights.

Administrators and teaching personnel need to be reminded of their shared accountability with parents. Since children are the legal responsibility of their parents who provide financial support of the schools,

parents should have reasonable expectations that their rights will be granted.

After spending 35 years in the field of education, serving as a teacher, counselor, administrator, consultant and program evaluator, and after working much of this time in schools and agencies that serve children, parents and the family unit, this writer has come to one inevitable conclusion: across this nation those school systems or schools that are progressing and producing an increasing number of successful learners are those which involve parents in a variety of school-related endeavors geared toward assuring success for their children. Parents are included in planning, consulting and reinforcing the academic and support programs of the schools. In the schools and at home parents are accountable partners in education. Parents and educators serving as role models, have the most significant influence on the lives of children. Therefore, a mutually accountable relationship between these two factions should be established with each fulfilling his/her respective role in assuring successful learning.

A BILL OF RIGHTS FOR PARENTS

Parents have a right to

1. Be assured that their children will be given every opportunity to succeed in school.

Schools must be able to predict that children will learn to respond correctly to information taught, and parents are responsible for encouraging mastery of subject matter, skills, and appropriate behavior on the part of their children given the child's state of readiness for the information taught and effective teaching. Parents are a part of an ongoing evaluation process if they serve as partners with school personnel in increasing student productivity and assisting their children in reaching the maximum goal.

2. Know what is expected of their children and of themselves concerning educational matters.

There must be accountable and role clarifying guidelines set forth by school officials for parents and their children, and parents must be responsible for seeing that they and their children adhere to the guidelines.

3. Guide the maturation and education of their children and help those who are responsible for the learning of their children.

Until children reach the age of majority (emancipation), parents are responsible for them and must provide the opportunity for their children to acquire basic survival skills.

4. Enroll their children in public, private, or parochial schools, or qualify to teach them at home.

Parents are responsible for becoming sufficiently informed in exercising their right to choose either a public, private, or parochial or home instructional program. Schools are responsible for cooperating with parents regardless of the choice of educational setting.

5. Be aware of Compulsory School Attendance Laws and the consequences for non-compliance with State Statutes.

Many states have Compulsory School Attendance Laws, and parents should be familiar with their requirements and comply with them as they relate to their children's learning progress, grades and assurance of being promoted to the next educational level.

6. Receive the philosophy of the school, school policies, rules and regulations, goals, aims and objectives, together with their interpretations.

Parents should be issued copies of the school's philosophy, policies, rules and regulations, goals and objectives, and time should be spent with school officials regarding the interpretation of these. Parents should have the opportunity to request additional information and to question the purpose or validity of specific areas of concern.

7. Visit schools to gather information to confer with school personnel and to become involved in designing action plans for effective student learning.

Parents, as partners, should visit schools for reasons other than disciplinary conferences, or as voluntary tutors and chaperons. A child's parents are his/her first teachers and as such, should be able to assist the teacher by sharing information and reinforcing the teacher's efforts to encourage the child to reach his/her maximum potential.

8. Be accorded respect from school personnel as a partner in their children's educational process.

Parents must abide by stated rules and regulations which normally dictate that they cannot interrupt the orderly process of the school. However, they should receive a cordial, warm reception by all school personnel, even when it becomes necessary to remind the parent(s) of the rules governing school visitation. School personnel serve as hosts to parents, and they should help to make the parents comfortable in the school. For example, "May I help you" can be substituted for, "You know you can't visit the classroom at this time."

9. Be informed of the school's evaluation of their children's educational and behavioral needs, and participate in the planning of alternatives for the resolution and/or fulfillment of identified needs.

For parents to serve schools more effectively, they must be properly inserviced relative to the testing program and the reasons for testing. In schools where specific workshops on testing, discipline, parent involvement, curriculum and instruction, State-mandated programs,

school budgets and facility planning are conducted, students tend to perform better academically and socially. In-service for parents increases their understanding of the goals and objectives of the school and can guarantee their involvement in its progress.

It is imperative for all parents to understand how children learn, why some children misbehave, and why it is necessary to provide support services to help teachers to teach and children to learn. They must be aware of alternative solutions and their roles as parents, when an alternative solution to a problem or concern is suggested and instituted for their children.

School personnel should emphasize to parents that learning takes place when the learner is able to respond correctly to the information taught, and that evaluations serve as a check on learning. Once aware of this, parents can establish their own evaluation system at home while assisting their children with homework assignments and special projects. They can also encourage their children to demonstrate what they have been able to grasp, as well as what they may want the teacher to re-teach or review before final tests are taken by their children. In a partnership, this should be possible.

10. Request and receive consideration for pupil appraisal services with some assurance that the evaluation methods used will be non-discriminatory in determining their children's specific educational needs.

Doubt exists in the minds of many parents, educators, students and community members relative to some tests and evaluation methods used with children. Parents need to feel comfortable with the testing instruments, and those administering the tests. Understanding the purpose and the results will enhance the future plans and decisions that parents and their children must make. The tests selected should be, to the extent possible, non-discriminatory in determining their children's specific educational needs.

11. Question the effectiveness of educational practices applied by school personnel when their children are in regular attendance, but not succeeding in school.

School personnel have the responsibility of selecting, training, and providing for development of teachers and other staff members. They are also expected to supervise these individuals by employing monitoring approaches that will help the teachers and staff improve their knowledge skills, techniques and strategies so that success

for the learner can be predicted. When learning is not evident, parents, as partners, are responsible for bringing this to the attention of the principal who investigates to determine whether it is the fault of the learner or teaching personnel. In either case, the principal, as the educational leader, must provide for a positive plan of action to address the problem.

Attention must be focused on the learner, and then on the practices of the teacher(s). Are the teachers teaching what they feel these children need, or have they surveyed needs and provided for them through the use of daily anticipatory sets and their lesson plans? Are these teachers motivated? Are they enthusiastic? Can they teach, touch and tolerate the assigned school, school officials, students, and assigned tasks? Only through helpful supervision by the educational leader and departmental supervisors can practices of teachers meet the needs of learners. Parents must be able to recognize effective teaching practices if they are to serve well in their role as teacher reinforcer.

12. Inspect, review, add or delete information from their children's school records.

Parents should be apprised of the content of the Buckley Amendment, its impact on education, and the rights of parents as these rights relate to their children's records.

13. Be informed of each level of due process available to their children regarding discipline, school placement, and other serious matters which affect the educational rights of their children.

Parents should be given in writing a statement defining and explaining due process and telling how it works in their particular locality. The records of school personnel who provide this act of fairness for students and their parents, show an increase in the number of students who elect to abide by school rules and regulations. As a result, suspensions and expulsions are on the decrease excepting for the more serious offenses. Parents are also better prepared to accept the consequences of their children's actions, even if it means placing the students in programs designed to address their particular disciplinary and/or academic needs within or outside of the school district.

14. Participate in making decisions regarding their children's school placement, based on educational performance, behavioral and psychological data.

Many parents make most of the decisions with or for their children. Why, then, can they not enter into an important school decision such as school placement? School systems that offer the most appropriate placement for children are those that arrive at the decision with some input from the parent(s) who can support the school's efforts.

15. Make a reasonable selection of courses for their children (at the secondary level) from the subjects offered by the school district compatible with academic requirements.

Parents can share with teachers, counselors, social workers and other school personnel recognized talents and interests of their children. This form of sharing oftentimes affords the school extended holding power and enhances the school's ability to motivate the students and assure their success as they satisfy State requirements and their personal subject interests.

School systems that practice shared accountability help produce knowledgeable parents who are able to understand State regulations, local school requirements, and school restraints. They are often quite capable of assisting their children in the selection of courses that may have an impact upon their future life careers and/or employment.

A Bill of Rights for Parents, understood, accepted and implemented, can serve to increase the chances for predictable learner success.

About the Author:

Dolores T. Aaron, Assistant Superintendent, Child Advocacy Unit Division of Educational Programs, New Orleans Public Schools, became the first black female Assistant Superintendent in New Orleans in 1980. Throughout her career she has been "up front for the children," as a teacher, consultant to counselors, developer of format for training paraprofessionals, member of the Conflict Resolution Team, as well as in civic work in the Girl Scouts, YWCA Advisor, and Supervisor of Youth Services. Honored by Xavier University in 1972 as Alumna of the Year, she is also a consultant in Discipline and Classroom Management at the local, state and national levels.

Chapter 6
Bill of Rights for Learners (Robert E. Corrigan, Jr.)

A child must learn from his or her parents if he or she is to survive. A child has the given right to learn from his or her parents how to live.

A parent must teach his or her child if there is to be fulfillment or a future. A parent has the given right to share life with his or her child.

We teach our young as we were taught. Without that, our families, our nation, cease to grow and to live.

A child has the right to learn to communicate.

A child has the right to learn how to maintain his or her health.

A child has the right to learn of God.

A child has the right to learn how to contribute to, and how to gain from, the family; to learn of personal joys which make life complete.

A child has the right to learn how to enter into society, how to contribute to society and how to succeed in society.

A child has the right to learn of government and of freedom.

A child has the right to learn of the law and of justice.

A child has the right to learn how to pass on to future generations, wherever possible, what those generations will need to learn.

Our children are completely dependent upon us. For 15 years or so, a child can't do for himself or herself. Strangely, this, our greatest responsibility, brings our greatest joy.

In our society, much parental responsibility has been transferred to the educational system. Indeed, the educator is, in many ways, a surrogate parent.

Unfortunately, many educators are unprepared to provide the vital resources required by the child if he/she is to successfully mature. The future of our families and our nation depends on the care given to our children. The schooling process all too often does not fulfill its responsibility to teach the child what the child needs in order to grow successfully.

On the other side of the coin, the creation of the role of surrogate parent has resulted in the unspoken transfer from parent to educator of too many responsibilities. The mutual

accountability implicit in the parent/educator interface has become distorted. Today, we often find a parent "dumping" total responsibility for a child's education on the schooling process.

Thus, the mutual accountability relationship between parent and educator is misunderstood and often unsuccessful. At stake is the future of our society.

And who suffers because of all this? Who is the real loser? Who is condemned to suffer and who never knows why? Who has a deep feeling of failure?

The one who suffers is the child, and the child can do absolutely nothing about this. Our children are dependent on us if they are to have a fulfilling future. We cannot allow ourselves to fail them.

Our children have certain given rights. With each right is a corresponding duty that we, as educators and parents, must assume if life is to be joyful for our children.

If a child cannot read it is not the child's fault. If a child fails to learn it is not the child's fault. If a child does not successfully mature it is not the child's fault.

The child is dependent upon the adult. It is our duty to provide for the rights of our children, as our parents provided for us. We are the failures if our children do not succeed; and, if we do not accept the gravity of this responsibility, we will know failure as few can imagine it.

We must apply means by which we can meet our responsibilities in the education of our children. Such means do exist. Any failure in our educational process is due to political factors rather than technical factors.

The proven technology now exists which can guarantee predictable mastery learning by our learners in any chosen subject matter. It is the right of every learner to be provided predictable mastery learning in several non-negotiable areas.

A Child Has the Right to Learn to Communicate

Our children must learn to speak and to read and write. Without this there can be no transfer between people. And yet,

how often today do we condemn the young to the prison of semi-illiteracy with its inmates of poverty, alienation, confusion, and anger.

Yes, we often fail in this, our first duty in the education of our children. And if we fail here, what of elsewhere?

A Child Has the Right to Learn
How to Maintain His or Her Health

Nutrition, hygiene, and the requirement for necessary medical attention must be taught to a child if a child is to comprehend these subject areas.

It is the right of every learner to know how to maintain his or her physical health.

To condemn a child or young adult to poor health through lack of a proper education is criminal.

A Child Has the Right to Learn of God

Our pledge of allegiance references our nation "under God." Many of the original colonies were dedicated to God. It is our tradition and our duty to teach our children of a power greater than ourselves, if only by a living demonstration of care. Without this giving, our children will not know of faith, of hope, and of love.

This simple act of giving, of fulfilling our societal educational responsibilities, demonstrates a commitment to selflessness. More formal religious training is the responsibility of each parent as he or she may deem appropriate.

Thus, though theology is not the responsibility of the structured educational process, is it not the responsibility in our country "under God" to recognize God by action and by reference?

A Child Has the Right to Learn How to Contribute to
and How to Gain From, the Family;
to Learn of Personal Joys Which Make Life Complete

Like a knowledge of God, knowledge of family life and personal values and joys is not the primary responsibility

of the formal educational process. Here, only the parent can determine what is appropriate; and only the parent shares the family and personal environment with the child. Nevertheless, the formal educational process shapes many of our children's attitudes toward family life and personal values and joys.

Education must be aware of its effect on a child's personal and family life and act accordingly through educational environment, through references to these matters, and through adult examples.

A Child Has the Right to Learn How to Enter Into Society,
How to Contribute to Society, and
How to Succeed in Society

In our complex society, specific skills are required for individuals to make a living. Education must be interfaced with society such that the individual graduate is equipped with requisite skills and knowledge to compete in and to contribute to society. It is the right of every learner to be provided these skills and knowledge.

As this right is denied the learner, he or she faces the fears and frustrations of poverty; the alienation of being rejected; and the self pity which springs from being unproductive. Society also suffers from the lack of contribution from yet another of its members.

On the other hand, as an individual learns how to enter into, how to contribute to, and how to succeed in society, he or she feels fulfillment, security, and happiness; and society benefits from the individual's success and productivity.

A Child Has the Right to Learn of Government and of Freedom

To learn how we determine our course as a group and the rationale for our actions is critical for individual security.

Democracy and its basis of individual freedom springs from "self evident" truths. As the individual learns that his environment is based on these truths, the individual can find peace and security.

"Inalienable rights" are the foundation of our societal lives. To learn of these is to learn of hope for the future;

to learn of a nation that cares.

Knowledge of freedom and its attendant responsibilities is essential to the social growth and behavior of all.

Learning of the responsibilities of freedom teaches us what we can and cannot do. We learn of responsibilities to our neighbor and vice versa.

A Child Has the Right to Learn of the Law and of Justice

How we act toward our neighbor is one of the controlling factors in determining our environment.

Knowledge of what is permitted, and why, brings security. First, one learns of authority and why authority is valid (see section on government and freedom). The knowledge that laws are not arbitrary brings acceptance and peace.

Learning of justice and the rights of the individual allows for peace within the individual and is part of the basis of a happy life.

A Child Has the Right to Learn How to Pass on to Future Generations, Wherever Possible, What Those Generations Will Need to Learn

Our children will be required to teach their children; just as we are required to teach our children.

The new and proven educational technology of the 80's, learner centered and delivering predictable mastery, must not only be implemented today but must also be taught to future generations.

The process by which learner's rights are fulfilled is itself a right of learners.

In that new and proven predictable mastery learning technology meets society's requirement to educate its members, access to such new methods is not only the right of learners but is also the right of educators and of parents.

All of these rights are expressions of needs; needs deeply sensed in the being of every child. We all but rob the child

of his/her humanity if we do not teach the child, as best we can, the appropriate means of fulfilling the given need for communication, health, God, family and personal joys, society, government and freedom, law and justice, and the continuity of all of these through passing them on to future children.

Our lives can never be satisfying unless we meet our duty by providing for the fulfillment of these right of our children.

About the Author:

Robert E. Corrigan Jr. joined Corrigan & Associates in 1980. He is an invaluable editor of this book.

Chapter 6

BILL OF RIGHTS FOR LEARNERS

A child must learn from his or her parents if he or she is to survive. A child has the given right to learn from his or her parents how to live.

A parent must teach his or her child if there is to be fulfillment or a future. A parent has the given right to share life with his or her child.

We teach our young as we were taught. Without that, our families, our nation, cease to grow and to live.

A child has the right to learn to communicate.

A child has the right to learn how to maintain his or her health.

A child has the right to learn of God.

A child has the right to learn how to contribute to, and how to gain from, the family; to learn of personal joys which make life complete.

A child has the right to learn how to enter into society, how to contribute to society and how to succeed in society.

A child has the right to learn of government and of freedom.

A child has the right to learn of the law and of justice.

A child has the right to learn how to pass on to future generations, wherever possible, what those generations will need to learn.

Chapter 7

Are School Boards and Policy Makers the Problem? Yes! (Merton H. Johnson)

Everyone has their own definition of what is wrong with Education. "We spend too much", "Students are not achieving", "Teachers are paid too little or too much", "Parents don't discipline their children", "The schools don't discipline enough", "Schools should get back to the basics", "Teacher tenure is bad", "Management is incompetent", "The State Legislature is ruining Education", "The School Board is too political", "We don't teach the right courses", "Students are not expected to do enough", "We don't have standards any more", "The costs of education are too high", "Teachers' militancy is ruining Education", and on and on and on we go!

I contend "the buck stops" with School Boards. As long as we continue to focus on a discussion of the problems "unifinitum" and as long as we do not establish policies and practices which are based on characteristics which, when existing, eliminate problems, we are the "problem".

Sure, Superintendents and Principals are hired to manage the schools and carry out school board policy, but do we have policies which mandate certain results - focused management competency? Do we have policies which mandate certain learner mastery competencies and practices? Do our policies define the characteristics which are required in order to give us a means for evaluating the degree to which we accomplish results which, when met, eliminate problems?

A problem is defined as the difference between what is desired and what currently exists. You can use that definition and apply it to any condition, organization, project, curriculum,

learner or whatever, and when the discrepancies between what is desired and what exists are met, problems are solved. That isn't to say that "all" problems are solvable or are of the same priority, but there certainly is no good reason that we shouldn't focus on defining the requirements for problem solutions to the greatest extent possible, placing priorities on each defined problem so we can monitor the extent to which we are achieving desired results.

What is needed is a resolve by Boards of Education to focus on policies which mandate problem solutions! Do you have clear statements of your school's Philosophy, Mission, Goals, Objectives, Tasks and Relationships? To the extent these exist or do not, we can solve problems. Conversely, to the extent they do not, we will always be the problem. Do you have a policy which mandates that plans exist to develop, implement and evaluate your curriculum as statements of desired student learning behaviors, knowledge, skills and competencies and attitudes? If not, you are the problem.

Policy makers such as Legislature, State Boards of Education, and local School Boards no longer can be allowed to "duck" their most important role. They must set policies and practices which mandate certain results. They must provide the implementors of those policies with the expectations and resources to move toward achieving the implementation of those policies so we can be accountable to our clients. To the extent that we identify and implement such policies, Boards and Policy Makers can be accountable and may even gain some credibility in the process.

Problem solving starts with leadership and management competence at the Board and Administrative level. If all Board members and Administrators ever do is talk about what is wrong and/or justify why things are the way they are, or write the schools off as "it's not possible", our credibility, performance and commitment from the public cannot be improved upon.

It is no longer acceptable to say that "colleges don't train our administrators or teachers properly." All effectively managed businesses and institutions have long ago faced up to their competence requirements by directly identifying their Mission, Goals, Objectives, Tasks and Relationships within their organization and have developed results oriented plans with measurable Objectives. Once this has been accomplished, they have determined for themselves the best means available to guarantee competency exists where required to meet the needs of their organization, and that competency based training is provided for the employees to solve their problems.

There are available, through the private sector, methodologies and programs of accountability that work. Corrigan and Associates have developed and field-tested a guaranteed success approach to solving problems (SAFE* Guaranteed Systematic Approach For Effectiveness). The SAFE approach is so logical, straight forward and complete that most educators and many Boards and business people have a difficult time comprehending it, yet they have not alternatively provided their Boards or organizations with a consistent, complete and cost effective management plan for total system-wide accountability.

Is Accountability and Effectiveness possible in Education?

Yes!!!

Boards must adopt policies mandating management accountability and effectiveness. They must further seek out training programs that can assure systematic accountability and effectiveness in addressing all aspects of their organization. This means a clearly stated Philosophy and Mission statement on which to build clearly stated Goals and Objectives for management, teachers, staff, students, and in many cases, parents. All partners of the educational process must be included in any effective system-wide plan which mandates results in an effective manner.

Is it easy to develop and/or implement such a policy? Yes! Several school districts and organizations have done so and can now demonstrate unusual clarity of their performance. Corrigan and Associates have enabled many district and organizations to deliver precision performance results through the use of their management training system (SAFE) -- a thorough and effective means of delivering predictable results. There is no need to send administrators and teachers off to earn another degree to achieve the competence to gain the knowledge and skills to manage effectively. The Corrigan system for "Delivering Maximum Productivity" is a guaranteed approach and schools throughout our nation could benefit greatly through adopting it.

Does it take long to transform a system to improve its productivity? Time and effort are required. However, commitment by Board and Superintendent is the major requirement. Without total leadership and policy commitment, little can be expected. Most inservice programs as cited in recent findings have produced limited, if any, positive results in increasing productivity, yet the Corrigan Plan has demonstrated each time it has been used, a very effective and predictable means to the results required by any organization.

Results? Yes! We all want them for improving Educational performance. Policies mandating results? Yes, that is the only solution to problem solving. School Board members must have the vision, wisdom and courage to set policies and the criteria which must be met by management and the Educational System in order that we might be accountable for delivering a product for and through students who will have gained the knowledge, skills, competency and attitudes to function in a contributing manner to our free society.

Commitment to performance through clearly stated Board of Education policies on effectiveness are required as a condition for solving the problems of Educational achievement for each

student to the maximum of that individual's potential!

About the Author:

Dr. Merton H. Johnson has been a Board member of the Bloomington Minnesota Board of Education since 1980. He is currently Director of METRO II, St. Paul, Minnesota (METRO II - Management Information System Service Center). He has been a professional educator for 20 years, filling every position in education - teacher, principal, Superintendent of Schools and Professor of Education.

SECTION II:

**SCHOOLING AS A SERIOUS BUSINESS:
LESSONS LEARNED FROM BUSINESS & INDUSTRY**

FOREWORD

**Delivering Excellence in Education:
The Major Responsibility of the School Boards of America (Shirley Fenstermaker)**

Chapter 8

Requirements for Delivery of Effective Educational Performance Results

Chapter 9

Applying Effective Management-for-Results Practices

Chapter 10

**The Educational Performance Audit:
Determining the Effectiveness of a Learning-Centered Performance System**

Chapter 11

Benefits Derived Through the Installation of Management-for-Results Practices in Education

FOREWORD

Delivering Excellence in Education: The Major Responsibility of the School Boards of America (Shirley Fenstermaker)

The school boards of the nation must learn to do their job more efficiently and more effectively and more professionally if they are to survive.

Better education must be achieved with fewer dollars per student. It may not be fair to compare public and private schools but the fact is, unless a major change takes place soon public schools may cease to exist.

Big business, as public school operation is, must produce a product (a successfully educated young person) that the public is willing to buy and at a price the public is willing to pay. If this result is not achieved public schools will close just as many inefficient businesses have. Uncle Sam has bailed them out for the last time. A choice will be made available that will provide for competition among schools if the present system of schooling fails (voucher system).

There is available a proven system which guarantees significant increase in the performance effectiveness by our schools including our school administration, our teachers, and, of greatest importance, our learners.

If the public is honestly polled for the results they want and are willing to pay a fair price for those results, public schools can and will survive as an important part of the democratic free society we cherish.

School boards must make and enforce those all important policy decisions to assure success for our schools and our future citizens just as the boards of any other business must assume the final responsibility for their business success or failure.

Shirley Fenstermaker
Former school board member
Dayton Public Schools
Dayton, Ohio

Chapter 8 Requirements for Delivery of Effective Educational Performance Results

The world of education is facing very crucial challenges in the immediate future as follows:

- (A) The predictable decline in financial resources;
- (B) The demand for more EFFECTIVE PERFORMANCE as measured by Quality Results delivered consistent with the most efficient use of limited resources (successful learners);
- (C) The required shift to the use of more effective and efficient Planning, Managing, and Evaluating practices which guarantee the delivery of COST-EFFECTIVE performance results.

Today we are seeing drastic efforts to cut back on operating budgets in educational programs. This current approach is, however, primarily COST-EFFICIENT by design - it cuts costs without examining the impact on results!

The major focus of this COST-EFFICIENT management approach is on the reduction of costs without a clear linkage to the effect on RESULTS TO BE DELIVERED consistent with this reduction of allocated resources.

Future management practices will require FIRST a refocusing on the results to be delivered by an organization (Performance Effectiveness) and then the derivation of budgets which are directly linked to the most efficient delivery of these required performance results (Program Budgets).

This rethinking through the use of results-focused managing and planning practices will, rather than be concerned merely with COST-EFFICIENT INPUTS, assure the delivery of COST-EFFECTIVE RESULTS.

Projected changes in both the philosophical and practical requirements for the delivery of EFFECTIVE Performance results by any organization is not a "nice-to-do" commitment. Rather, it is a necessary NEED-TO-DO requirement to be met by all organizations IF they are to succeed in the projected conditions of economic turbulence in the coming decades.

These more effective performance-focused management practices will be equally applicable to business, education and government organizations and their managers who are accountable for delivering required results.

Education is a social institution. Yet is it not accountable for delivering a QUALITY PRODUCT, namely successful graduating learners who in turn become our future successful citizens! In education the taxpayers invest their taxes with the obvious right to receive a profit on their investment (successful future citizens).

As an accountable performance-focused enterprise the schools of America must deliver this profit on the taxpayer's investment or be replaced with an organization which will deliver the required results.

The final consideration in the selection of educational programs should focus on the COST-BENEFITS to be derived from each program, including serious PRE-consideration of the FEASIBILITY for program implementation (long-term financial commitments) to be linked with considered RELEVANCE of needs to be resolved.

In a world of declining financial resources with an ever continued growth in social needs to be resolved, the future practices in education for setting priority needs in the community and investing tax dollars in programs to resolve established priority needs must be based on pragmatic (cost-effective) management requirements combined with POLITICAL (COST-BENEFICIAL) considerations.

Shifting the focus of educational planning and managing to the achievement of PERFORMANCE EFFECTIVENESS requirements (quality results) can provide crucial management CONTROLS which:

- (1) Can replace political BIAS with COST-EFFECTIVE programs; and
- (2) Install programs which will be RELEVANT (meeting priority needs), FEASIBLE (fiscally responsible), and MANAGABLE (delivering maximum returns on the investment [taxes] of all taxpayers!).

Can we afford to do less for the survival and growth of our schools?

APPLYING A SYSTEMATIC APPROACH FOR EFFECTIVENESS
FOR DELIVERY OF INCREASED PERFORMANCE EFFECTIVENESS
(QUALITY RESULTS) FOR ANY ORGANIZATION

The promise of predictable increased performance effectiveness by any educational organization will be fulfilled through the application of the PROVEN systematic approach for effectiveness.

SYSTEMATIC refers to those disciplined and orderly steps performed by managers of any organization to assure the planned delivery of successful results. These systematic process steps will provide the structured and CONTROLLED process whereby individual managers will learn:

- A. To eliminate sources of error (including assuming) which can:
 1. Result in one's commitments to priorities for action which are not the most meaningful (relevant) for consideration; and

2. Result in one's commitment to NON-FEASIBLE targets for action.
- B. To detect and in turn to eliminate BIAS, fraud, and/or waste when committing resources for consumption.
 - C. To effectively CONTROL (at all levels) the delivery of quality results through the use of techniques and means for evaluating on-going performances.

This Systematic Approach for Effectiveness (SAFE) is not to be considered a panacea. This SAFE process will provide those DISCIPLINED steps to both minimize ASSUMPTION and eliminate sources of error which can directly degrade the delivery of quality PERFORMANCE results.

Thus is offered a PROVEN capability to increase the predictable delivery of results (PERFORMANCE) by any educational organization.

The SAFE systematic process steps will provide every accountable manager the skills and qualifications to make every school district and/or university a most successful business enterprise (i.e., operating every school in a most COST-EFFECTIVE [management-for-results] manner; with the delivery of the desired return-on-investments for taxpayers - successful graduating learners leading to future successful citizens).

Chapter 9 Applying Effective Management-for-Results Practices

Focus on Quality Results for our Schools

Educational professionals responsible for the effective management of schools will have a new set of requirements to achieve in the 80's -- the delivery of COST-EFFECTIVE results for learners and parents -- the commitment to MAXIMUM PRODUCTIVITY* for our schools defined by Quality of Results delivered -- and the requirement for performance accountability for the school district and for each professional educator working in that school district in order to deliver priority performance RESULTS.

These requirements will introduce critical changes in the way one must think, act, and be evaluated. These changes will include: new concepts of managing-for-results; new roles and functions of educational leaders including all central office administrators, principals, teachers, guidance counselors and support personnel to deliver quality results; new standards of accountability for delivery of performance results by all practitioners at all levels of involvement in the school planning, management, operations and evaluation process.

The shift to the delivery of performance results as the SOLE focus requires that each professional be qualified to think and to perform as a MANAGER-FOR-RESULTS**.

*MAXIMUM PRODUCTIVITY: Committed and qualified people working together for the delivery of maximum product quantity and maximum product quality (measured in terms of pre-negotiated and acceptably defined performance standards) consistent with the minimum use of limited resources (money, time, personnel, facilities, equipment, etc.) to achieve the delivery of these products.

**MANAGER-FOR-RESULTS: A person accountable for controlling the planned delivery of predetermined QUALITY products or services; and who successfully achieves these results or outcomes by the application of those precision Planning, Managing, and Evaluating for RESULTS practices which provide for the selection, implementation and continuous evaluation of only the most COST-EFFECTIVE plans of action.

The concept of operating as a MANAGER-FOR-RESULTS forces the application of the most effective performance-based planning, management, and evaluation process. A MANAGER-FOR-RESULTS will continuously evaluate progress of performance within a pre-developed plan-of-action as measured against measurement achievement standards.

In a learning-centered performance system the ultimate focus must be on:

- °The individual learner's success;
- °District/State-wide measurable performance results for all learners;
- °Accountability for delivery of performance results by each practitioner as contributors to the achievement of carefully derived Performance-Based plans-of-action;
- °A continuous focus on management evaluation of district/school performance progress "along the way"
- °Changes in plans required to keep "on track" as planned (quality controls);
- °The evaluation of each performer (all levels of contribution) specific to his/Her achievements as a MANAGER-FOR-RESULTS (every level);
- °A formal ONGOING interaction with and between the community and the educational professional team in order to make priority commitments for ACTION (NEEDS, GOALS, AND OBJECTIVES), report RESULTS achieved by the team of professional MANAGERS-FOR-RESULTS (all levels), submit proposed revisions to be made in future operations;
- °The communication of resources required from the community to increase the achievement of MAXIMUM PRODUCTIVITY (cost-effective learner success) in our schools (Annual Performance Audit for the district/school).

HOW TO GET FROM HERE TO THERE WITH PREDICTABLE SUCCESS

The change in concepts, roles, functions and task requirements to be accomplished by the educational manager in this decade (1980-1990) are totally realistic; and they must be provided for in future commitments to staff development for principals, teachers, guidance counselors, central office leadership, and Boards of Education.

To offer a concise focus on what must be done to maximize success, the following question must be answered.

QUESTION 1.

What are the proposed Planning, Management and Evaluation-for-Results (PME/R) skills to be mastered by MANAGERS-FOR-RESULTS so that they can effectively and efficiently manage their specific educational environments?

DELIVERING MAXIMUM PRODUCTIVITY

As previously stated, all professional educators (all levels including Board Members, Superintendent, Senior Administrators, Principals and Teachers) are MANAGERS-FOR-RESULTS.

Each professional will require a common set of results-oriented Planning, Management and Evaluation Skills (PME/R) to perform assigned roles and functions within the authority/responsibility relationships in the school district organizational structure.

The job of the effective educational manager-for-results will be to:

- ° Define and select priority targets for action based on needs to be resolved;
- ° Derive and implement action plans to most effectively achieve stated targets with the most efficient use of limited resources; (delivery of most cost-effective results);
- ° Organize and motivate personnel to deliver their maximum output within set time and resource limitations;
- ° Maintain the required quality and quantity of products and/or services being delivered over time through the continuous "fine tuning" and control of the total delivery system and its parts (quality control methods);

- ° Deliver maximum productivity as preplanned;
- ° Provide for controlled revision based on performance delivered.

Each of the above, accomplished with precision and control, will deliver MAXIMUM PRODUCTIVITY for the organization; i.e., maximum quality and quantity of products delivered according to pre-negotiated and acceptable standards with effective use of limited resources (time, money, personnel).

It is this challenge, delivering maximum productivity, that faces today's educational managers.

Maximum productivity is the outcome of controlled performance-based management delivered by managers who possess and apply the skills and knowledges required to deliver maximum effectiveness (results) in combination with controlled efficiency (resource usage).

The keys to the delivery of maximum productivity will be the application by managers of effective Results-Focused Planning, Management and Evaluation methods. Precision planning will require the applications of RESULTS-oriented (Management-through-Objectives*) methods:

1. To define and select priority implementation targets; and
2. To derive ACTION plans which will assure the delivery of ONLY priority results with predictable EFFECTIVENESS and EFFICIENCY.

*MANAGEMENT-THROUGH-OBJECTIVES: The focus of management steps performed to assure the achievement of a specific performance objective through: (a) the initial derivation of all required activities required to deliver the final end product; (b) The selection and implementation of only the most efficient and feasible ways and means to perform all required activities; and (c) the continuous application of Quality Controls to assure predictable achievement of the final performance results stated in the performance objective.

In order to accomplish this requirement the educational manager will require the application of an orderly, systematic planning and implementation and evaluation process to answer the questions presented in Table 2 .

This systematic approach must establish those necessary external and internal controls to assure:

- a) The highest probability to commit to only relevant and feasible targets for achievement (results);
- b) The internal planning, management and evaluation controls to assure delivery of maximum productivity results.

The requirements to be met to achieve a and b above are as follows:

1. The assurance that only relevant data required for valid management decisions are derived and considered.
2. The capability to analyze data in such a manner that planners are assured the highest probability of deriving and making only correct decisions using only valid decision-making criteria.
3. The assurance that planners can proceed in a controlled and purposeful manner to make successive commitments to action on a NEED-TO-KNOW and/or NEED-TO-DO basis. This assurance establishes minimum risk and maximum potential gain when making decisions.

TABLE 2

RATIONAL QUESTIONS TO BE ASKED AND STEPS TO BE PERFORMED TO INSTALL AN EFFECTIVE RESULTS-ORIENTED PLANNING/MANAGEMENT AND EVALUATION (PME/R) PROCESS.

- ←1. Why are we proposing to do this? What is the need?
- Assess needs
 - Define problems
 - Set priorities for action
- ←2. Exactly what is it you want to accomplish and how can we evaluate our success:
- Goals related to priority needs or problems
 - Management (performance) objectives
 - Management (performance) requirements
 - Measurement standards to be achieved (end results)
- ←3. What can cause our failure to achieve our objectives and how are we going to neutralize this possibility:
- Constraints and/or new performance requirements to be met
- ←4. What specific activities are we going to take to implement our objectives?
- Major activities to be performed (milestones)
 - Sub activities to be performed for each "milestone" (sub functions/tasks as appropriate)
- ←5. What do we require to perform each activity?
- People, things, other means available (feasible methods and means)
- ←6. Exactly how much is this going to take (time, people, things, money)?
How do you know it's enough?
- Time line schedules of all activities
 - Personnel requirements to achieve defined accountability standards
 - Support requirements (people, things, others to make things work)
 - Program budget (dollars to get all activities done in required time schedule and measured against delivery of concise RESULTS)
- ←7. How are we going to monitor our implementations and report final results?
- Evaluation steps and revisions along the way to keep on track (Quality Controls Checks)
 - Evaluation and reporting "at the end" (final results achieved).
- ←8. How should we revise our plan to do better the next time around?
- Proposed revision in plans to increase performance effectiveness and efficiency (short range)
 - Proposed revision in plans based on revising needs (long range)

(←--) Dotted lines show feedback loops to assure internal consistency and compatibility between questions and answers and actions taken.

4. The assurance that planners are provided, as part of the analysis process, the capability for sensing errors in the execution of the analysis and decision-making process; and/or sensing a requirement for further data for making correct action commitments.
5. The assurance that planners are provided a capability for revision or correction of errors in time assuring valid and reliable decisions.
6. The capability for establishing a controlled and standardized process for recording and communicating all successive analysis and planning steps. The derivation of each planning step must be recorded on paper, thus allowing interested parties the capability of judging the validity and reliability of each planning step, data derived, and reasons for making decisions for action.
7. The application of a systematic analysis process which provides for the detection of bias and the capability to eliminate this bias from the decision-making process.
8. The selection from alternatives of that plan which presents the most cost/effective plan to predictably achieve established objectives and performance requirements.

Figure 6 presents the SAFE* PME/R process model for planning, management and evaluation for RESULTS. This PME/R model specifies all steps to be performed by MANAGERS-FOR-RESULTS to accomplish the requirements stated above and will assure minimum risk consistent with maximum gains in planning for and delivering performance results.

Figure 6 page 92 & 93, depicts the SAFE Closed-Loop Managing-for-Results steps to be applied for management planning.

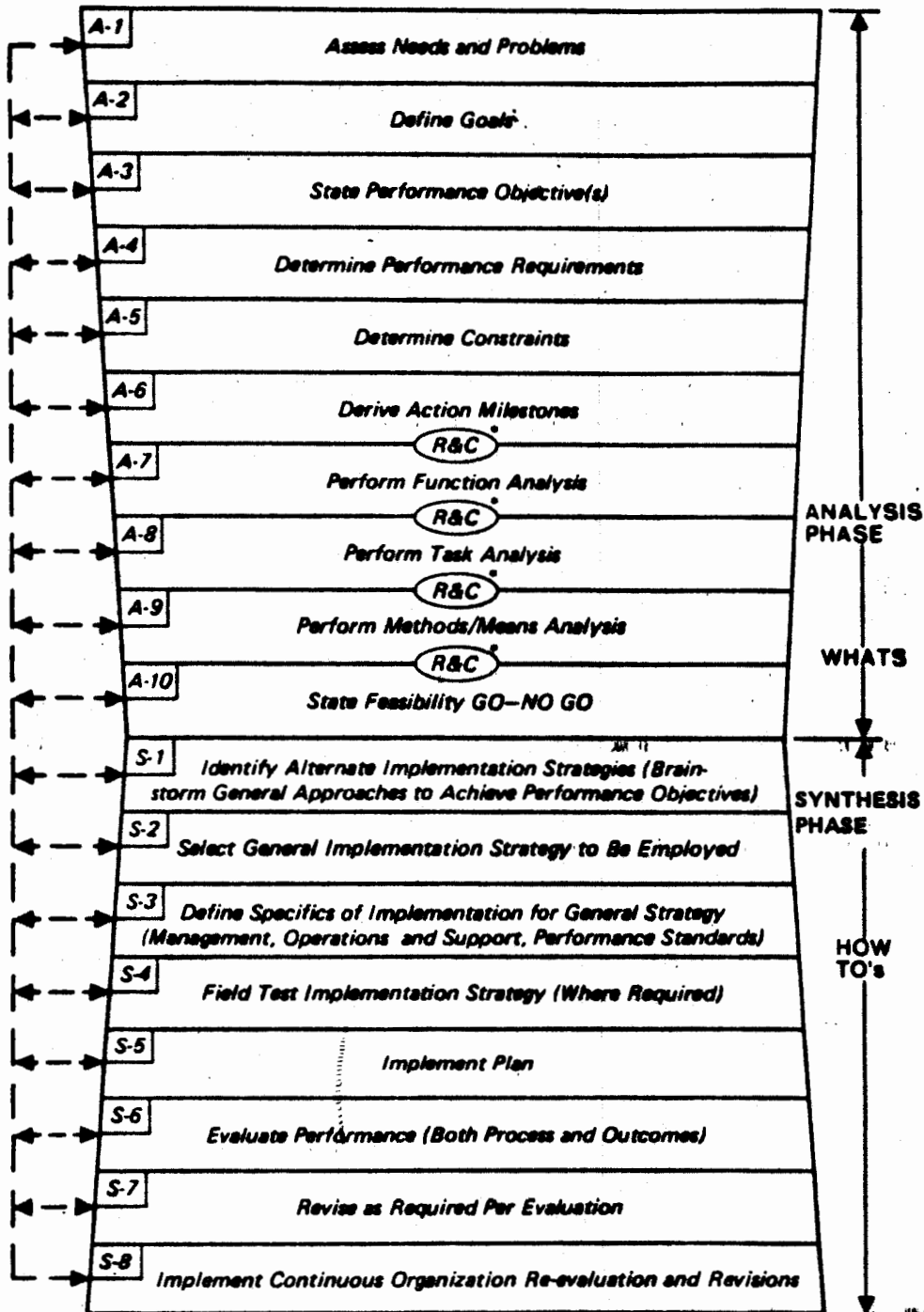
*SAFE: Systematic Approach For Effectiveness

Figure 6
Systematic Approach for Effectiveness (SAFE):
Assuring the Delivery of Effective and Efficient Education

QUESTIONS ASKED	OUTCOMES ACCOMPLISHED
ANALYSIS STEPS	
A-1 (A) What Are the Relevant Needs to Be Resolved? (B) What Are Relevant Problems to Be Solved to Resolve Needs?	A-1 Stated Priority Needs and Problem Statements
A-2 What Are Our Intents to Achieve?	A-2 Priority Goals Derived from Needs
A-3 What Is Our Exact Performance Commitment for End	A-3 Priority Performance Objectives Specific to Stated Goals and
and Achievement (Results Desired) and the Criteria for A-4 Measuring Success?	Needs
A-5 What Are the Hurdles Which Can Stop Us? How Do We Neutralize Them?	A-4 Measurement Criteria Defining Program Output or Products (Results Expected)
A-6 What Are the Major Events or "Milestones" to Be Accom- plished to Achieve Our Performance Commitment?	A-5 Negative Forces to Be Reconciled (Program Constraints)
A-7 What Sub-Activities Must Be Accomplished to Perform Each Milestone?	A-6 Major Functions or Milestones to Be Achieved in Sequence to Produce Program Product or Output and Resolve Constraints
A-8 What Are the Specific Tasks to Be Accomplished for Each Sub-Activity? (Only as Required)	A-7 Subfunctions to Perform Each Milestone
A-9 What Are the Feasible Ways and Means to Perform Required Tasks and Functions?	A-8 Tasks to Be Performed for Each Subfunction (As Appropri- ate)
A-10 Is It Feasible to Proceed?	A-9 Alternate Methods/Mean Which Are Feasible "Ways and Means" to Perform Tasks and Functions
SYNTHESIS STEPS	
S-1 What Are the Most Viable Alternative Strategies for Achiev- ing Objectives (Results) (Ref: A-3, A-4, A-6, A-7)	A-10 Data Indicating Feasibility to Proceed or Not
S-2 What Is the Best Strategy to Employ to Assure Maximum Effectiveness and Efficiency When Implementing Required Activities (Ref: A-6, A-7, A-8)	S-1 Most Feasible Alternative Strategies for Delivering Effectiveness and Efficiency (Ref: A-9)
S-3 Who Will Do What; with What Methods/Mean; What Perform- ance Evaluation Standards; What Time-Line Schedules; What Communication/Reporting Requirements?	S-2 The Best Strategy Which Will Deliver Success Consistent with Maximum Effectiveness and Efficiency (Ref: A-9)
S-4 How Do Methods/Mean Operate Against Performance Stan- dards?	S-3 Optimal Implementation Plan for Maximum Effectiveness and Efficiencies Including Quality Control Mechanisms for Assured Success (Ref: A-3 through S-2)
S-5 How Do We Activate All Planned Activity, Operations, and Management?	S-4 Performance Data Indicating Effectiveness and Efficiency of Strategies
S-6 How Well Are We Performing?	S-5 Personnel Involved; Functions and Tasks Initiated; Quality Controls Implemented (Sensing, Correcting, Evaluation, Commu- nication)
S-7 What Revisions Are Required to Upgrade Planned Perform- ance? (Per Evaluation)	S-6 Detailed Performance Discrepancies: For Outcomes, Pro- cesses, People, and Resources Used (Both Along the Way and at the End)
S-8 What Are Required Changes to Refocus on Achieving Long-Term Performance Targets?	S-7 Change Requirements Per Evaluations (for Performance Discrepancies) to Upgrade Planned Performances
	S-8 New Targets and Organizational Changes Based on Changing Priority Needs Vs. Goals (Closed-Loop Revision: Recycle to A-1)

Figure 6
Systematic Approach for Effectiveness (SAFE):
Assuring the Delivery of Effective and Efficient Education

STEPS TO PERFORM



* Determine new performance requirements and constraints.

The SAFE Closed-Loop "managing-for-results" process model (Figure 6) was derived to meet all design requirements which should be established to guarantee the delivery of PRECISE and PREDICTABLE performance results by managers.

On examination of this SAFE Closed-Loop model (Figure 6) you will see a continuous process of "checks and balances" as one proceeds step-by-step through progressive actions from DERIVING priority Needs/Problems for possible action (Step A-1); through the steps of deriving and defining Goals, Objectives and Performance Standards (Steps A-2 through A-4) prior to commitment to results to be delivered; through progressive steps of feasibility analysis (Steps A-5 through A-10); shifting to the development and selection of the most COST-EFFECTIVE plan of action for achieving results (S-1 through S-4); then, focusing on the requirements for effective implementation including Quality Control procedures to guide achievement of predefined accountability performance standards for all personnel (Steps S-5 and S-6); and, finally (Steps S-7 and S-8) focusing on proposed revisions in Plans and/or Operations following implementation based on analysis of Performance Discrepancies between ACTUAL versus Projected Results desired, and/or new Targets based on Changing Needs (back to Step A-1).

At each step (A-1 through S-8) the planners are required to "close-the-loop" by checking back with prior steps to be certain that the data derived is internally consistent with the previous desired data (Steps A-1 through S-3). In this manner managers-for-results proceed with minimum RISK in planning and maximum GAIN through the implementation of the final plan.

Relevance is carefully derived and defined through Steps A-1 through A-4. The Feasibility of achieving an action commitment (A-3 - A-4) is established through Steps A-5 through A-10; the commitment to deliver maximum cost-effective results. (defining Maximum Productivity outcomes) is achieved on completion of progressive Steps (S-4 and S-5). The following Steps (S-6)

will deliver the PRECISION results as planned.

The statement is made that, "If you do not provide sufficient time, effort and resources for effective performance planning; you had better allocate three or four times that amount to redo the things that will predictably go wrong -- if you are provided that luxury following initial failure."

Performance planning, as defined, is the key to quality control and quality assured delivery of cost-effective results; and skilled planners are the key to effective planning. The planning requirement is too critical to allow the assumption that these skills exist in personnel. There must be assurance that all involved personnel not only individually possess the planning skills required; but that all involved personnel are applying this common planning process that allows them to collectively answer all of the critical questions asked in Table 2. It is only with the assurance, derived through the disciplined application of the SAFE common process, that system-wide interaction and collaboration can be successfully accomplished.


The SAFE* Closed-Loop System Management Process Model is built upon the framework of empirical design, implementation, evaluation and revision -- all based upon documented needs.

This management process model relates to all phases of management, including the design of instructional systems which will predictably achieve stated mastery learning objectives.

The benefits to be derived in the use of this SAFE system management process model are obvious.

- A. From the broadest perspective, educational managers are provided a model which assures the capability for continuous sensing and adjustment of their management performance as conditions in the real world demand change;

- B. From an operational efficiency perspective, educators are provided a methodology which assures them the greatest potential for gain with minimum risk in making commitments to action at all levels and for all phases;
- C. When properly executed, the SAFE Closed-Loop System Management Model establishes objective, measurable, and internally consistent criteria which operationally define and control the delivery of quality results. This statement applies equally for every step in the implementation of the proposed SAFE model, regardless of scope or magnitude.



The proposed SAFE system management process model developed by R. E. Corrigan, B. O. Corrigan and Ward Corrigan is similar to that which has been used in the physical and behavioral sciences for many years. It identifies a process which characterizes the empirical sciences. This model for educational performance management presupposes that education be placed into a measurement/performance context. Relevant and practical educational management, then, begins with the determination of educational needs; states feasible and measurable objectives (goals/end-products); applies system analysis to determine the "whats" (functions and tasks required to achieve the objectives); then progresses to the selection of feasible and required "hows"; the development and implementation of the "hows"; and, finally to the evaluation and revision of the total process. This, it is submitted, is the basic model for educational management.

An important consideration to be established at this point concerning the application of the SAFE Closed-Loop model is as follows: ALL steps need not be performed by all managers in each application. For example, the planning steps to be performed by the teacher are less complex and/or extensive than those for a principal's annual plan. The annual results-oriented plans for the total district will perhaps require more extensive

data analyses (function and task analyses and methods means analyses) than a principal's plan.

The key to the question of level of applications, "How much is much?" when planning for precision results is the degree or level of performance accountability demanded for final or interim results.

The systematic SAFE Closed-Loop management-for-results model allows for:

- A. Commitment to only priority needs and feasibility results;
- B. Internal checks and balances in planning to eliminate the possible commitment to a non-feasible plan of action;
- C. Steps and tools to control and deliver required performance results by each manager (teacher, principal, central office administrator, superintendent, and Board of Education member);
- D. Implementation of only Cost-Effective plans.

When applying this SAFE PME/R process each manager is provided maximum flexibility (depending on job requirements) while assuring the delivery of quality results by each.

SAFE provides the crucial COMMON performance-based planning and evaluation steps to commit to and to deliver predictable success for all school districts, all schools, and every accountable educational partner.

Professional Competencies Provided

Performance management will require the derivation of performance standards for all personnel in order to evaluate their success in delivering planned results. Also required are techniques for continuously checking and revising operations to control the quality of results delivered.

The establishment of feasible and realistic accountability achievements for both management and operations personnel will require, prior to the implementation of plans, the predetermination of performance standards. These performance standards provide the necessary checks and controls during implementation to assure effective delivery of required results.

Tying together all these performance planning, management and evaluation techniques, combined with realistic commitments by all managers, will produce the predictable delivery of maximum productivity as defined earlier.

Chapter 10
The Educational Performance Audit:
Determining the Effectiveness of a Learning-Centered Performance System

Overview

To what extent are our schools delivering quality educational results; namely, learners who demonstrate required competencies, attitudes, values and personal commitments to enter and to succeed in the society for which they are being prepared?

In a society experiencing greater demands for the use of ever decreasing financial resources, concern regarding the educational process is expressed by parents, businessmen, government leaders and by the students. Critical questions are being asked:

1. How effective are our schools in preparing learners to succeed in the world for which they are being prepared? (Effectiveness: required skills, knowledges, attitudes, values)

2. How efficient are our school personnel in the use of limited resources to develop successful learners along the way (K-12), and upon graduation? (Efficient: consumption of resources including money, personnel, time and support while producing the highest quality results - successful learners)

3. How do we commit to selected programs for learners so that we are certain that they will provide learners what they "need-to-do" to enter and succeed in their future world?

Answers to the questions stated above are concerned with the performance of people and things working individually and in interaction to achieve desired results.

The word "audit" is familiar to most of us. It is usually associated with the concept of a firm of certified public accountants reviewing the "books" of a business, agency or school district to determine if monies have been properly spent, and whether or not the "books" balance.

With the advent of new requirements for accountable performance by each partner in the school enterprise (accountability legislation in 38 or more states), we see a new meaning for the term AUDIT. This new meaning refers to the process of evaluating the effectiveness and efficiency of school management, operations and support in terms of the quality and relevance of results produced. The word AUDIT in this context relates to an examination of how well the school district is performing; i.e., how well each "partner" in the district is doing his/her job and the ultimate effect of said performance on the final quality of the educational product, LEARNER SUCCESS.

Thus, we see the advent of the Educational Performance Audit (EPA).

THE AUDIT PROCESS

The educational audit process is concerned with the following:

1. Determining the outcomes or products of the educational process; i.e., the concise achievements of learners in every grade.
2. Determining the level of achievement of learners - and how well these achievements compare with predefined and acceptable performance standards.
3. Evaluating how well each of the educational partners performed on their jobs; and what impact their performance had on the success and/or failure of learners at the end of the instruction/learning program.

4. Evaluating what each of the educational partners did - and whether they applied the best possible methods to deliver success for learners.

5. Determining the contribution of each partner - and whether each partner performed in the positive, collaborative and accountable manner required for most effective, efficient production of quality results.

6. Assessing the working organization, its design and its management and operating procedures in terms of overall system effectiveness and efficiency; and, as appropriate, offering recommendations for increased effectiveness in delivery of desired results. These recommendations could apply at every level within the school system including:

- ° Community commitments and involvement
- ° Board policy and directives
- ° Administrative procedures and processes for management, operations and support
- ° Middle management (principals) procedures and processes
- ° Counseling and guidance procedures and processes
- ° Teacher management of instruction and learning

In addition, the audit would be concerned with evaluating the overall performance in those prescribed interactions involving teams working together to deliver results.

The ultimate focus of the Educational Performance Audit is to provide a constructive data base for use by each educational partner and the system as a whole in order to:

- a. Identify excellent processes and procedures for broad applications;
- b. Identify performance discrepancies defining the gaps between the "What Is" performance conditions versus the desired "What Should Be" performance targets;

- c. Identify negative forces or barriers hindering the achievement of desired performance effectiveness, efficiency targets. This would apply whether the barriers be related to management, operations and/or support functions and roles or whether they focus on the superintendent, a teacher or the custodian;
- d. Consider alternate approaches for overcoming barriers thereby increasing the performance effectiveness, and to recommend the "best" considered approaches for future implementation;
- e. Evaluate the overall system performance and each of its parts in terms of costs related to results, and to determine if ways and means might be proposed to increase overall productivity; namely, increased quality and quantity results consistent with (1) the same costs, or (2) even better, reduced costs.

Thus, the Educational Performance Audit (EPA) is designed to be a constructive and positive experience for each partner in the educational enterprise. Through this experience the capability for increasing the effectiveness of results (learner success) consistent with increased efficiencies in management, operation and support (costs) can become a reality.

Through this periodic audit program, the entire educational enterprise becomes more and more public, and in turn, more and more credible with the resulting required accountability and ownership commitments by each partner.

Chapter 11
Benefits Derived Through the Installation
of Management-for-Results Practices in Education

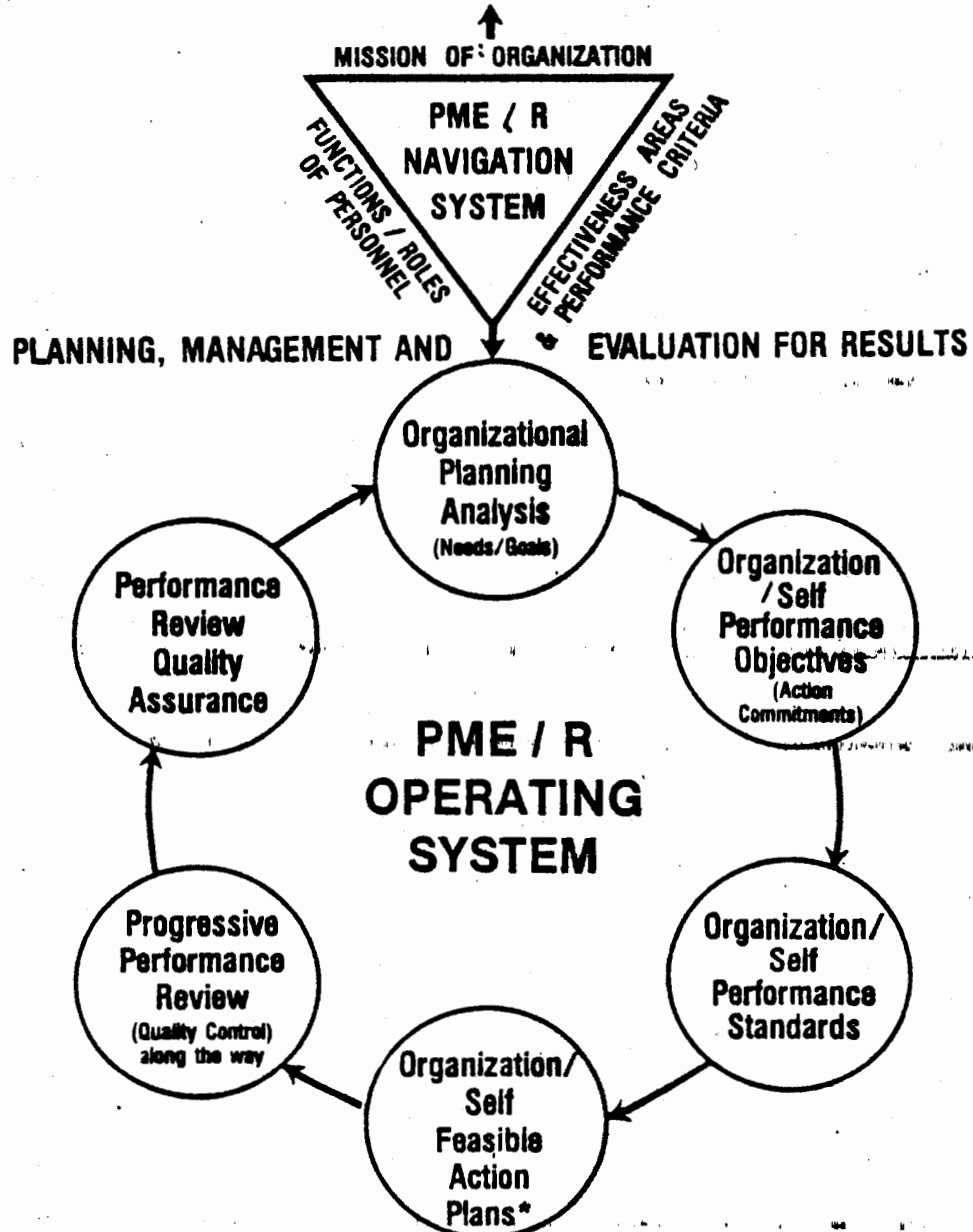
If implemented, the SAFE* models and practices will deliver the following significant capabilities specific to an Educational Performance Management System.

- (1) Ties together all levels of leadership specific to the achievement of the MISSION of the organization in terms of mutual accountability performance standards. (Figure 7)
- (2) Establishes a design by the organization to deliver MAXIMUM PERFORMANCE EFFECTIVENESS consistent with the delivery of required RESULTS/Outcomes. (Figure 7)
- (3) Establishes goals and performance objectives and standards defining final results for the organization based on priority needs; and revisions in planned achievement in response to less than effective performance by the organization and/or its operating parts. (Figure 8)
- (4) Provides all managers (every level) with the qualifications to be effective managers-for-results with required skills and knowledges to achieve their pre-negotiated job performance requirements. (Tables 3 and 4)
- (5) Establishes performance-focused job descriptions for each employee which are tied to measurable performance standards defining performance accountability standards for each job. (Figure 8)

*SAFE: Systematic Approach For Effectiveness

Figure 7

ORGANIZATIONAL FOCUS



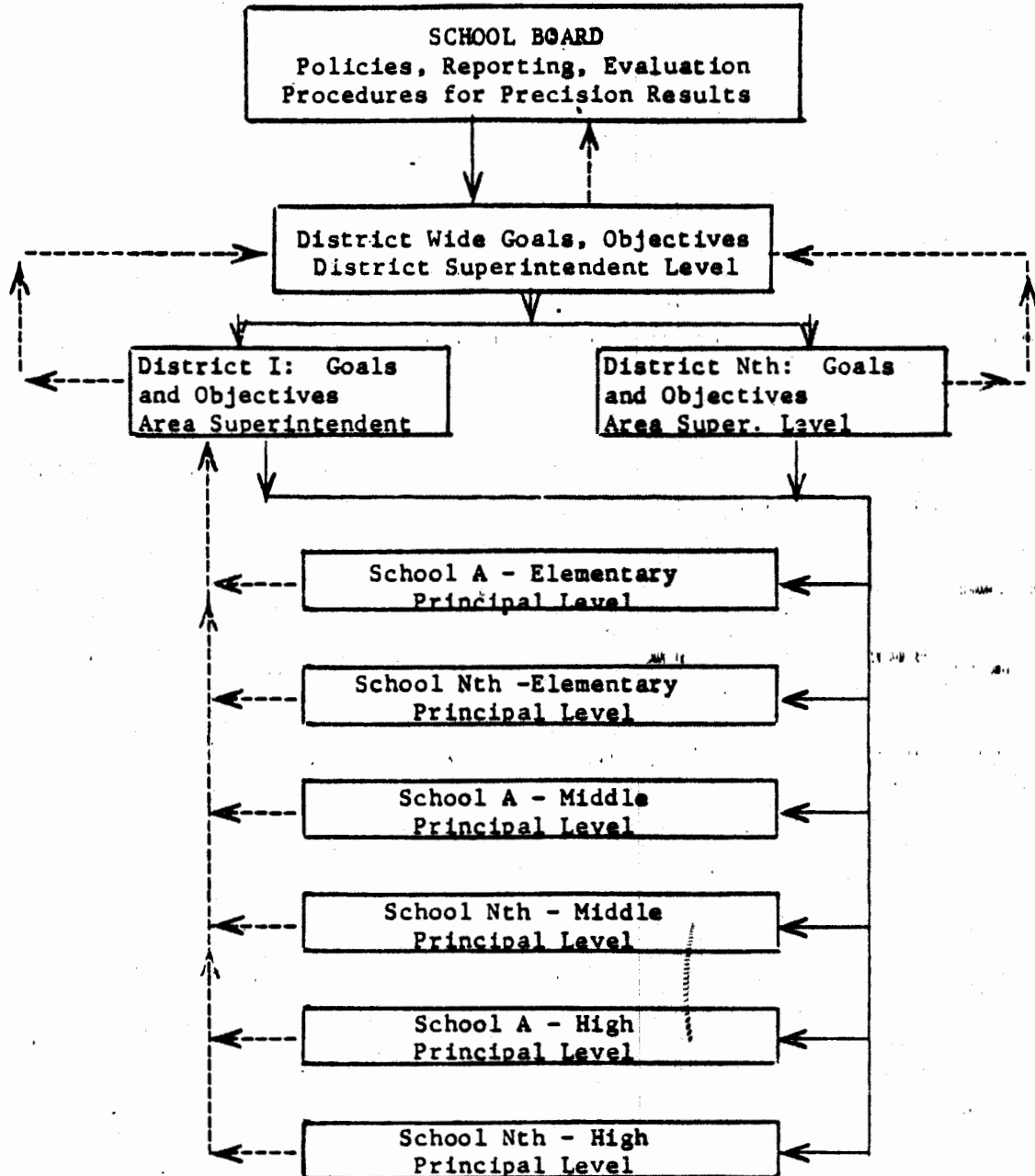
Total (Results-Oriented) Organizational Process: The closed-loop diagnostic / prescriptive confirmation / revision loops specific to delivery of feasible expectancies.*

**(Measurable Results for Organization and Self)*

FIGURE 8

Linkages between levels of performance accountability and audit tracking in a school district

DELIVERING PRECISION MANAGING-FOR-RESULTS PRACTICES



SOLID LINES (————>): Downward flow of Accountability Requirements specific to District Level Performance Targets
DOTTED LINES (<-----): Upward flow of performance data from bottom level (schools) to top levels including Area Superintendents, District Superintendent and the School Board for performance review and decision making by appropriate management levels.

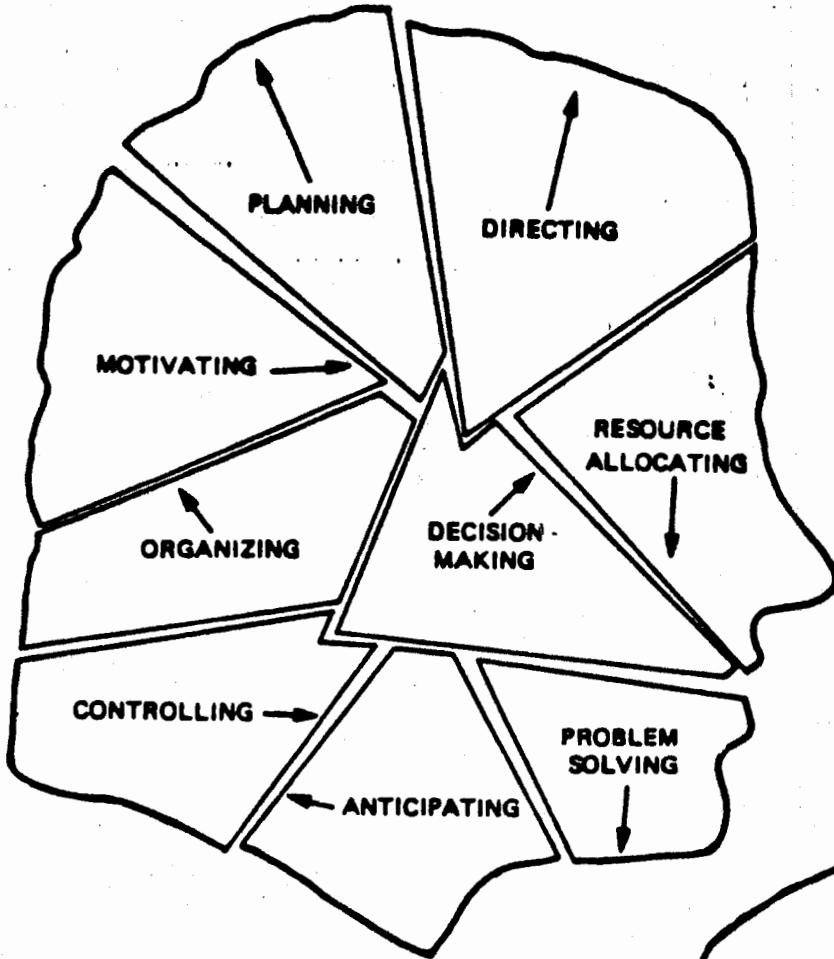
- (6) Initiates a personnel performance evaluation procedure specific to assessing the achievement of pre-negotiated accountability standards for all personnel (all levels).
- (7) Assures for feasible achievement by each employee of job performance standards: (A) Through pre-negotiation prior to assignment and implementation; and (B) Through periodic performance evaluations and revision of performance achievement expectancies.
- (8) Establishes a management information decision-making process which provides all managers (all levels) the data they require to monitor and evaluate their own and others performance while making required revisions to maintain desired performance effectiveness standards.
- (9) Installs controls for continuing performance effectiveness evaluation through application of dynamic quality control procedures. These procedures apply to evaluation of both the individual employee performance and school department or classroom effectiveness "along the way" (formative evaluation) and at the end (summative evaluation).
- (10) Provides for revision of operations based on data derived from these specific performance evaluations. (Specific performance discrepancies for processes performed, outcomes delivered, and resources expended).
- (11) Ties resources to precommitted outcomes to be achieved as the way to link resource allocations to expected results. This will provide the basis for delivery of most COST-EFFECTIVE results by the organization.
- (12) Establishes a comprehensive Educational Management Performance Audit (EMPA) to evaluate and report the

ACTUAL achievement by the organization consistent with precommitted objectives and measurement standards (cost-effective outcomes) and proposed revisions for increasing effectiveness of performance (Quality Results) for the organization.

The ultimate accomplishment for your organization will be an Educational Performance Management System which will deliver MAXIMUM PRODUCTIVITY with predictable increased performance effectiveness.

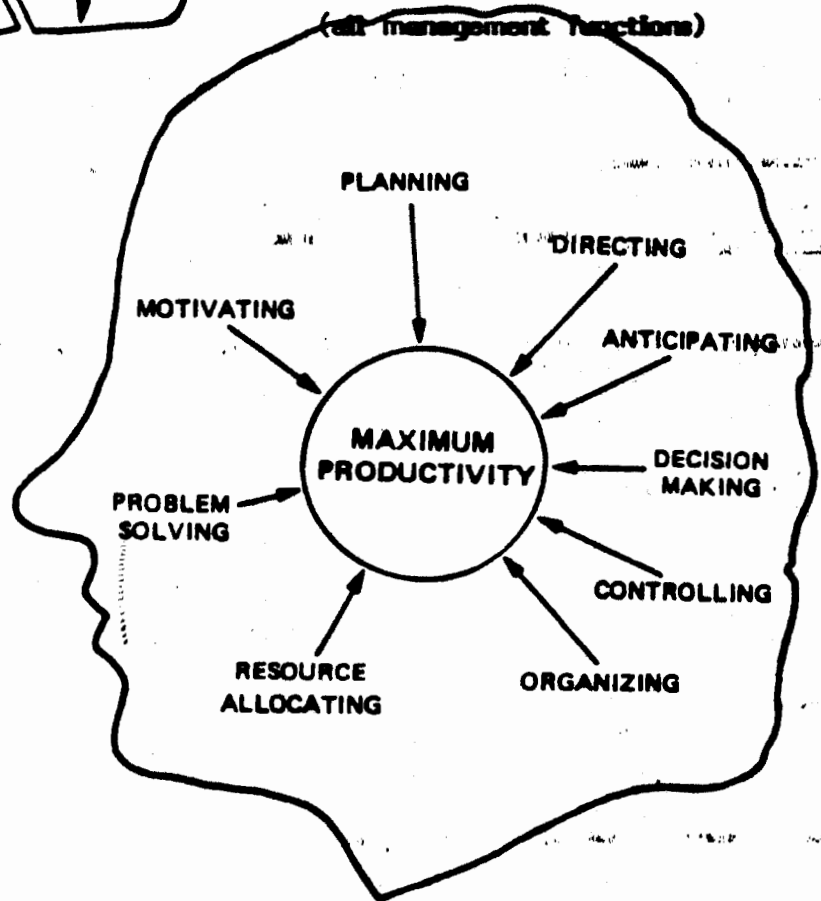
**TRAINING WITH CURRENT BAND-AID SOLUTIONS
FOR INDIVIDUAL MANAGEMENT FUNCTIONS**

TABLE 3



**PRODUCTIVITY TRAINING as a
SKILLED MANAGER-FOR-RESULTS**

(all management functions)



**ENABLES MANAGERS TO SYSTEMATI-
CALLY FOCUS THEIR SKILLS ON THE
INCREASED ACHIEVEMENT OF PRIORITY
RESULTS (EFFECTIVENESS) AND THE
IMPROVED UTILIZATION OF RESOURCES
(EFFICIENCY) THEREBY DELIVERING
MAXIMUM PRODUCTIVITY**

TABLE 4

Education-For-Results practices will result in the delivery of maximum productivity through the development of teams of competent managers with skills as a:

<u>PLANNER:</u>	who can correctly plan for and PREDICTABLY ACHIEVE committed results
<u>DECISION-MAKER:</u>	who can derive <u>all</u> necessary information in the correct form and at the right time to assure high levels of success in choosing most productive alternative strategies
<u>PROBLEM-SOLVER:</u>	who applies a PRECISION problem-solving method which eliminates BIAS and/or ASSUMPTION in defining and solving problems
<u>CONTROLLER:</u>	who, through precision PRE-planning for results, provides <u>all</u> necessary "need-to-know" data to monitor and CONTROL productivity with maximum effectiveness for delivery of results
<u>RESOURCE ALLOCATOR:</u>	who has the required PRE-planning data to select the BEST (most efficient) PEOPLE - TOOLS combinations assuring delivery of maximum productivity
<u>MOTIVATOR:</u>	who can PRECISELY define the accountability standards for performance (RESULTS) for each person; and employ positive techniques to negotiate FEASIBLE commitments - and - install the positive commitments to deliver best results
<u>DIRECTOR, ORGANIZER, LEADER:</u>	who is capable of communicating: <ul style="list-style-type: none">- Goals and Objectives for productivity- The part each person plays in delivering maximum productivity- Performance standards for each part which measure accountability achievements- Acknowledgement of successful contributions by each person to the organization's success- The reality of shared-accountability between and among all persons to achieve success

SECTION III:

**REQUIREMENTS FOR SUCCESS:
DELIVERING PREDICTABLE LEARNING RESULTS**

Chapter 12

**Quality of Learning vs. Quality of Instruction
The Missing Link for Success**

Chapter 13

Requirements for Delivering Predictable Learning Success: Concepts and Principles

Chapter 14

Achieving Exit (Graduation) Learner-Mastery Requirements

Chapter 15

**Significant Political and Technical Requirements for Installing
a District-Wide Learning-Centered Performance System (Gene Geisert)**

Chapter 12
Quality of Learning vs. Quality of Instruction
The Missing Link for Success

Perhaps THE most critical question that teachers, parents, and administrators should be asking today is, "Are our schools primarily focused on what must be TAUGHT by teachers or are our schools primarily focused on what must be LEARNED by learners?" If the answer is "What must be taught," then we have uncovered the central reason for students who are not successful, parents who are dissatisfied, and educators who are at a loss to explain what is happening.

In answering the question "What must be taught?," present curriculum processes and teaching practices are related to providing Quality Instruction and the management of instruction. Learning becomes secondary to instruction. In answering the question "What must be learned?," curriculum processes and teaching practices focus on improving the Quality of Learning and the management of learning. In this reference, learning becomes primary.

The first priority of our schools must be the delivery of successful learners through providing PREDICTABLE MASTERY of those knowledge, skills, and values required for a learner to enter and succeed in society. This priority should exist for each administrator, each teacher, and each learner in every subject and in every classroom from kindergarten through graduate school.

In this context the word MASTERY is defined as the accomplishment by each learner of pre-established measurement standards (criteria) defining achievement of a specific learning objective. The word PREDICTABLE means assured success or accomplishment by each learner to some pre-established level (70%, 80%, 90%, 100%).

Comparing Quality of Instruction and the Management
of Instruction WITH Quality of Learning and
the Management of Learning

We hear the requirement for increasing the Quality of Instruction in today's classrooms and, in turn, for the Management of Instruction. Emphasis is placed on the teacher's defining the activities he/she will perform to organize and to deliver instruction to learners. One step in the Instruction model might be the writing of learning objectives and associated performance measures for testing. Primary emphasis, however, rests on the teacher -- not the learner as the client, or on learning outcomes.

An alternate model is proposed to replace this emphasis on Instruction. We recommend that curriculum and/or lesson-planning methods be concerned primarily with Quality of LEARNING, and, in turn, the Management of Quality Learning. Here the focus for instruction and learning is through implementation of a LEARNING BLUEPRINT, pre-designed to deliver predictable, accountable, and effective LEARNER results. This Blueprint provides everything the learner must know and do to achieve learning objectives.

What goes on IN THE CLASSROOM or learning site through the interactions between instructor, students, and materials becomes, in the final analysis, the critical concern for delivering learner success.

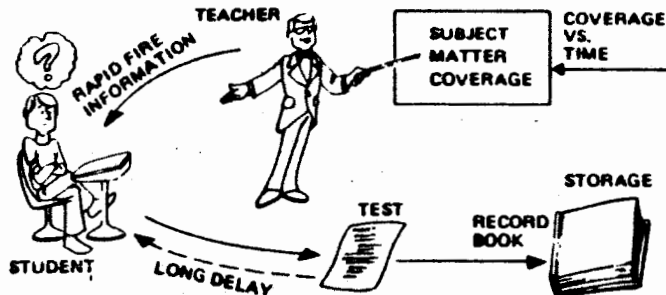
The crucial shift from a focus on teaching to a focus on predictable learning results involves a refocusing by the curriculum designers, the teacher, the learner, the administrator, and the parent. Each must differentiate between professional practices defined as teacher-centered (conventional practices) and those defined as learner-centered (proposed new practices). In turn, each must evaluate the potential effectiveness of the learner-centered approach over the current practices to deliver predictable success for our learners.

Figure 9

Comparison of the Open-Loop and Closed-Loop Models of Instruction and Learning

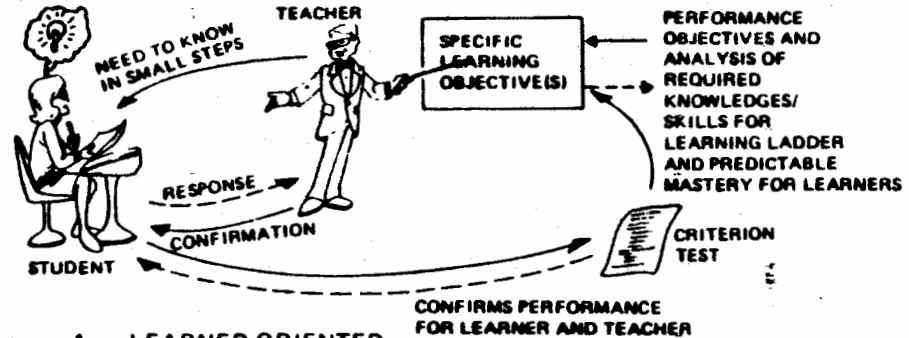
Success in the classroom is the result of a proper mixing of the teacher, the students, and the instructional methods and materials. There are two models presented. On the left is the open-loop model of instruction, and on the right is the closed-loop model of instruction. Each has definite characteristics which differentiate it from the other. Please compare and contrast the characteristics of these models and decide which you would prefer to see operating in the classroom.

TEACHER-CENTERED OPEN-LOOP MODEL OF INSTRUCTION



1. **TEACHER ORIENTED:**
emphasis on presentation.
complexity determined by materials used.
2. **INSTRUCTIONAL PLANNING**
coverage versus time.
3. **INSTRUCTIONAL MATERIALS:**
selected to satisfy content requirements.
4. **INSTRUCTIONAL DYNAMICS:**
one-way communication.
random teacher-student interaction (teacher presents — student records — sometimes questions).
5. **PACE OF INSTRUCTION:**
determined by time limits and amount of material to be covered.
6. **TEST:**
norm-referenced.
samples material covered.
delayed feedback to students.
7. **RESULTS FROM TESTING:**
used to evaluate student.
stored.

LEARNER-CENTERED CLOSED-LOOP MODEL OF INSTRUCTION



1. **LEARNER ORIENTED:**
emphasis on interaction and demonstrated student success.
complexity tailored to learner's capabilities.
2. **INSTRUCTIONAL PLANNING:**
analysis of required knowledges and skills by learners to achieve the learning objective(s).
3. **INSTRUCTIONAL MATERIALS:**
selected against learner capabilities so they can achieve the learning objective. (see learning path design)
4. **INSTRUCTIONAL DYNAMICS:**
two-way communication. (correct answer confirmation for learners)
continual, planned teacher-student interaction (teacher presents — student responds — teacher confirms).
5. **PACE OF INSTRUCTION:**
determined by student's ability to *demonstrate understanding at each learning step*. (If understanding demonstrated — GO; if not demonstrated — STOP & CLARIFY before proceeding.)
6. **TEST:**
criterion-referenced. (measurements defining learner success)
measures achievement of learning objective.
immediate feedback to students.
7. **RESULTS FROM TESTING:**
used to evaluate effectiveness of instructional methods and materials. (closed-loop interaction)
used as basis for revision of methods and materials *until students can achieve learning objectives*. (Field-testing and validation)

Comparison of Open & Closed-Loop Models of Instruction and Learning

Refer to Figure 9 (left side) which presents the characteristics of the Conventional OPEN-LOOP model of instruction operating in most classrooms today. On the right you are presented the characteristics of the CLOSED-LOOP Learner-Centered approach for delivering predictable and accountable learner success -- the proposed single focus of professional practices for the future.

The Open-Loop approach is primarily a teacher-centered model of instruction. The focus of this model is on what the teacher does to achieve instructional objectives; what subject matter will be covered in a stated time period; what materials are to be used emphasizing coverage of content; how instruction is to be paced in relation to time limits and to the amount of material to be covered; and which test will sample the content covered. Instruction is frequently a "telling" process, with the learner not actively involved nor aware of the expected learning outcomes to be achieved by him/her. The test is used to assign grades but is not functionally used by the learner after instruction has been completed to increase learning effectiveness.

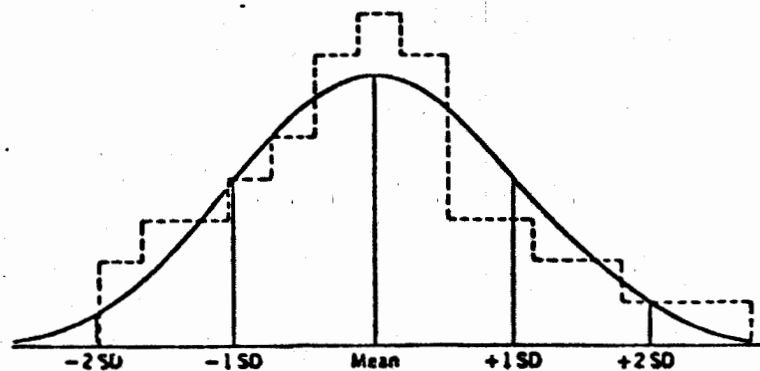
Grades in the Open-Loop Model are frequently assigned against NORM-REFERENCED STANDARDS, comparing a learner's performance against other learners' performance. Another method of grading is to impose the normal distribution statistic reflected in the Bell Shaped Curve (Figure 10), to the range of test scores achieved by a class. Rarely do either of these methods reflect the actual achievement of an individual learner. Both of the above are undesirable methods of forcing grades into A, B, C, D, and F categories.

The purpose of norm-referenced standardized testing is to determine how a learner scores in comparison to how all other learners at his level in the United States or a region score.

Using the normal distribution curve (Bell Shaped Curve) to derive grades for a single class violates the basic assumptions for application of this statistic, which are: 1) that data gathered from a random sample will be randomly distributed in a Bell Shaped curve to reflect percentages of characteristics or events occurring in a total population; and 2) that there be no intervention to influence the distribution of scores -- namely, that scores be distributed by chance alone.

FIGURE 10

BELL SHAPED NORMAL DISTRIBUTION CURVE



One class of 25-30 learners would not usually be considered a random sample; and certainly instruction should not be a random process on learners. Rather, instruction should be an engineered and structured intervention process to deliver, as feasible, predictable learner success for each learner.

Currently teachers usually design their instructional plans "through the eyes of the teacher." This means the critical design questions the teacher asks relate to multiple concerns regarding "what and how will I teach?" The major concerns in planning are what to present, what to cover, what to schedule, when to test, what homework to assign, how to remediate, and others. These are the primary skills provided teacher trainees in educational training institutions (see focus of Open-Loop

Teacher-Centered Model characteristics, Figure 9). Unfortunately, these practices will not deliver learner success.

In contrast, the Closed-Loop model of instruction and learning is singularly LEARNER-CENTERED by design. The single design objective of this Closed-Loop model is the delivery of predictable and measurable success for each learner. Every act by the professional, when applying this Closed-Loop model, is performed to achieve predictable and measurable success for each learner. Professional practices required to plan for and to deliver predictable success are dramatically different than those practices presently applied by curriculum designers and teachers. (See Figure 9 for characteristics of Closed-Loop Learner-Centered Model)

In the Closed-Loop model, the teacher becomes subordinate to the learner in order to facilitate learning; becomes the manager of learning success; and is evaluated as successful only when learners are successfully achieving pre-defined objectives and criterion measures.

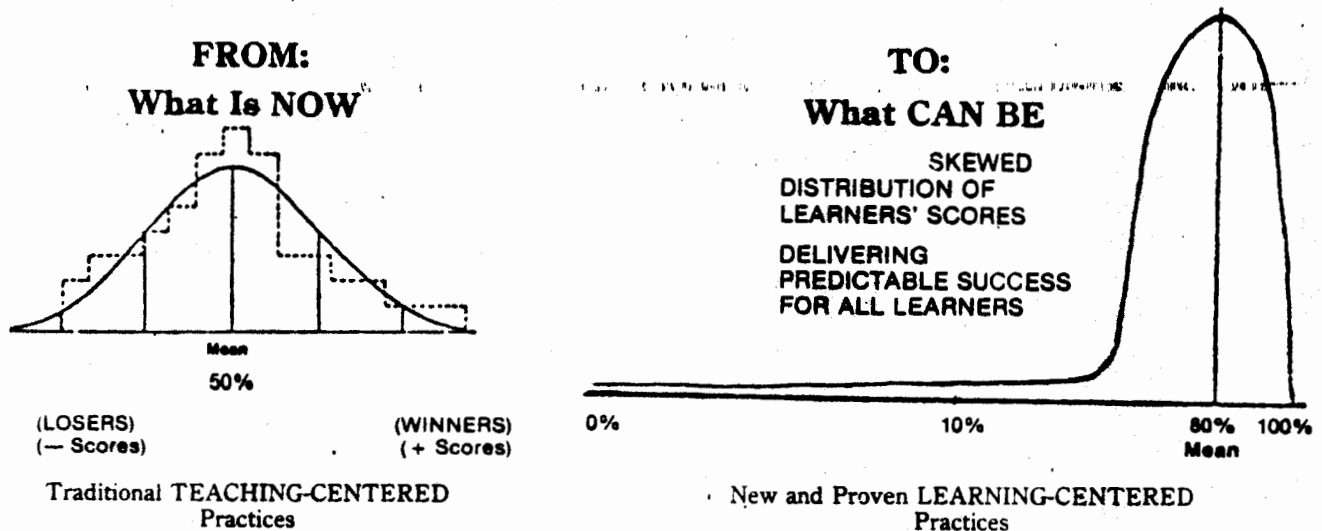
Instructional planning in the Closed-Loop Learner-Centered Model requires that the teacher first analyze everything the learner must know and do to achieve a learning objective. Then the teacher must design sequential learning steps to be achieved by qualified learners. Planning starts from learner entry at the appropriate level of difficulty into the learning/instructional sequence (where the learner qualifies). The learning steps apply the principles of learning; e.g., practice, motivation, transfer, retention, reinforcement, etc.; and provide everything the learner must incorporate to know and do to build correct responses. The teacher plans so that the learner proceeds in a controlled manner (step-by-step) to achieve predictable, pre-defined learning objectives and criteria (terminal learning outcomes).

A teacher, applying the Closed-Loop Model derives a "learning ladder" which each student will master; and selects and employs only the most appropriate methods, materials, and tools to be used by learners and teacher for delivering learning success (eliciting only CORRECT RESPONSES by learners).

When this is fully accomplished, the teacher has designed a step-by-step Functional Learning Path; i.e., a learning blueprint or learning ladder for implementation assuring guided advancement and progress by each learner along an achievable path. This path or ladder will lead to final and predictable achievement by learners of the pre-stated learning objectives. The teacher has derived this learning path only as seen "through the eyes of the learner" thus assuring the learners' success. This means that every act performed by the teacher will be subordinated to the achievement of preplanned terminal objectives defining learner success. This commitment represents a major shift in the role and functions of the teacher from being perceived as a dispenser of knowledge to being an engineer and manager, accountable for delivering learner success.

Learner achievement is measured by criterion-referenced tests; i.e., a test designed to measure each learner's achievement of standards or criteria stated in the learning objective -- not how one student scores in relation to other students. A well designed and field-tested learning path will produce a skewed curve of student scores showing all students achieving criteria as depicted in Figure 11.

Figure 11.



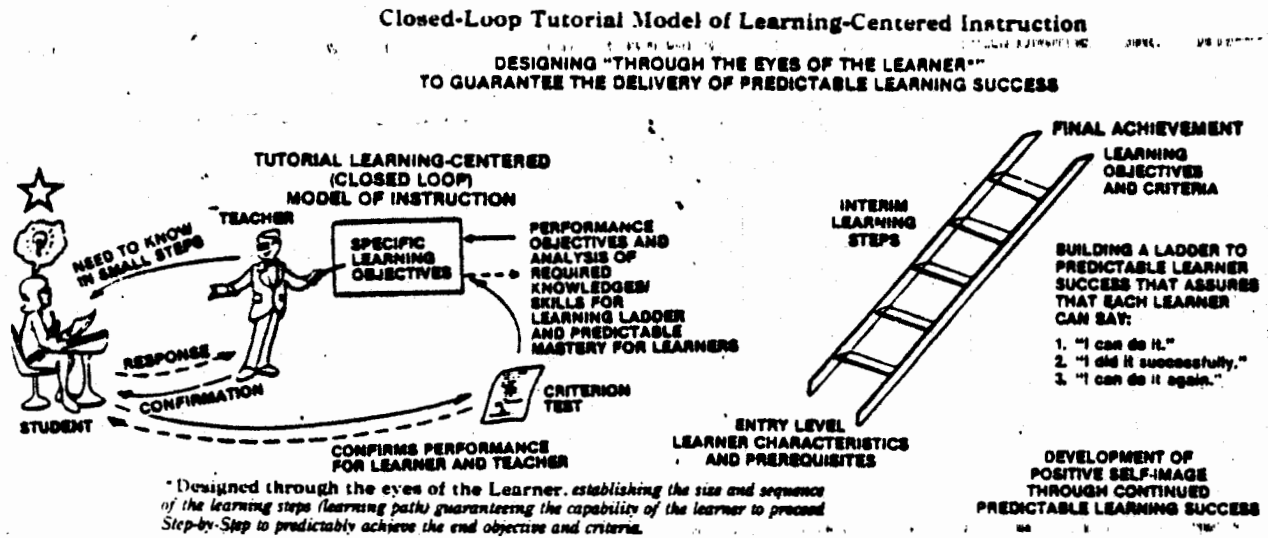
In order that PREDICTABLE MASTERY be a reality, there are several principles which must be operating within those practices by teachers, principals, administrators, and community leadership, as follows:

1. The prime commitment of the educator must be success by each learner. The educator's focus, therefore, must shift from instructional outcomes to learning outcomes.

2. Instructional processes (objectives, content/learning steps, methods and media) must be re-examined and re-designed "through the eyes of the learner." This means that rather than students having to "psych the teacher" in terms of guessing the priorities of instruction, the methods of evaluation and the criterion of mastery, the educator must "psych the learner." Educators must anticipate the level of sophistication and prior knowledge that students bring to the instructional setting. They must be aware of the characteristics of the student with whom they will be working. They must anticipate the sequence and pace of instruction that will be most appropriate for that particular group of students to deliver mastery. They must anticipate what will be the most effective learning and instructional strategies and methods of reinforcement for this particular group of students to assure mastery; and they must be ready, willing, and able to modify all of the above in the face of failure by the students to achieve the levels of mastery required. When failure occurs in learning, the teachers must hold themselves accountable for the practices applied -- not merely blame the student.

3. The model for designing and implementing instruction must itself be focused on predictable mastery. This model should follow a carefully designed learning path with the step size and pace established to meet the

learners' levels of understanding; and the correctness of each learning step should be confirmed, or remediation provided, until mastery is assured. Educators should require mastery as the basis of progress and proceed no faster with instruction than is dictated by the progressive and demonstrated mastery of students along the way.



It is our belief that the majority of school districts in America focus on the quality of instruction rather than the quality of learning. We believe further that the vast majority of teachers either have not applied the principles discussed earlier or apply them at such a superficial level that there is no impact on the quality of learning outcomes.

In school districts where these practices have been applied, learners are achieving predictable success. Practitioners' reports, presented in Volume II: Delivering Predictable Success for Our Learners, detail dramatic gains obtained by a single teacher, by districts (large and small, rural and urban) and by Korea. Two Mississippi districts report eliminating the negative statistical relationship between race or socio-economic status and learning achievement -- exciting results!

On the following pages comparisons are made between teaching-centered and Learning-Centered technologies through a series of questions and answers.

THE PRIMARY COMMITMENT OF EDUCATION MUST BE THE DELIVERY OF PREDICTABLE LEARNING SUCCESS FOR ALL LEARNERS

MAJOR CONCERN:

Which instructional technology should teachers and learners be practicing in our classrooms nationally in order to achieve the primary commitment of education in the 80s?

THE BASIC ISSUE TO BE RESOLVED BY ALL EDUCATIONAL PARTNERS* IS: WHICH OF THESE TWO ALTERNATIVE INSTRUCTIONAL TECHNOLOGIES WILL BEST ACHIEVE THE STATED PRIMARY COMMITMENT OF EDUCATION (NATIONALLY) – THE DELIVERY OF PREDICTABLE SUCCESS FOR ALL LEARNERS.

(*School Boards, Parents, Community, Administrators, Teachers, Learners)

EXAMINE AND COMPARE THE TWO INSTRUCTIONAL APPROACHES PRESENTED BELOW ENTITLED **TEACHING-CENTERED TECHNOLOGY AND LEARNING-CENTERED TECHNOLOGY;** AND DECIDE WHICH IS BEST FOR OUR LEARNERS.

• WHAT ARE THE KEY QUESTIONS ASKED IN THE DESIGN AND IMPLEMENTATION OF ALTERNATIVE INSTRUCTIONAL TECHNOLOGIES?

TRADITIONAL TEACHING-CENTERED TECHNOLOGY

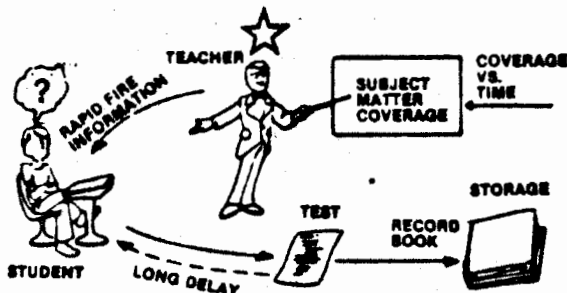
What shall I (the teacher) cover in a defined time schedule; what resources will I use to cover the material, and what test questions will I present to sample the material I have covered?

(A KNOWLEDGE-DISPENSING APPROACH TO INSTRUCTION)

• WHAT IS THE MODEL OF INSTRUCTION APPLIED?

TRADITIONAL TEACHING TECHNOLOGY
(Teaching-Centered Practices)

LECTURE MODEL OF INSTRUCTION



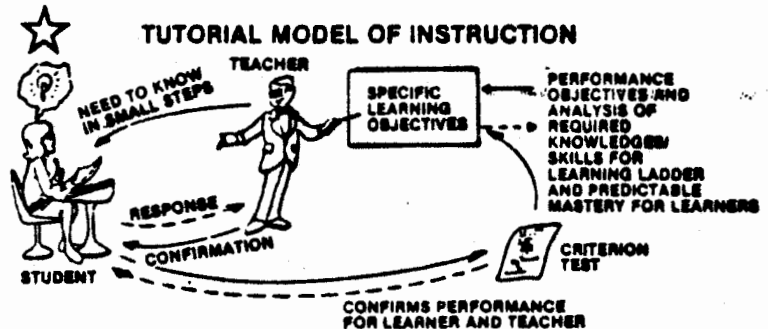
NEW & PROVEN LEARNING-CENTERED TECHNOLOGY

What do we (all educational partners) need to do (plan, design, implement and revise) to guarantee that our learners will achieve predictable success in accomplishing defined learning targets (objectives and criteria)?

(AN ARCHITECTURAL-ENGINEERING PROCESS TO DELIVER PREDICTABLE LEARNING SUCCESS)

NEW AND PROVEN LEARNING-CENTERED TECHNOLOGY
(Learning-Centered Practices)

TUTORIAL MODEL OF INSTRUCTION



WHO IS THE STAR? – THE TEACHER

- Statement of INSTRUCTIONAL Objectives and Outcomes
- ONE-WAY communication flow between teacher and learner
- No formal provision for guided testing of correctness of responses of learners at defined activities
- COVERAGE of material in specified calendar time periods
- Test SAMPLES materials covered during instruction
- Learners play passive role
- Totally TEACHER-CENTERED activities

• WHAT IS THE FOCUS OF DESIGN?

MANAGEMENT OF INSTRUCTION:

- Teacher-controlled activities
- Focus of lesson planning is EFFICIENCY of operation by designing through the EYES OF THE TEACHER

WHO IS THE STAR? – THE INDIVIDUAL LEARNER

- Statement of Learning Objectives and Outcomes
- Continuous and structured TUTORIAL (two-way) interactions between teacher and learners
- Pacing of instruction BASED SOLELY on measured success by learners at progressive learning steps
- Criterion testing vs. norm reference testing
- Learners play continuous ACTIVE Role
- Required field-testing until Tutorial instruction delivers PREDICTABLE learning success

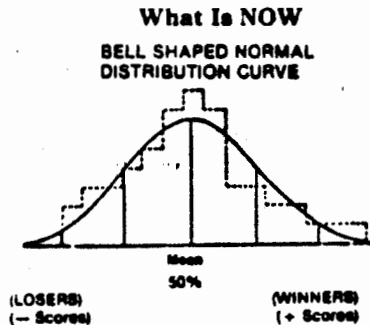
MANAGEMENT OF THE DELIVERY OF PREDICTABLE SUCCESS FOR LEARNERS (RESULTS)

- Focus on QUALITY OF RESULTS produced (effectiveness) for learners
- Applications of architectural/engineering process to guarantee the delivery of predictable learning success (Programmed instructional methods)
- Program designed through the eyes of the learner (NOT the teacher) for predictable results.

**THE PRIMARY COMMITMENT OF EDUCATION MUST BE THE DELIVERY OF
PREDICTABLE LEARNING SUCCESS FOR ALL LEARNERS**

**• WHAT IS THE ANTICIPATED DISTRIBUTION OF TEST SCORES FOR LEARNERS APPLYING
ALTERNATIVE INSTRUCTIONAL TECHNOLOGIES?**

TRADITIONAL TEACHING TECHNOLOGY



- 50% LOSERS (or more) – 50% WINNERS (or less)
- Measures effectiveness (results) of the teaching process
- Bell-curve distribution of test scores reflects performance by the teacher as a manager of the coverage of content vs. focusing on the delivery of learning outcomes

• WHAT IS THE MODEL OF EVALUATION (Standards and Methods)

NORM REFERENT TESTING: compares how well a learner compares with all other learners

Score A, B, C, D, F applying Bell-Shaped curve distribution format (see above).

This Bell-Shaped curve violates the requirements for its use – namely: must be limited to:

- (a) CHANCE distribution of scores
- (b) under no circumstances can there be a guided intervention to control outcomes

• HOW IS INSTRUCTIONAL EFFECTIVENESS LINKED TO CLASS SIZE?

- Requires fewer and fewer students for a single classroom teacher

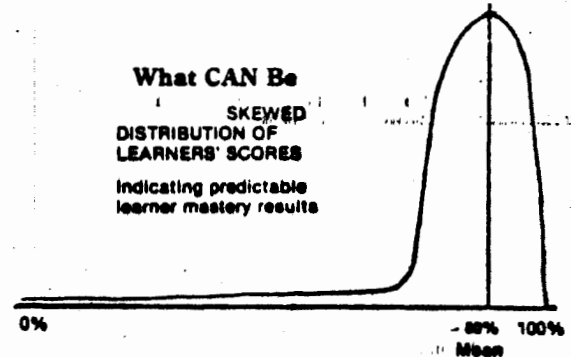
• HOW ARE COSTS OF INSTRUCTION COMPARED BETWEEN PRACTICES?

- SIGNIFICANT COST INCREASES – currently 80-85% of all costs of education are in teacher salaries.

• HISTORICAL VIEW: WHAT ARE THE RESULTS DELIVERED (REPORTED LONG-TERM EFFECTIVENESS) OF THE ALTERNATIVE INSTRUCTIONAL PRACTICES?

- Progressive and INCREASED DECLINE in level of test scores for learners (1950-1982)
- Reported national crises in the effectiveness (results delivered) for learners in our schools
- Increasing number of learners as LOSERS
- Loss of confidence by parents, community, professional educators
- Can not deliver success for learners by design: Teacher Management Focus vs. Learning-Results Focus

NEW & PROVEN LEARNING-CENTERED TECHNOLOGY



- Greatest majority winners – Means 80% and above
- Skewed distribution of test scores above measures the effectiveness (results) of the Learning-Centered instructional process – PROGRAMMED INSTRUCTION
- Test results achieved by designing through the eyes of the learner vs. the teacher
- Represents guaranteed success for learners

CRITERIA REFERENT TESTING: each individual learner evaluated ONLY in terms of one's self-achievement of stated learning objectives and criteria test items. No group norms.

- Predictable achievement by 80-90% of target learners of stated Learning Objective(s)
- Achievement of criteria test items for learning objectives

- Can, in fact, show delivery of significant GAINS in learning scores while increasing size of class.
- Can easily increase ratio of teacher to learner (30-40:1) without reduction in effectiveness of learning results (Delivery of Predictable Learning Success)
- Research Data shows: Predictable, positively skewed distribution of test scores for learners with up to 60 students with one teacher and one teacher aide.

- SIGNIFICANT COST REDUCTIONS – reduction in the percentage of educational costs for teachers' salaries consistent with increased effectiveness of learning results.

- Delivery of predictable success for learners can be a reality based on proven research data

- Can deliver the skewed distribution of learner test scores (above) with ALL LEARNERS BEING WINNERS for ALL grades – elementary, middle, high schools

**CAN THERE BE ANY DOUBT AS TO WHICH INSTRUCTIONAL/LEARNING TECHNOLOGY
WE MUST REQUIRE BE USED IN OUR CLASSROOMS?**

Chapter 13

Requirements for Delivering Predictable Learning Success: Concepts and Principles

The lessons learned over the past 20 years to deliver predictable learning success demonstrate that we must focus on a district-wide commitment involving all educational partners (learners, teachers, administrators, counselors, parents, and community representatives).

We must shift from the term CURRICULUM (which focuses more on books, test items, instructional components), to a learning-centered DELIVERY SYSTEM to guarantee predictable success for each qualified and committed learner.

We must shift from a focus on NORM-REFERENCED test score distributions (national norms with 50% winners and 50% losers) to a learning-centered criterion-referenced performance model demonstrating that all qualified and committed learners are achieving established learning objectives and criterion measures.

We must shift from looking at a single teacher in the classroom as the sole person accountable for learning success to an accountable and collaborative educational partnership between teachers, principals and others, as required, working collaboratively as a team to deliver predictable success for each learner.

Requirements for the Design of a Learning-Centered Accountable and Collaborative Schooling Process

Four requirements are presented for immediate consideration and action:

- (1) Re-focus all efforts toward delivering predictable success for learners as the PRIME commitment of each professional educator (teacher, principal, guidance counselor, administrator).

- (2) Learn and apply those PROVEN management and mastery-learning curriculum design practices which will equip each educational professional to deliver PREDICTABLE results: (a) for learners; (b) for teachers; (c) for administrators; (d) for the school board; and (e) of critical importance, for the parents and community members who pay the bills through their taxes.
- (3) Rethink the organizational focus to be applied for each professional as a MANAGER-FOR-RESULTS for: (a) the classroom teacher delivering predictable mastery-learning outcomes; and/or (b) the principal delivering all required support to each classroom to assure delivery of mastery-learning results as preplanned by the teacher.
- (4) Link effectiveness of classroom instruction to the only meaningful measurement criteria; namely, predictable learner success.

The Organizational Focus for Delivery
of Predictable Learning Results

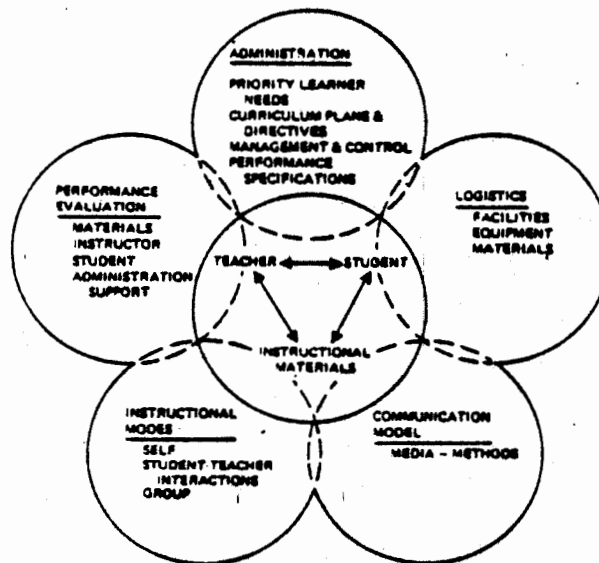
The ultimate focus of all MANAGERS-FOR-RESULTS in our schools (teachers, principals, and administrators) must be the delivery of successful learners upon graduation; and progressive predictable success for learners along each step (grade level) leading to successful graduation. The commitment to the process of MANAGING-FOR-RESULTS in the educational schooling process should be defined only in terms of intermediate and final success for learners as they progress through grades K-12.

Effective classroom instruction must be defined only in terms of the predictable mastery of learning standards for each learner, each grade, each content area. These standards should be expressed through learning objectives and criterion test items to be achieved through the classroom instructional process.

To produce quality results for learners, each partner of the educational system (teachers, principals, administrators, central office, superintendents, school board members, parents, community members, and learners) must plan for and perform those activities required to support instructional/learning activities performed in the classroom. Figure 12 shows the focus of the learning site. We see the teacher, student, and instructional materials in the center circle as the focus of instruction and mastery-learning outcomes. All other components, shown as interlocking circles, perform activities which directly or indirectly influence the learning results achieved in the classroom. Each of these support groups to the classroom must be accountable for their contribution to achieve predictable mastery-learning outcomes.

FIGURE 12.

*Education Planning Requirements Include
ALL Parts of the Educational System*



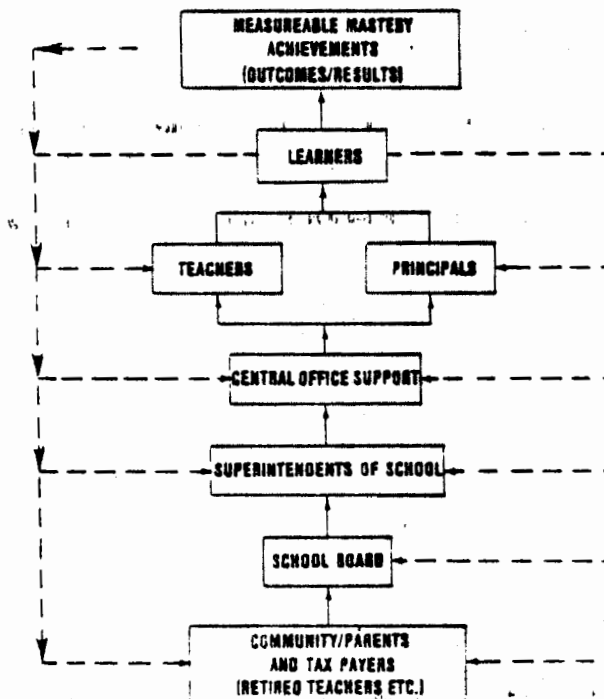
The schooling process must commit to achieving predictable learner success; namely, the positive achievement of predictable mastery of stated learning objectives and criterion test standards for each learner. This commitment would apply for all learners,

in each grade, and for all content areas. All the above could be related to a K-12th grade articulated curriculum leading to predictable achievement of measurable graduation requirements. These graduation requirements must offer those competencies, skills, and knowledge for each learner (consistent with one's prerequisite competencies and abilities) to enter into and to succeed in the society for which he is being prepared.

A Refocusing of Roles and Functions of Professional Educators

A total commitment to delivery of Quality Learning Results by a school district forces a redefinition of roles, functions, and performances to be evaluated. You are referred to Figure 13, presenting a Learning-Centered functional organization chart specific to delivering predictable learning mastery results. Figure 13 starts with the PRIME focus for district RESULTS to be Measurable Mastery Achievement by Learners (Top Level). It then focuses on those professionals (teachers

FIGURE 13



and principals) who are the professionals directly and primarily accountable for delivering learner success. Figure 13 then focuses on SUPPORT requirements and personnel to fulfill support requirements to the classroom teacher (Central Office and Superintendents of the District). Finally, Figure 13 focuses on the contribution by the Community and the Board of Education, those to whom all educational professionals are accountable for delivering successful results for Learners.

In Figure 13 we see the hierarchy of relationships between and among each member of the educational team as MANAGERS-FOR-RESULTS; namely, those responsible for delivering predictable success for each learner in each classroom.

The TEACHER as a MANAGER-FOR-RESULTS must have pre-stated those activities to be performed (instruction, learning, evaluation, support, et al.) and those measurement criteria to be achieved by the learner, the teacher and external management support personnel to deliver successful learner Results in the classroom. The teacher must also be capable of DIAGNOSING performance achievement "along the way" and to adjust as required, to modify instruction and learning in order to achieve desired RESULTS for learners, support personnel and self.

The PRINCIPAL as a MANAGER-FOR-RESULTS for a single school or perhaps a cluster of schools, must have preplanned those performance results expected from each teacher and all support personnel aiding the teachers in the classroom. He/she would necessarily be certain that the classroom teacher can FEASIBLY ACHIEVE the teacher's prenegotiated accountable results. The principal is the instructional leader of his/her school(s). His/her prime concern is the role as INSTRUCTIONAL MANAGER to assure the managed delivery of predictable quality learner results in all classrooms involving all teachers and learners under his/her jurisdiction.

It is meaningful to view the teacher in each classroom as the manager of learning results. The teacher's PRIME RESPONSIBILITY will be to plan for, and to deliver, predictable learner mastery results for his/her learners. Thus, the principal and each teacher are linked together as MANAGERS-FOR-RESULTS with:

- (a) the teacher(s) focusing on successful learning results by each learner as the final accountability standard for each teacher; and
- (b) the principal focusing on all required support functions to be successfully performed, thus assuring maximum productivity and learner success in each classroom; i.e., highest levels of quality learning results (effectiveness) consistent with the most efficient use of limited resources (efficiency).

For all MANAGERS-FOR-RESULTS, (teachers, principals, and all other participants), a common results-oriented planning, management, and evaluation process must be applied by each, assuring a common language and common process leading to (a) collaborative commitments to action, (b) derivation of plans to assure predictable delivery of results, and (c) the capability to monitor and revise plans for increased effectiveness and efficiency.

The distinction must be made between Quality Instruction and the Management of Quality Instruction as compared with Quality Learning and the Management of Quality Learning Results. The teacher as manager for predictable learning results must apply those proven professional practices assuring predictable mastery of stated learning objectives and criteria. These professional practices must focus only on Need-To-Do Learner-centered professional practices to be applied by professionals (teachers and curriculum designers) assuring predictable success for learners.

Shifting From Teaching-Centered to Learning-Centered
Professional Practices for Reversing the
Current National Crisis in Learning Effectiveness

An initial and crucial step to be taken is to realize that the professional practices currently applied by our administrators and by our teachers have not delivered competency-based mastery for our learners.

Our present schooling practices are primarily Teaching-Centered. These Teaching-Centered practices focus on the question, "What will our teachers teach?" This Teaching-Centered approach has not delivered winning programs for our learners.

Rather than focusing on what a teacher will teach, we must shift our focus to success for our learners. This is done through a Learning-Centered approach, an approach that focuses on the question, "What will our learners learn?"

A Learning-Centered educational approach redirects all efforts to achieving learning success and to applying those professional practices by teachers and administrators required to deliver predictable learning success.

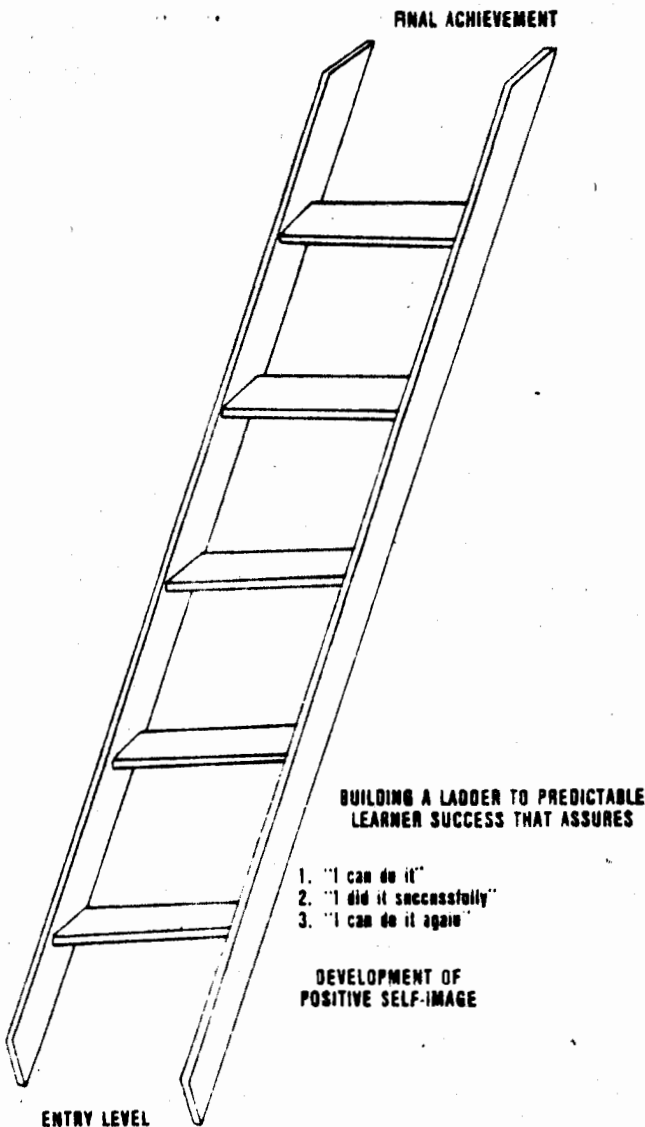
Designing Through the Eyes of the Learner

The proposed shift to LEARNING-CENTERED professional practices for delivering predictable learning mastery results involves refocusing on new professional skills and practices, assuring success for learners as follows:

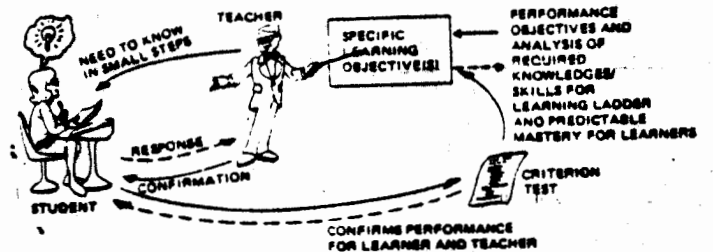
- (A) On the design of instructional programs which are totally LEARNING-CENTERED, we shift to "What a learner will learn," as "designed through the eyes of the learner." This requirement establishes a learning ladder (or learning path) which assures the capability of a learner to proceed step-by-step from point of entry; through progressive learning plateaus; to the predictable achievement of the terminal (final) competency-based mastery-learning objective and criteria. (See Figure 14, Designing Through the Eyes of the Learner)
- (B) The implementation of a closed-loop tutorial model of instruction which assures a TEACHER CONTROLLED yet LEARNING-CENTERED process. A teacher using this model would proceed no faster than the demonstrated MEASURED understanding by learners for each rung of the learning ladder. Figure 14 presents the closed-loop learning model of

FIGURE 14

DESIGNING
"THROUGH THE EYES OF THE LEARNER"



LEARNER-CENTERED CLOSED-LOOP
MODEL OF INSTRUCTION



1. **LEARNER ORIENTED:** emphasis on interaction and demonstrated student success, complexity tailored to learner's capabilities.
2. **INSTRUCTIONAL PLANNING:** analysis of required knowledges and skills by learners to achieve the learning objective(s).
3. **INSTRUCTIONAL MATERIALS:** selected against learner capabilities so they can achieve the learning objective. (see learning path design)
4. **INSTRUCTIONAL DYNAMICS:** two-way communication. (correct answer confirmation for learners) continual, planned teacher-student interaction (teacher presents - student responds - teacher confirms).
5. **PACE OF INSTRUCTION:** determined by students ability to demonstrate understanding at each learning step. (If understanding demonstrated - GO; if not demonstrated - STOP & CLARIFY before proceeding.)
6. **TEST:** criterion-referenced. (measurements defining learner success) measures achievement of learning objective. immediate feedback to students.
7. **RESULTS FROM TESTING:** used to evaluate effectiveness of instructional methods and materials. (closed-loop interaction) used as basis for revision of methods and materials until students can achieve learning objectives. Field-testing and validation.

the teacher controlled yet learning-centered instructional/ learning process. (The tutorial model leading to predictable, teacher guided learning success) In Figure 14 you are also presented the characteristics

and requirements for all the design and installation of the proposed LEARNING-CENTERED programs. The shift is from COVERAGE OF CONTENT -- TO -- achievement of relevant competency-based mastery learning objectives and criteria.

Teachers working with principals and support personnel applying this Learning-Centered approach can assure predictable success for each learner, in each classroom, and in every content area. These processes have been PROVEN through multiple success stories by school districts over the past 20 years.

Establishing a District-Wide Winning
Learning-Centered Performance Program

Prior statements have focused on those required learning-centered professional practices to be mastered by teachers and principals to deliver predictable learner-mastery results in each classroom.

In order to deliver district-wide success for learners it is proposed that accountability standards be established for the performance of all central office, school board, and parent/community members. These requirements are postulated to be as follows:

The Central Office Administrators (including Superintendent) are accountable MANAGERS-FOR-RESULTS for broad areas of responsibility (examples: Curriculum/Instruction/Learning, Personnel, Facilities, Administration, and others). The Superintendent, as the senior executive officer, is accountable for total system-wide RESULTS. Each professional educator regardless of levels of accountability should be focused on:

- (1) the priority target for the district NEEDS and GOALS; and
- (2) management practices assuring the delivery of PRECISION performance RESULTS.

The Board of Education members are to be equally accountable to define appropriate policy and standards; and to require operational standards to be established and executed to deliver MAXIMUM PRODUCTIVITY for priority RESULTS set for District GOALS and OBJECTIVES. They, in turn, must provide required resources AS PLANNED to assure the delivery of desired results or outcomes for District Performance Objectives and Standards.

In the 80's, all members of the educational decision-making, management, and operational teams in the schools must operate as qualified MANAGERS-FOR-RESULTS. To do this they must receive required skills training in these methods to deliver as a team required learning results.

The Community and Parents must become Dynamic and Active partners in the setting of LEARNING GOALS AND OBJECTIVES for the schools, particularly in the statement of relevant graduation competency skills for learners; they should assist, as feasible, in the analysis of learner-centered curriculum requirements; and they must play an active role as evaluators of learner results as reported by the professional educational team (teachers, guidance counselors, principals, and administrators).

This critical linkage between community and professional educators will allow the installation of a WIN-WIN model for all concerned -- particularly predictable success for the individual learner.

Chapter 14

Achieving Exit (Graduation) Learner-Mastery Requirements

The exit (graduation) product of our public high school is, in the final analysis, the major pay off of all education; namely, those graduates with the required competencies, attitudes and vocational skills to survive and grow in the world for which they are being prepared.

Predictable learning results must be expressed as those GRADUATION STANDARDS representing the REQUIRED NEED-TO-KNOW and NEED-TO-DO skills, attitudes and values for individual graduates to achieve individual independence in society when exiting (graduating) from our high schools.

The specific skills and knowledge defining graduation standards would be derived from employees, community, parents, professionals and learners. These standards will define the EXIT Results for graduation and establish the EXIT CURRICULUM standards to be achieved in ALL subject areas by each qualified graduate.

Given these EXIT Curriculum Standards for high school graduation the schools would develop the appropriate buildup (Learning Sequences) for each successive grade level (K-12) which will result in the PREDICTABLE ACHIEVEMENT of the final EXIT graduation Curriculum standards by all qualified learners.

For each Terminal Learning Outcome for each successive grade level (K-12) the district would develop and test out "learning ladders" required to be climbed successfully by all learners resulting in their predictable achievement of all Terminal Learning Objectives and Criteria Testing Standards for each subject area and for each progressive grade level (K-12).

The traditional concept of COVERAGE of subject content in a defined TIME PERIOD (traditional instruction) would be replaced with a Learner-Mastery model of instruction assuring that all learners proceed based only on measurable success at progressive learning steps. This will apply at every grade level.

The final outcome to be delivered and field-tested will be the District-Wide Predictable Learning Delivery System (grades K-12) which will be implemented by all teachers as designed and field-tested, thus guaranteeing predictable learner success:

- (A) Through each progressive grade (K-12) level; and
- (B) With successful graduation at the end of the 12th grade. (Meeting stated graduation standards)

BENEFITS ACHIEVED

Benefits achieved through the installation of the District-Wide Predictable Learning Delivery System include the following:

1. All qualified students are guaranteed those required skills, attitudes and values upon graduation from school which lead to self-sufficiency and to a quality life in the world they are entering.
2. The current predictable failure rate of large percentages of high school students is replaced with a PREDICTABLE success model for these students. The current slide to predictable failure (from Grade 1 to Grade 12) is reversed with 100% predictable success.
3. The FOCUS of all efforts of teachers, administrators and the school board becomes predictable learner success using those tested and proven learner-mastery practices which will guarantee progressive success in advancement

of all learners through grades K-12 resulting in their successful achievement of all graduation requirements.

4. Cost-effective management practices would be tied to the implementation of the tested District-wide Predictable Learning Delivery System resulting in the most COST-EFFECTIVE and controlled predictable success for all learners in the school district.
5. The focus of all professional educators in the district becomes the managed delivery of assured predictable success for all learners.

No longer is it feasible that each teacher work independently to define what is or is not relevant to be achieved in one's classroom. As a replacement, the district would develop Learner-Mastery curriculum (grades K-12) linked to the achievement of required graduation standards. In turn, all instructional programs (grades K-12) would be carefully matched to assure the predictable and successful advancement by each learner from entry (K) through progressive grade levels (1-12) leading to the successful graduation of each qualified learner based on their achieving all EXIT (graduation) standards.

All teachers will be required to be qualified in those proven learning-centered practices to develop as teams the required programs for each grade level assuring predictable success for learners; and all administrators will be required to be qualified in those proven managing-for-results practices which support the feasible achievement of the objectives of the district-wide delivery system.

THE PROOF OF THE PUDDING: APPLYING THE PROVEN
LEARNING-CENTERED TECHNOLOGY

The learning-centered practices discussed above have been extensively and successfully applied in multiple

applications over the past 20 years. Successful case histories are presented in Volume II for large and small districts and for urban and rural districts. "The Moss Point Story - Climbing the Learning Ladder to Predictable Learning Success," presents in detail what has been accomplished to achieve graduation requirements.

RESISTANCE TO CHANGE: PEOPLE VARIABLES

The installation of a successful Predictable Learning Delivery System in any school district will be directly contingent upon the levels of acceptance of and commitment to that system by the professional teachers and administrators of the district.

Success will be correlated one:one with people variables - not with technical variables. The technical skills "to design through the eyes of the learner" are not difficult or complex in themselves. They do, however, demand a high level of disciplined application. Initially this entails more work and more time than do conventional lesson planning procedures. Once completed, however, the processes of planning for instruction and learning will involve much less time and effort while guaranteeing predictable success for all learners.

The proposed commitment to Learning-Centered processes which is required to plan, to design, and to install a Predictable Learning Delivery System can involve several potential sources of resistance by educational professionals as follows:

1. Additional WORK: The redesign of current curricula to assure the delivery of predictable success for learners will require the investment by every professional in the learning of new skills and knowledge which are in direct conflict with current practices. The faculty must be involved: (a) in an extended retraining program requiring 40-80 hours outside of the regular working day; (b) in the development of

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new curricula designs applying the more effective predictable learning practices; and (c) in the extended field-testing and revising of the new curricula until they will achieve PREDICTABLE PERFORMANCE STANDARDS.

2. Personal THREAT: Both teaching and administrative educational professionals may be threatened by the proposed commitment to the installation of predictable learning practices. Individuals are feeling assaults by parents, community, and learners specific to the continued decline in the performance of learners (test scores). The educator, as any human being, resents these assaults and, in turn, can feel a combination of such feelings as threat, indignation and guilt. By accepting the requirement to shift to new proposed practices, educators can incorrectly perceive that they are admitting they do not know their job, i.e., that they do not have the skills to succeed.
3. Personal Agendas: Not all professional educators have the success of their learners as their top priority. These new practices will establish accountability standards for evaluating the effectiveness of each contributor. These accountability standards will demand an open performance system which can disrupt personal agendas since the learner and his/her success becomes paramount and measurable.
4. Centralized Delivery System: Over the years the professional teacher has had total control of what was to be taught in his/her classroom. With the proposed centralized predictable learning delivery system this personal freedom is replaced with a centralized K-12 grade curriculum which aims toward delivering predictable accomplishment of stated graduation requirements by each learners. Every student in every grade will be

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directed to achieve a series of predefined learning objectives and measures for that grade level. Successful achievement will start with the necessary prerequisite skills to enter grade 1 and to complete grade 1, which are the prerequisite skills to enter grade 2 and to complete grade 2 - and so on through grades 3 - 12. Predictable achievement by learners of exit (graduation) skills will require this commitment.

5. CHANGE: Most individuals are secure in their day-to-day routines. We are all creatures of habits and comforts. The requirement to CHANGE can bring instability to one's life and with this change increased frustrations.

The resistances are found to be common reactions when change is proposed. Sometimes resistance is demonstrated because the persons to be involved in or affected by the change lack sufficient knowledge about the proposed change to make informed judgments. Sometimes they lack skills to implement the change and do not wish to expose this.

Most of these resistances can be overcome through:

- 1) District-wide commitment established by Board policy;
- 2) Orientation of all concerned so that they have sufficient knowledge to make commitments;
- 3) Assurance that training in the new skills will be provided before staff will be asked to apply these to curriculum design; and
- 4) Probably one of the most important, assurance that the entire installation will be gradually installed over a 3 - 5 year period so that everything will not be required "overnight or by next week".

When districts have followed these procedures, acceptance by staff emerges during training and/or application because benefits to themselves and to learners are experienced.

Teachers and administrators realize that the processes provide a means for specifying, sharing and applying their creativity and expertise in a logical manner - thus resistance fades.

Chapter 15
Significant Political and Technical Requirements for Installing
a District-Wide Learning-Centered Performance System (Gene Geisert)

A revolution is taking place in public education. Propelled by technological advances, thoughtful administrators are looking to a breakthrough in professional practices and methods to provide answers as to how to better assure that students will learn successfully. The future is already here in a few lighthouse districts and will quickly spread through the nation's schools.

The concepts of results-focused learning are spreading simply because it delivers a more effective, efficient strategy for delivering success for the learner. Students are mastering the basic skills in various environments at every grade level when a mastery learning system is implemented. Such a system is designed to deliver effective and predictable learning results.

As with the application of any new approach, the widespread use of results-focused learning systems will require dynamic leadership if we are to seize upon this opportunity and create a climate for success.

Public educators are undeniably under attack. So pervasive is the perception that American public schools are failing, that non-educator groups are seeking to replace the traditional role of the superintendent by substituting a new cadre of instructional decision-makers. Many school boards no longer look for or desire their chief executive officer to be an innovator of "best educational practices." State legislators frequently cite a crisis in public education as a rationale for passing mandated instructional approaches or for supporting alternative educational structures. Community groups, mayors, city councils

and the courts are all actively seeking to influence the future direction of American education.

It is my thesis that ultimately only the superintendent, with the potential power base for monitoring and initiating system change which that role carries, is in a position to bring about comprehensive change resolving stated crises. Aggressive, skilled, local administrators hold the key to creating schools that work effectively. Local superintendents have new tools which will enable them to recapture the rapidly deteriorating leadership role. Their heritage as school officers provides a strong foundation for the winning approach. Superintendents have sought what is best for learners. Rarely have they sought personal gain or political payoffs, or carried hidden agendas. They are "up front" for learners. Successful learners form the platform for building the ultimate rationale for the continued existence of a strong public school system. Success-based (mastery) learning will be a powerful piece in helping superintendents to survive the future (if not public education itself).

In essence, success models for learners follow these concepts:

1. Youngsters are provided favorable learning conditions, and are given sufficient time to achieve.

2. Professional educators are qualified to apply new learning-centered practices assuring the delivery of successful learning outcomes and the effective management of the delivery of learning results, i.e., performance objectives and standards.

3. Students are given clearly stated learning objectives that specify skills to be learned and that spell out standards of performance; and they are given required learning ladders (learning paths) to assure progress to success in achieving mastery learning objectives and standards.

4. Learners are offered alternative learning strategies to assure successful progression to the achievement of objectives and standards.

5. There is progressive assessment and analysis of student results by the teacher to chart each student's progress

and to assist the teacher in selecting viable alternative learning strategies.

6. The teacher applies a continuous diagnostic, prescriptive, confirmation, and revision process at each step of the learning path to control the quality of learning results delivered.

7. Teachers are provided with performance data to track pupil progress on an individual basis, and to provide need-to-know information so that appropriate decisions can be made by learning managers to assure progressive success by learners.

Providing the teacher with continuous diagnostic, prescriptive data that free the teacher to teach, based on prepared learning blueprints for delivering successful learning, is the most exciting and challenging cornerstone of all.

In turn, utilizing a system-wide learning management system, teachers will have at their fingertips precise data which will not only assist them in managing classroom activities, but further, will provide for the selection of appropriate instructional media to supplement teaching strategies for delivering predictable learning success.

Imagine knowing where each pupil is in terms of his or her learning needs, having multiple learning approaches inventoried for prescription by the teacher, and having the pupil's progress monitored at every step of school life leading to his or her predictable success.

Think of a learning-centered management system that further groups children by need and by capability and by learning style; and offers methods by which the group can be taught or reinforced in the achievement of those skills the teacher is presenting with resulting predictable success for learners.

New Orleans public schools calls its outcome-based learning program effort "SCIP," and for the past three years has been working with private industry and consultant firms to perfect such a model. Birmingham, Alabama; East Orange, New Jersey; Denver, Colorado; Jacksonville, Florida; Orange, California; Fresno City College, California; Northglenn, Colorado; and others are also well along in the development of similar models.

*Reports by several of these Districts are in Volume II: Delivering Predictable Success for Our Learners.

To survive the future, public education must show significant and timely improvement toward meeting the demand that schools be, first, EFFECTIVE in delivering predictable learner success and, second, EFFICIENT in the management and, in the use of limited resources when delivering successful learning results.

Sharing Real World Experiences and Requirements
For Installing a Successful Learning-Centered
Delivery System in the Schools

In retrospect, my five years (1975-1980) directing the New Orleans SCIP Program has taught me valuable lessons which can have an impact on the success of other mastery-learning system installations. These lessons refer to both POLITICAL and TECHNICAL requirements.

Rethinking for the Design and Installation of a
District-Wide Learning-Centered Performance System

It must be initially understood that the successful installation of a district-wide learning delivery system will require major changes by all educational partners in ways of thinking about, planning for, designing for, and managing the delivery of predictable learner success.

Following is a series of critical questions which must be asked and answered, in the sequence presented, in order to install a successful district-wide Learning-Centered Performance System.

Question 1 asks: What must administrators know and do for teachers and learners?

Question 2 asks: What must teachers know/do to insure learner success?

Question 3 asks: What must learners know/do to be successful in schools and life?
(Grades K-12)

Question 4 asks: What must be done (added/deleted/ revised) to maintain learning system effectiveness?

The answers to these significant questions are presented in Table 5.

Political and Technical Requirements for
Installing a District-Wide Learning-Centered
Performance System

In order to achieve success for learners, the school board must understand the concept of learning-centered practices to be installed in a school district and must commit itself to these professional practice requirements.

•The school board must be committed to learner success as the prime business of the schools.

•The school board must make a multi-year (long-range) commitment to the installation of a district-wide Learning-Centered Performance System; i.e., every partner committed to the success of each learner as the first order of business.

•The school board must see this commitment as its top priority and see dollars as a MUST-DO investment requirement.

•The school board must commit sufficient resources to accomplish these requirements.

•The school board must establish realistic time requirements to install an effective and successful learning delivery system.

TABLE 5. Questions to be Asked and Answered to Design and Install a District-Wide Learning-Centered Performance System

TABLE 5.

Question 1	Question 2	Question 3	Question 4
<p>What must administrators know and do in order to do for teachers and learners?</p> <p>Acquire specialized skills in:</p> <ul style="list-style-type: none"> - planning - management - evaluation <p style="text-align: right; margin-right: 10px;">} FOR results</p> <p>to install, support and manage a Learning-Centered delivery system assuring predictable learning success.</p> <p>Prepare and Learn: to monitor, control and revise system to deliver predictable results for learners.</p> <p>Install and operate a computerized learning-centered management system to assure efficient operation.</p>	<p>What must teachers know/do to insure student success?</p> <p>Acquire: Professional practices for delivering predictable learning success</p> <ul style="list-style-type: none"> - Knowledge of content in subject matter area <p>Acquire: Skills required as a teacher to deliver success for learners</p> <p>Acquire: Management skills: diagnostic/prescriptive/confirmation/revision steps to control the delivery of predictable learning success</p>	<p>What must learners know/do to be successful in schools & life? (K-12)</p> <p>Apply Learning-Centered skills to develop predictable mastery learning outcomes (Learning Paths designed to assure learner success).</p> <p>Implement professional practices to design program success for learners. (Closed-Loop Learning-Centered steps:</p> <ul style="list-style-type: none"> - Diagnosis - Prescription - Confirmation - Revision <p>Achieve learning outcomes specified in the K-12 Learning Paths designed "through the eyes of the learner" to produce mastery of progressive learning objectives and criteria</p> <p>Achieve Graduation Objectives and Standards for exit from schools designed to:</p> <ul style="list-style-type: none"> - Get and hold a job - Generate at least sufficient resources to be self-sufficient - Generate quality life outcomes. 	<p>What must be done (added/deleted/ revised) to maintain learning system effectiveness?</p> <p>Identify change requirements specific to:</p> <ul style="list-style-type: none"> - new priority needs - new professional competencies to be learned - more effective management/organization - more effective: management decision-making evaluation procedures <p>Initiate actions to revise as required to increase overall learning system effectiveness and efficiencies</p>

The installation of a district-wide learning delivery system also requires that the concepts of outcome-based learning be differentiated from traditional schooling processes. Professionals must be committed to new Learning-Centered competencies based on new instruction/learning requirements. Predictable learning does not simply mean achieving priority learning objectives and criterion measures. This commitment has major implications for change, including (a) advancement of students based only on each learner's achievement of measurable performance (standards), and (b) reporting to parents on the achievement of learning objectives.

The most crucial, technical requirement for installing a district-wide learning system is that every teacher, teacher-aide, and/or those responsible for delivering predictable learning results be committed to and qualified in learner-centered professional competencies as follows:

- A. Each teacher understands the difference between a TEACHING-CENTERED instructional learning process and a LEARNING-CENTERED instructional process; each teacher commits himself or herself to the use of the new professional practices required for the delivery of predictable learner success.
- B. Each professional teacher teaches with learning blueprints "DESIGNED THROUGH THE EYES OF THE LEARNER" -- not through the eyes of the teacher.
- C. Each teacher agrees to his or her accountability for the daily application of learning-centered practices in his or her classroom; each professional will agree to be evaluated on his/her performance in delivering outcomes for learners.

Managing for the Delivery of District-Wide
Predictable Learner Results

Given the achievement of the above stated requirements, the Learning-Centered management system can be effectively designed and installed. The larger the school district, the greater the complexity in operation, management, and quality control requirements. One will see the increasing requirement for quality control procedures in order to provide timely and necessary data for teachers, principals, and senior school administrators in order to deliver precise learning successes in a school district. The quality control checks allow managers to evaluate performance results against pre-stated standards at a specific time; to identify deviation from expected achievement of preplanned outcomes; and where necessary, to remediate for performance discrepancies in learning and/or management outcomes. This latter process (quality control) is defined as control of the quality of the results to be achieved -- not of the professionals involved.

A computerized mastery learning-centered management system responds to the needs of each manager for results as follows:

*For the classroom teacher as the accountable manager for delivery of learning success: Management data provide him or her a diagnostic, prescriptive data base for making appropriate instructional/learning decisions; and selections from among alternative strategies and means in order to coordinate delivery of predictable mastery learner results.

*For the principal as the accountable manager for supporting the successful delivery of successful learners in each classroom: Data are provided for decisions as to those need-to-know and/or do support actions to be performed to maintain quality assurance of learning results in each classroom.

*For the central office administrator as the accountable manager for major programs, the overall school's performance,

and all district level goals and objectives: All required performance data are provided in the correct form, at the required time and frequency as related to required decisions specific to the major focus of the district, i.e., successful learners.

*For the superintendent and the school board as the ultimate accountable managers for district-wide results to be reported to the community-at-large: The data base is provided for annual revisions, new objectives, and new resource requirements. (Educational Performance Audit - EPA)

Each of the levels of management and operation defined above has its unique need-to-know (data) and need-to-do (action) requirements in order to make appropriate decisions specific to (a) defining priority targets for action; (b) committing itself to the achievement of priority results as expressed by performance objectives and criteria; and (c) monitoring performance effectiveness "along-the-way" and "at-the-end" of implementation programs.

Given the ongoing management/decision-making requirements stated above, the installation of a computerized learning-centered management system becomes most rational in order to deliver the desired and most cost-effect results for learners, teachers, principals, senior administrators, board members, and the community.

SECTION IV:

**PROCESS FOR SUCCESS:
SYSTEMATIC APPROACH FOR EFFECTIVENESS (SAFE)**

Chapter 16

SAFE: An Integrated Model and Practices for Delivering Effective Educational Results

Chapter 17

**A Pioneering Graduate Program in Instructional System Design Technology (ISD):
The Chapman College Experience (1963-1969) (Wilfred Landrus)**

Chapter 18

Designing and Field Testing the Systematic Approach for Effectiveness (SAFE)

Chapter 16

SAFE: An Integrated Model and Practices for Delivering Effective Educational Results

The commitment was made in 1960 to develop a Learning-Centered instructional system design (ISD) approach representing a major and dramatic shift from the pedagogical principles and practices offered teachers and administrators in teacher preparation colleges/universities.

In order to expect a shift by professionals to these learning-centered practices we perceived the absolute requirement for an extensive field-test and research program in order to demonstrate unequivocal proof of the proposed learning-centered versus the conventional teaching-centered practices.

Learning-Centered practices redirect all efforts to achieving learning success and to applying those professional practices by teachers and administrators required to deliver predictable mastery learning outcomes/results. This answers the question "What must we know and do to be sure that our learners are provided everything they must know and do to build the correct responses? -- Mastery learning results?"

It was decided to proceed in three successive phases to test and hopefully derive the required conclusive performance data showing the measurable benefits of a learning-centered approach to be applied by future educational professionals (teachers and administrators).

The following successive phases were performed to test out the theoretical concepts of increased mastery learning effectiveness:

PHASE 1. To design and to extensively field-test a

group instructional learning-centered program applying those programmed instructional principles postulated by Skinner and Crowder to be combined with the techniques of System Analysis for installing required system-wide managing-for- results processes including the accountable performance by teachers, principals and support personnel. This program would be "packaged" for use by teachers to deliver predictable achievement of defined mastery-learning objectives. We called these programs the Group Tutorials.

PHASE 2. Given positive results from Phase 1, design a generic learner-centered instructional process establishing the pedagogical base for broad applications and use in teacher training institutions.

PHASE 3. Apply the proven process to develop and validate skills training systems whereby educators could acquire the new practices: (a) either in teacher training institutions or (b) in inservice programs in our schools.

An additional requirement was that these training systems for professionals would allow for successful trainer/manager replication thus assuring a quality-controlled "training of trainers replication process" in each school district.

Each of these steps were performed and the data presented through the lessons learned (1961-1983) verified the effectiveness of the Systematic Approach for Effectiveness (SAFE) as a proven learning-centered technology to deliver predictable learner mastery outcomes for all levels of students, all grade levels and all content areas by all professional educators.

PHASE I: THE DESIGN OF THE LEARNING-CENTERED
GROUP TUTORIALS INSTRUCTIONAL SYSTEM (1960-1965)*

Group Tutorials are a complete teaching/learning instructional system with each Tutorial representing a unit of instruc-

*See Volume II, Chapter 4, for a complete research report on Tutorials

tion/learning. They are the first application of a totally learning-centered instructional system design combining:

- A. The principles of Self-Directed Programmed Instruction;
- B. The techniques of System Analysis from industry; and
- C. The principles of ~~managing-for-results~~ practices to install and manage a group instruction classroom environment while delivering predictable mastery for learners.

These group tutorials represented a pioneering group instructional mastery-learning program at the Alamitos School District, Garden Grove, California, in 1960-1965. This first instructional system design model (ISD) applied the principles of Programmed Instruction (P.I.) developed by Dr. Fred Skinner and Dr. Norman Crowder (1956-1965). The work of these pioneers offered the proven capability to deliver predictable learning results, and established the basic technology for design and delivery of mastery learning results. Their applications were limited to self-paced programmed learning techniques defined respectively as Linear and Branching P.I., usually presented in a programmed text. In both of their methods predictable learning mastery was an absolute requirement for success.

Effective programmed instructional applications require:

- A. The pre-statement of measurable learning objectives and criterion test measures (specific to defined learning needs);
- B. The analysis of required progressive steps to be performed by a learner to achieve the stated learning objectives and measurement criteria defining mastery (Learning Ladder);
- C. The design of the programmed learning sequences (step-by-step) to require active participation of each learner; to elicit only correct responses by learners; to provide immediate

feedback to the learners as to correctness of the response;
and the ability to make corrections before proceeding;

D. Extensive field-testing of the instructional programs with required modifications until achievement of mastery learning standards is a predictable event.

The performance criteria within programmed instructional applications defining mastery learning results* focuses only on achievement of pre-stated learning objectives and performance criteria.

Benefits to learners are obvious. However, all learning experiences could not be limited to self-paced programmed texts. In the early 1960's we proposed that the principles of P.I. be expanded to incorporate system analysis practices and use of appropriate methods and media suitable to the nature of the learning task -- a multi-media approach. Thus, we could choose from all educational methods and media in all modalities and select the best combination to assure learning success in any subject matter area.

To train programmers in university classes and in industrial settings, in the 1950's we had developed a step-by-step process for program design**. If we were to apply these design processes to more complex instructional systems, a more comprehensive process would be required to include system analysis and the management of performance systems applying management-for-results practices.

*MASTERY LEARNING RESULTS: The achievement of predefined learning objectives and criteria by learners defining performance standards for mastery learning results.

**Corrigan had developed the first teaching machines for Rheem Califorme Corporation; had developed P.I. programs for industrial training and had extensive experience in the applications of System Analysis in missile development with Douglas and North American Aircraft Companies.

The Group Tutorial Model, as first applied at the Alamos School District, applied the design principles for programmed instruction, system analysis, and management-for-results techniques to a group instructional system design (ISD). The ISD approach established the focus of all group instruction to be solely on the delivery of mastery learning results for learners in the classroom environment. This commitment shifted the focus of classroom instruction from a teaching-centered process to a learning-centered process, and from the concern about "what the teacher would teach," to "what a learner will learn."

By this redirection, we shifted to the delivery of predictable mastery learning results as the focus of teacher practices.

In this pilot model the teacher performed the role of a "tutor" using the programmed lesson plan and student materials to control the teacher-student interactions, to assess correctness of learner response and to make revisions of lessons to increase the effectiveness of instruction to assure mastery. If the learner did not learn, the teacher assumed the accountability for student failure. He/she would evaluate and revise and reteach until objectives were achieved.

Applying the system approach over a four year period, materials and methods were field-tested, revised when required, and re-tested so that learning success was assured and predictable. (Chapter 4, Volume II presents a complete research report and data about all development phases.)

The Group Tutorial process provides a validated generic process to design and to deliver predictable learner mastery results. The systematic processes focus on "designing through the eyes of the learner" for the delivery of mastery outcomes rather than on the teacher; and combines the precision tools and concepts of a systematic learning-centered analysis for assuring the effective management of the delivery of predictable mastery learning results.

By applying these generic methods, professionals can assure PREDICTABLE mastery results for learners. This proven teacher-controlled but learning-centered process presents a formal learning-centered engineering process* for the design and the delivery of predictable mastery learning results.

PHASE II: THE DESIGN OF A GENERIC LEARNER-CENTERED
INSTRUCTIONAL PROCESS (1964-1969)

In 1964-1969 a graduate program was established at Chapman College, Orange, California, offering a Master's Degree in Instructional System Design (ISD) Technology.** This Master's program offered the generic Learning-Centered skills and knowledge to design, install, and deliver predictable learner mastery outcomes.

The focus of this graduate program was two-fold:

- (a) To derive those generic pedagogical professional requirements and practices to be applied by teachers and administrators. leading to Learning-Centered results; and
- (b) To formulate these practices into a validated and formal Learning-Centered pedagogical discipline.

Over the period from 1966-1968 the U.S. Office of Education funded a multi-year Teacher Fellowship Program with Chapman

*LEARNING-CENTERED ENGINEERING PROCESS: Those disciplined actions performed by learning-centered designers: (a) to define those performance results to be achieved; (b) those progressive step-by-step actions performed by learners with desired responses to be elicited at progressive learning steps; and (c) the continual try-outs and revision UNTIL target learners achieved predictable learning success.

**This graduate program is discussed in Volume I, Chapter 17, Dr. Wilfred Landrus.

College leading to a Master's Degree in Instructional System Design Technology (ISD). This graduate program was designed and implemented by Dr. Robert E. Corrigan, Mrs. Betty O. Corrigan, and Dr. Roger A. Kaufman, currently Professor of Education, Florida State University.

During this period the concepts and principles of a Learning-Centered (mastery) delivery system for use by both administrators and teachers were expanded upon as derived from the Group Tutorials and were applied:

- A. In the state-wide California program for Preparing Educational Planners (Operation PEP);
- B. As the first total commitment by colleges to mastery learning practices; and
- C. In the installation of a college-wide mastery learning delivery system (Oakland Community College, Birmingham, Michigan).

The results achieved by trainees in both applications verified the proven effectiveness of the managing-for-results and mastery learning practices to increase the performance of learners, teachers, and administrators in the schooling process (delivering predictable success for learners).

Concurrent with the program at Chapman College were the significant contributions being offered by Dr. Madeline Hunter, UCLA, to the pedagogical base for professionals committed to learner success (1962-1983).

In conjunction with Dr. Hunter's significant contributions are those by Dr. Benjamin Bloom, University of Chicago, to overall mastery learning technology. Dr. Bloom had prior to his work in Mastery Learning research provided the significant Taxonomy of Educational Objectives (1956) which classified objectives

written by instructional personnel and established a hierarchy from the lowest level of knowledge (recall) to the higher levels of analysis, synthesis, and evaluation. This has been a valuable contribution, enabling curriculum designers to develop learning objectives for a hierarchy of cognitive skills; to deliver the level of achievement desired from learners; and given objectives, to analyze which lower order skills must be attained by learners as lead-ups to the higher order activities. Herein was provided the critical levels of NEED-TO-KNOW and NEED-TO-DO to design mastery learning sequences as seen and as "designed through the eyes of the learner." Dr. Bloom is recognized as a prime contributor to the generic principles of Mastery Learning and he offers significant research models for further applications.

A most current and significant development is the growing movement for mastery learning programs and outcome-based schools programs which focus on the delivery of quality learning outcomes with emphasis on required professional practices to achieve mastery learning results through field applications.

It is a fact that the proven learning-centered pedagogical and technical resources are currently available to all professional educators to plan for and to deliver predictable mastery learning results: (a) for all learners; (b) for all content objectives; and (c) for all grade levels (K-University graduate programs).

PHASE III: QUALITY ASSURED DISSEMINATION PROGRAMS
OF LEARNING-CENTERED PROFESSIONAL PRACTICES
(SAFE* Training Programs -- 1969-1982)

In 1969 the commitment was made to apply then PROVEN Learning-Centered knowledge and skills to develop a series of professional Learning-Centered skills training systems to be used by professional educators:

*SAFE: Systematic Approach For Effectiveness

- A. To deliver predictable learner success in all applications;
and
- B. To effectively manage the delivery of learner success
by teachers and administrators.

Over a period of 12 years these professional training program systems (called SAFE Training Programs) have been applied most successfully with professionals in over 54 educational institutions (local districts, state departments, USOE federal programs, colleges, and universities).

These SAFE Training Programs guarantee the attainment of mastery results for each of the SAFE programs by professional educators completing all the training requirements. These practices, when applied as learned, will deliver mastery results in their classrooms.

As with the Group Tutorials, these SAFE skills training programs for delivering predictable learner mastery results and maximum productivity have experienced three complete but independent field-tests until they could predict absolute mastery for all professionals involved.*

The proven capability to install the discussed Learning Centered practices has been demonstrated by multiple practitioners. These are the lessons learned and applied as derived from the successful implementation of the three development phases discussed herein.

The current national crisis in education (NATION AT RISK) can be predictably eliminated applying these Learning-Centered pedagogical practices integrated in the SAFE process model.

*The design and testing of the SAFE Skills Training Systems are presented in Volume I, Section IV, Chapter 18.

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Chapter 17

A Pioneering Graduate Program in Instructional System Design Technology (ISD): The Chapman College Experience (1963-1969) (Wilfred Landrus)

Born too soon to survive, but none-the-less, born out of an urgent need even then for educational reform, one of the world's first Instructional System Design Technology was launched in 1964 by Chapman College.

This new Department of Instructional System Design Technology was headed up by Dr. Robert E. Corrigan, assisted by his wife Betty Corrigan, Dr. Roger Kaufman, Rosemary Luxton, Donald Goodwin and the author.

Based primarily upon the pioneering work of the Corrigans, this new graduate program was designed to provide professional educators with the skills and tools for designing, creating, validating and implementing effective learner-mastery behavioral change curricula and support sub-systems.

The program soon attracted the attention of California and Federal officials charged with implementing such Congressional mandates for the improvement of education as contained in the National Defense Education Act of 1958, the Higher Education Act of 1965, the Elementary and Secondary Education Act, etc.

Chapman College, in collaboration with Litton Industries where Dr. Corrigan was Vice President, was chosen in 1966 to conduct "Operation PEP", a California-wide program for the preparation of educational planners. This was funded by the Elementary and Secondary Education Act as an innovation in education project. Over one hundred senior educational leaders from state, county and school district levels were

introduced to and trained in the basics of instructional system analysis and synthesis techniques to further their effectiveness as educational planners and shapers.

Also in 1966 and following, Chapman College was awarded two successive Experienced Teacher Fellowship Programs funded by Title V of the Higher Education Act of 1965. During this two-year period fifty experienced teachers in the subject areas of science, social science and Spanish earned Masters of Arts degrees in Instructional System Technology. Each learner concentrated in applying the skills and tools of this new Learner-Centered technology to his or her own teaching discipline.

Consistent with the performance requirements implicit and explicit in the Systematic Approach for Effectiveness at that time, the target objectives for these teachers were that by the end of the 12 month program they would:

1. Be able to determine appropriate models and strategies of learning based upon the current research data and current theories of learning.
2. Be able to design curricula and curricular materials using the techniques of system analysis to design courses and lesson plans which would deliver predictable learner-mastery results.
3. Be able to design evaluation schemes for validating and evaluating curricula.
4. Be able to make methods/media selections specific to delivering CORRECT learner responses including television, language laboratories, computers, classroom communication systems, self-instructional devices, and select methods and means criteria derived from a tradeoff between relevancy and practicality (cost-effectiveness).

5. Be able to administer Instructional Systems including teaching materials, teaching aids, and teaching devices; and further be able to derive the coordination and interaction requirements of the various means of instructing and learning in order to plan and implement predictable learner mastery programs.

6. Be able to write and validate basic self-instructional programmed materials in their content specialty areas in order to elicit predictable learning results from teacher derived performance objectives and mastery learning sequences.

7. Be able to introduce the newly learned substantive content material in the respective areas of Physical Science, U.S. History and Institutions, and Spanish with the techniques of Instructional System Technology to improve learning in their respective classrooms and schools.

8. Be able to introduce the newly learned substantive and technique materials into their local schools and serve as reference sources for other teachers who want to improve their teaching abilities by using the tools and skills learned and taught in the Experienced Teacher Fellowship Program.

9. Be able to design practical research models and evaluate future Instructional Systems in order to determine validity, and use learner-response data in upgrading and correcting present and future instructional materials and curriculum.

Initial follow-up inquiries indicated greater success for those teachers who sought out new jobs to fit their new skills than for those who went back to their former teaching positions. Apparently, the latter being alone in their schools were able to make relatively little change in the way things were being done in their schools. More recent follow-up inquiries indicate that almost all of those who sought new positions have done very well.

Post-Mortem

If the Instructional System Approach is superior, why did Chapman College dismantle its Department of Instructional System Technology in 1970 and let its nationally recognized faculty scatter?

It is an effort for the author to be objective about the demise of such a promising program. But the reasons appear in perspective to be understandable up to a point.

Fundamentally, the reasons centered on two factors - resistance to the basic tenets of this new approach and lack of follow-through funding. The first funding problem arose with the failure of the college to receive an expected third Experience Teacher Fellowship grant. This failure, coupled with inadequate build up of enrollments from other sources, posed a funding problem for the Chapman College administration. Program subsidization is not unusual in private higher education, but the College was used to having the Education Division earn money to help subsidize weaker areas of the College.

Further, as soon as the flow of outside financial support for the Instructional System Technology program began to dry up, resistance from the faculty mounted. Certain influential faculty members had always objected to this "new kid on the block" with its absurd idea that if a thought can be taught, it can be identified and measured - and that, therefore, a faculty member can be held heavily responsible for what the student learns.

Rather than face this resistance and save a promising program until it could essentially stand on its own, the administration of the college buckled in spite of a pledge to the Federal Government earlier that they intended to keep the program going.

Somewhat ironically, it was not long after Chapman College abandoned its pioneer program that the California Legislature and some other states passed legislation which began to require some of the ingredients contained in the System Approach. One of these elements was the stress on teacher and system accountability for student achievement. Unfortunately, too few teachers and administrators understood what a measurable performance objective was, much less recognize the need for a total system-wide involvement in accountability. So, like so many attempts at educational reform, this reform towards accountability bogged down. The Chapman College Instructional System Technology program would have done much to make this reform successful.

But, the Corrigan's and Roger Kaufman did not give up. Dr. Kaufman continued to teach educational system technology, first at United States International University, and later at Florida State University. Robert and Betty Corrigan concentrated on further service to schools of the United States through their consulting service. They have since refined the system approach to the point where they teach the essential skills in a short series of seminars using their SAFE Training Systems.

The continued deterioration of public confidence in its social and educational institutions would seem to point up the urgency of adopting on a nation-wide basis a generic system approach which has a proven track record in developing relevant and cost-effective learner-centered education.

About the Author:

Chapter 18 Designing and Field Testing the Systematic Approach for Effectiveness (SAFE)

Introduction

In 1969 Dr. Robert E. and Mrs. Betty O. Corrigan initiated the development of several professional skills training programs for use by educational professionals. These professional skills training programs were extensively field tested and redesigned with the co-developer, Ward L. Corrigan (1970-1980). The SAFE systems have gone through three complete rewrites and field testing involving over 50 educational clients.

The design objective for these SAFE* skills training systems was to provide educators those competencies to overcome the then stated (1960) deficiencies in our schools including:

1. The continuing decline in student learning test scores;
and
2. The overall decline in the effective management of our schools.

The underlying design premises of the SAFE skills training programs for teachers and administrators were as follows:

* SAFE*: Acronym for Systematic Approach For Effectiveness

- 1) That educational professionals were accountable for applying practices which would assure the delivery of most COST-EFFECTIVE results for the educational system (the total school district);
- 2) That the *primary focus* of the district was to be responsive to the priority needs of learners resulting in their predictable success to enter and to succeed in the society for which they were being prepared;
- 3) That each of the educational partners (community, school board, administrators, teachers, guidance counselors, support personnel, parents and learners) has a unique role to play in planning, delivering and evaluating MAXIMUM PRODUCTIVITY for a school district. The term MAXIMUM PRODUCTIVITY is defined in terms of the effectiveness of the quality and quantity of results delivered consistent with the most efficient use of limited resources available to a school district;
- 4) That the focus of the interaction between and among all educational partners was one of mutual accountability to one another in the delivery of results for the schools. This postulate stressed the fact that the COMMUNITY is the provider of required resources. As the employer the COMMUNITY should establish the priority targets defining the final expectations of the schools (Needs, Goals, Objectives, and Performance Standards), should evaluate the effectiveness of the programs designed by the educators, and should adjust the provision of additional resources at the end of a year

based on the *measured* success and/or failure of the programs.

In addition this postulate stressed the fact that the professional educators (Administrators and Teachers) would design those programs required to deliver maximum productivity in achieving the priority targets established by the Community (Needs, Goals and Objectives); and as the employees, be accountable for the success of these programs.

The targets of *mutual accountability* for each partner would be concisely devised PERFORMANCE STANDARDS defining the role and function of each as part of the total team, and for instructional or management support in the delivery of predictable mastery for learners (MAXIMUM PRODUCTIVITY);

- 5) The focus of all efforts by each partner was to be the delivery of predefined RESULTS expressed in measurable performance terms rather than merely activities performed, in doing one's job.

This redefinition would change the focus to PERFORMANCE EFFECTIVENESS as the single criterion for evaluation of personnel accomplishment, and for evaluation of programs designed to deliver predefined RESULTS or OUTCOMES.

The above stated postulates and/or requirements for the design of the SAFE* skills training system presented public educators a refocusing and redefinition of EDUCATION as a PERFORMANCE SYSTEM; that is, a total school district (an Educational System) being singularly focused on the delivery of maximum productivity of results with learner success being the primary focus of these results.

It further postulated that such a PERFORMANCE system would be designed to delivery maximum productivity for results; and would establish "two-way" mutual accountability *performance standards* between the Community (the employer) and the professional educators (administrators and teachers) as the employees. The basic underlying design focus was to evolve a continuing match between the selection of priority educational targets for action (Relevance of Needs and Goals) and the design and implementation of performance (results-oriented) programs assuring the delivery of maximum effectiveness of results (FEASIBILITY).

The achievement of the postulates and requirements stated above defining Education as a Performance System would require a new *technology* for educational professionals based on:

- A. defining and achieving PERFORMANCE RESULTS;
- B. a process for selection of Performance Targets and for the design and implementation of Action programs which could be easily mastered by educational professionals;
- C. accountable performance processes defining professional management PRACTICES which will predictably deliver MAXIMUM PRODUCTIVITY of results for a school district (including results-oriented planning, management, evaluation and personnel motivational/evaluation methods), and
- D. professional teaching/learning PRACTICES to be applied by teachers which would result in the delivery of PREDICTABLE LEARNER mastery of priority learning objectives.

The focus of accountability for each professional (managers and teachers) would be those NEED-TO-KNOW and/or NEED-TO-DO professional practices required to deliver and manage *Quality*

Learning (Predictable Learner Mastery) as contrasted with the focus on Quality Instruction and the management of Quality Instruction.

Designing and Field-Testing the SAFE* Systems

During the 13 year period from 1969-83 Dr. and Mrs. Corrigan and Ward Corrigan designed, developed and extensively field-tested 3 SAFE* skills training systems which achieved the requirements for delivering MAXIMUM PRODUCTIVITY for educational organizations; and, in turn, for delivering predictable Learner mastery - the focus of productivity outcomes for educational organizations.

The design of the SAFE* skills training systems demanded a unique application of the principles for delivering maximum productivity in the skills training of professionals as follows:

1) The skills training model applied by the Corrigans must assure the achievement of the following:

- a) That the individual trainees in each training program would predictably accomplish all SAFE* skills and knowledge objectives established for each training step within the prescribed SAFE* training sequences.
- b) That the SAFE* program would be totally practicum-oriented, i.e., each step would result in an *actual application* of the step being learned.
- c) That the individual trainee, upon completion of his/her SAFE* training and with possession of SAFE* manuals could

successfully apply the SAFE* skills learned to a specific management or mastery learning application.

2) The SAFE* training model would offer to educators a successful *training of trainer's* model. This means that trainees initially taught by the Corrigan's, in the application of the SAFE* training processes, in turn, could successfully train others (back home) to achieve with required proficiency all stated training objectives and performance standards (management or curriculum). This achievement above would require the use of *all* required SAFE* training components (including A-V sequences, manuals and forms used) and to be applied in the prescribed SAFE* training formats.

3) Trainees taught by the Corrigan's - or, taught by those trained by the Corrigan's - would successfully develop management and/or predictable learning applications with minimum involvement by the Corrigan's & Associates staff.

Over the development phase the success of the SAFE* skills training programs to achieve ALL design objectives for a *training of trainees* model were PROVEN through multiple applications.

I. The SAFE* Training Programs for Developing PREDICTABLE Learner Mastery.

(A) The Alamitos School District - CAL (1960-1964):

The development and field-testing of the SAFE* model applications for delivering predictable learner mastery regardless of teachers, learners and environment.

(B) Master Program - Chapman College, Orange, CA.
Graduate Department
Instructional System Technology (1963-1970)
Developed by Dr. Robert E. Corrigan, Dr. Roger A. Kaufman and Mrs. Betty O. Corrigan.

Established the working principles of the SAFE* (systematic approach for effectiveness) models for delivering MAXIMUM Productivity via results-oriented planning, management and evaluation; and those teacher skills for the delivery of predictable learner mastery outcomes, i.e., Quality Learning Outcomes consistent with most effective management of the delivery of quality learning outcomes.

(C) Oakland Community College, Birmingham, Mich.
(1965-1968)

The training of ALL faculty and administrative managers in either the *Delivery of Predictable Learner Mastery* and/or *Delivering Maximum Productivity*. Oakland Community College was the first higher-education institution to commit to and to install a *totally Learning-Centered Performance System*.

- (D) Orange Unified School District, Orange, CA.
(1969-1980)

The first school district in California to commit to the installation of Instructional System Technology application to deliver predictable learner mastery. This was one of the successful applications of the SAFE* *training of trainees* model discussed earlier.

- (E) Duval County Schools, Jacksonville, Fla.
(1969-1970)

The first school district in Florida to commit to a totally *Learning-Centered Performance System* for the design of results-oriented management and curriculum program delivering predictable Learner success.

The Duval County School program very successfully applied the Corrigan's *training of trainees* models to train between 1500 and 2000 teachers and administrators in the SAFE* *Instructional System Design (ISD)* programs. The trainees applied these skills to develop successful curriculum in grades K-8 and high school; and, to establish a nationally recognized federal program.

Each of the SAFE* applications cited above represent a comprehensive commitment by the top leadership to a long-term application of learner-mastery practices. In each case the commitment was to deliver success for learners in the classroom and involved a multi-year investment.

Additional programs currently in process where SAFE* skills training programs were applied are as follows:

- (A) Plumas County Schools, Cal. (1972-1980)
- (B) Newark Public Schools (1976-1978)
- (C) New Orleans Public Schools (1976-1980)
- (D) Moss Point, Miss. (1976-1980)
- (E) Newton, Miss. (1978-1980)
- (F) Minnesota Consortium of Districts (1977-1978)
- (G) Fresno City College (1976-1980)

Each SAFE* application has produced excellent results consistent with the pre-stated objectives.

II. The SAFE* Training Programs for Delivering MAXIMUM PRODUCTIVITY.

This SAFE* training program has been successfully used in multiple organizations applying the principles and process to deliver maximum productivity for educational institutions. Certain of these applications have applied the SAFE* training of trainers model as follows:

- (A) Operation PEP (Preparing Educational Planners):
State of California (1965-1968)

Applied the SAFE* results-oriented planning, management and evaluation training programs to train over 100 key state-wide leaders. These professionals applied the skills learned to install this new performance-based technology in multiple school districts, Title III Center installations, and State Department guidelines.

(B) Quincy Plumas County Program: (1972-1980)
(See prior statement).

(C) Northwest Regional Laboratory: (1969-1979)

Developed 10 year management plan applying results-oriented SAFE* principles. Delivered all products (pre-committed) according to schedule (10 years) and against prestated performance standards.

(D) Alaska Methodist University: (1976-1980)

(E) Fresno City College: (1976-1980)

The Vocational/Occupational Division, under the direction of Assistant Dean Richard Handley, applied all SAFE practices for programs entitled "Research and Development Project for Disadvantaged Students," "Project Mobility," and "The Extended Family Model." (See report in Volume I, Chapter 20)

Other successful applications of the performance-based SAFE* management skills include:

(A) Community College Senior Administrators (1974-1976)

(B) St. Ambrose College (1977-1978)

Since 1960 the SAFE* skills training programs have been successfully applied with over fifty educational clients.

You are referred to Appendix D which presents National Applications of Corrigan & Associates - a comprehensive review of the key works of Dr. Robert E. Corrigan, Mrs. Betty O. Corrigan, and Mr. Ward Corrigan for a twenty three year period (1960-1983).

SECTION V:

**BLUEPRINTS FOR SUCCESS:
EDUCATION AS AN INVESTMENT —
IT DOESN'T COST, IT PAYS**

Chapter 19

Operation Yes! A Commitment to Predictable Success for All Educational Partners

Chapter 20

**The Fresno City College Model for Delivering Predictable Success for Learners:
"The Small Miracle of the Extended Family" (Richard Handley)**

Chapter 21

**The Jasper County Schools Program:
The Future Model for Collaborative Effectiveness in Education (Solomon Bonds)**

Chapter 22

Investing in Education for a Positive Future

Chapter 23

Summary and Conclusion: Where to Go from Here!

Chapter 19

Operation Yes! A Commitment to Predictable Success for All Educational Partners

This book has presented proven ways and means to reverse the negative performance results projected for schools in America.

The time for positive action is now. The implications of not acting in a responsible and effective manner in response to our current educational realities is intolerable!

The responsibility for the commitment to install more effective and proven educational practices rests with the school board in every school district in America.

Getting Started Tomorrow

We propose that each school board initiate the following action steps resulting in the controlled but purposive review of requirements that must be met to install the delivery system.

STEP 1: INITIATE THOSE REQUIRED STEPS TO PROGRAM SUCCESS IN YOUR SCHOOL DISTRICT

A Blueprint for the Possible presented in this section reviews actions to be taken by school boards, parents, community members and all educational professionals. The blueprint provides the logical steps required to create a harmonious and productive partnership for delivering successful performance for any school district in a reasonable turnaround time frame of 3 - 5 years with a most reasonable investment.

Programming Success for Your Schools

Let us first refocus at this point to re-define necessary terms before proceeding to examine the five progressive phases

to install a Learning-Centered Performance System in your district.

What is meant by the term "Learning-Centered Performance System"?

"Learning-Centered" means, in its simplest definition, a total commitment to the individual learner and his or her predictable success as the focus of all school activities and programs.

It further requires the commitment by all the educational partners to be mutually accountable for the assured delivery of success for our learners, i.e., predefined accountability of both teaching and administrative personnel to achieve the objective of delivering predictable success for learners and parents.

"Performance System" means that we are interested only in achieving measurable results or outcomes for our learners. This requires the commitment to and installation of those processes and practices which will deliver (a) predictable learner mastery of learning objectives identified, and (b) the assured delivery of effective management of these programs.

A critical requirement for the success of a Learning-Centered Performance System is a positive collaborative relationship involving the community, board, administrators, teachers and learners working together in the most harmonious manner possible; each performing their defined roles and/or functions to deliver success for learners.

This commitment demands a change from "What's in it for me?" to "How can we best work together, as a team, to plan for and deliver predictable success for our learners; and most effectively and efficiently use the limited resources at our disposal."

The steps in the Blueprint for the Possible (see Figure 15) are presented for the analysis of educational leaders. They will lead you through five progressive phases required to successfully install a Learning-Centered Performance System. Each phase produces answers to critical questions that must be asked.

**PHASE I: ARE WE COMMITTED TO
INSTALLING A LEARNING-CENTERED
PERFORMANCE SYSTEM? (Steps 1.0-7.0)**

The initial steps of the Blueprint lead the district to assessing, exploring and evaluating the benefits to be derived by committing to, installing and successfully operating a district-wide Learning-Centered Performance System.

If a careful exploration of the benefits of a Learning-Centered Performance System does not produce the commitment that it is the type of system your district should have, you would stop all efforts and leave the Blueprint for the Possible at this point.

If, however, you are committed to the benefits of such a system, you would proceed to perform steps 8.0-11.0 of the Blueprint to complete Phase II.

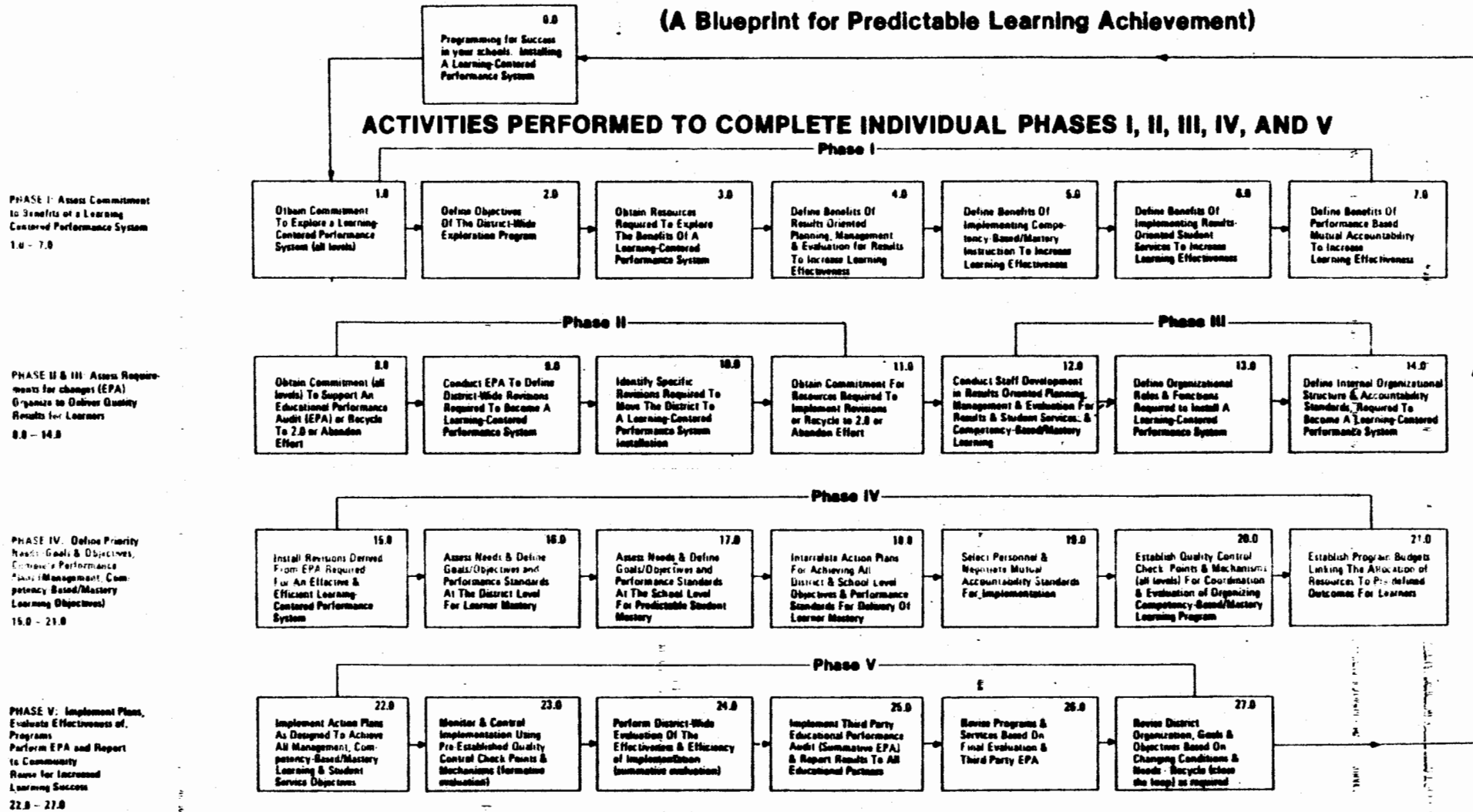
It is important that all members of a school district be provided the opportunity to be involved in this critical first step including parents, teachers, administrators, and where appropriate, community leaders and learners.

A significant first step is to prepare a district report card discussed in Section I, Chapter 2, where the realities of learner performance (test scores) are presented. These data will define the "real world" information to establish the requirements for action to follow.

FIGURE 15: Programming Success for Your Schools: Installing a Learning-Centered Performance System

(A Blueprint for Predictable Learning Achievement)

ACTIVITIES PERFORMED TO COMPLETE INDIVIDUAL PHASES I, II, III, IV, AND V



All partners should read this book in order to establish a common base for discussion of proposed future action steps. In addition, group directed and self-instructional resources for orientation can be made available*. These describe in greater detail the reports by national educational leaders and practitioners who have successfully applied these methods. Completing all of the above steps will remove unwarranted concern, misinformation and wrong conclusions; and point out facts versus bias.

Given full exposure, discussions and exchange of ideas, the basic requirements for future success becomes a reality.

PHASE II: HOW CLOSE IS THE DISTRICT TO
BEING AN EFFECTIVE LEARNING-CENTERED
PERFORMANCE SYSTEM? (Steps 8.0-11.0)

Given a commitment to the benefits of the more effective Learning-Centered Performance System, you would perform the next steps in the Blueprint which direct you to diagnose the present status of your district and to prescribe the changes that would be required to install the successful Learning-Centered Practices required for your district.

You are presented steps to follow that lead to the completion of an EDUCATIONAL PERFORMANCE AUDIT (EPA). (Chapter 10, Section II.)

The Educational Performance Audit (EPA) is designed to offer decision makers a current status report on how well the district is operating in terms of: effective and efficient management processes; community involvement; decision-making processes (of key importance); mastery learning/mastery instructional processes which deliver predictable success for learners;

*See Attachment A for SAFE orientation programs for use in Phase I above.

performance based student service programs; personnel accountability and system evaluation; and a number of other critical performance areas. Each of these are important to the successful installation of the system assuring delivery of successful results for learners.

Where good practices are in place, no change would be proposed. Where the requirement for changes does become apparant, the EPA would propose specific steps to be taken by the district to produce the required changes; such a proposal whould include the identification of the skills and knowledge required by personnel who will be accountable for bringing about the change. Through EPA diagnostic/prescriptive techniques the educational leadership will be able to focus on only priority changes to install a learner mastery delivery system in the district.

In the event that you choose not to implement the changes recommended by the EPA, you would stop your efforts and exit the Blueprint. If the change requirements that come out of the EPA are deemed both relevant and feasible and the commitment exists to implement those changes, you would proceed to Phase III.

PHASE III: HOW DO WE GET READY
TO IMPLEMENT A LEARNING-CENTERED
PERFORMANCE SYSTEM? (Steps 12.0-14.0)

Given the commitment to install the recommended changes from the EPA, you are presented next steps to follow (12.0-14.0) in order to involve all the educational partners (parents, board, administration, teachers, learners) in a systematic but humanistic process of precision management-for-results to be tied with the delivery of predictable learner mastery results and performance-based student services . Each of

these three major elements is a critical building block upon which the effectiveness and efficiency of the learning-centered performance system will rest.

By the end of Phase III, all involved personnel would have been provided the skills they would require to perform successfully; the organizational structure and accountability formats would be in place; and all recommended changes from the EPA would be completed. At this point the district is ready to operate as a Learning-Centered Performance System.

PHASE IV: HOW DO WE PUT OUR LEARNING-CENTERED PERFORMANCE SYSTEM TO WORK? (Steps 15.0-21.0)

You are presented steps 15.0-21.0 in the Blueprint to derive and to focus on priority performance objectives based on priority needs and goals; to design plans of action for most effective and efficient achievement of all performance objectives including those for management, mastery learning instruction, student-centered services; to commit to mutual accountability standards for personnel assigned to design and to implement the learning-centered programs and services; to define the best linkages for communication, performance evaluation and revision (formative and summative); and to link expected results to be delivered to resource availability (program budgets).

For the first time, the district would be performing as a total Learning-Centered Performance System. It would be focused on learning - not teaching; it would be focused on producing specific results - not putting in time; it would be focused on mutual accountability - in place of one way or punitive accountability.

PHASE V: HOW WELL DID WE DO AND HOW SHALL WE
REVISE FOR INCREASED SUCCESS FOR LEARNERS
IN THE FUTURE? (Steps 22.0-27.0)

The final set of steps in the Blueprint (22.0-27.0) leads you through implementation, post implementation evaluation and a post implementation Educational Performance Audit (EPA). These final steps are directed at determining how well the district performed against its precommitted performance objectives and accountability standards. This EPA provides a report to the community and to the district as to the measured performance of the system, and the efficiency with which that performance was achieved (cost-effectiveness in delivering predictable success for learners).

As the last step in the Blueprint for the Possible you are presented the requirement to use the data from the EPA, (in combination with changing needs and changes in the real world) as the basis for establishing new performance requirements for the district. This is an annual process. It keeps the system dynamic and responsive to changes from within the district and outside the district. In this way the district can always be assured that it is maintaining its effectiveness and efficiency; and meeting the priority needs of learners and the other members of the educational partnership.

The total commitment of this Blueprint is to the learner, namely his or her ability to predictably succeed; and in turn, to enter into and succeed in the society for which he or she is being prepared.

STEP 2: SUCCESSFUL ACHIEVEMENT BY ALL LEARNERS
OF EXIT (GRADUATION) MASTERY LEARNING REQUIREMENTS

It is crucial to remember that the business of our schools is not merely to deliver good grades by learners. We must remember that the schools are responsible to prepare our future

citizens to enter the community and to succeed in their lives after leaving schools. Indeed, the ultimate objective should be effective citizens in the community when they become the parents and leaders of the future.

We propose the installation of the Jasper County Schools collaborative partnership model (Section V, Chapter 21) which installs a full partnership program including every educational partner.

The installation of these Learning-Centered and collaborative models, principles and concepts will establish the necessary philosophical commitments for programmed success for all partners entitled OPERATION YES!

Operation Yes* commits to predictable success for all learners, all educational professionals, all parents and the community membership by getting every partner to say "yes" as follows:

- ° For the students to say "yes" - I will enter the system and work to succeed as an accountable partner.
- ° For the parents and the community to say "yes" - we will support and contribute to your efforts for achieving predictable success.
- ° For the school district (school board, teachers, administrators and counselors) to say "yes" - we will give you the skills and knowledge you require to be successful both in school and in the world you will be entering on graduation.
- ° For the employer to say "yes" - you have the skills, knowledges and attitudes I need - "you're hired!"

*Conceived by Ward L. Corrigan, 1979

- ° For the city to say "yes" - our youth are off the streets and out of crime and into our schools and jobs.

Given the commitments above and the proposed proven educational practices discussed in this book, the current problems discussed in Chapter 1, "Telling It Like It Is! Our Current Realities" can be resolved.

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Chapter 20
The Fresno City College Model for Delivering Predictable Success for Learners:
"The Small Miracle of the Extended Family" (Richard Handley)

Foreword

Over the period 1975 - 1980 Fresno City College designed and installed a comprehensive Learning-Centered Performance System which tied together in one operating system all the managing-for-results practices discussed in Section II and those Learner-Mastery practices presented in Volume II. This Learning-Centered Performance System model (see Figure 16) combined new principles for learner-centered guidance counseling practices; for continuous performance audit tracking of learner achievements; for a learner support system involving community and student assistance; and the linking of all components together with those community members who would hire graduates of these programs upon graduation.

This Learner-Centered Performance System (Figure 16) was designed for use with learners who are classified as dropouts or are pushed out by an insensitive educational system not responsive to the capabilities and needs of these learners. The specifics of the progressive design steps and the extraordinary results achieved for these learners involved is presented in the following chapter written by Assistant Dean Richard Handley, Fresno City College.

The Extended Family staff owes a special debt to our former project consultant, Ward Corrigan, who died tragically while at the height of his productive career. Although he never witnessed the completion of this project, without his leadership

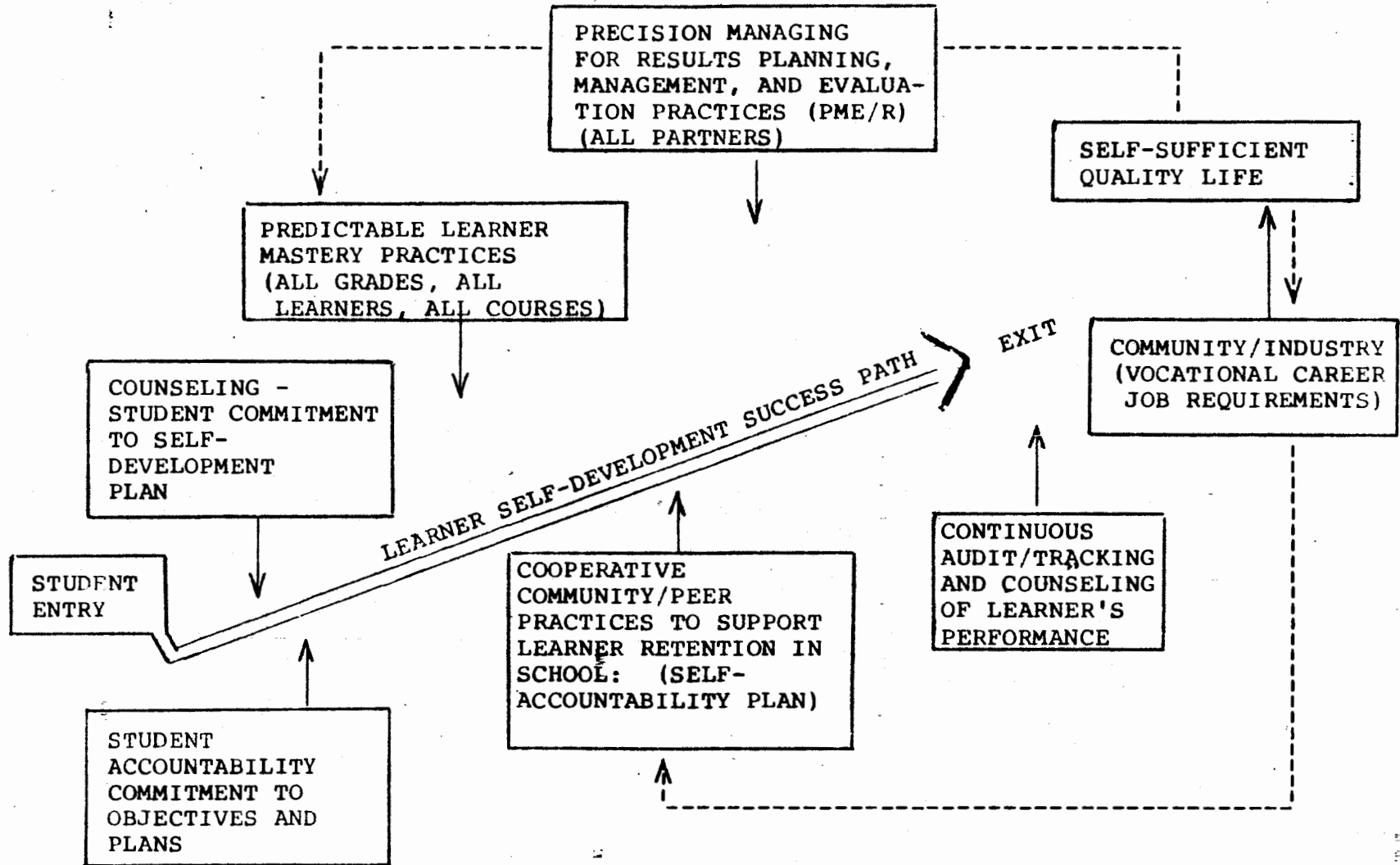


FIGURE 16.

INSTALLING A LEARNING-CENTERED PERFORMANCE SYSTEM
 PREDICTABLE LEARNING DELIVERY SYSTEM COMPONENTS

there would have been no Extended Family program. The Extended Family staff warmly remembers Ward's unusual combination of expertise, responsibility and graciousness.

If you stamped "FAILURE" on his forehead, he probably wouldn't have argued with you. More probably he wouldn't have been able to read the word "failure". Gary, at age 23 was about to be given one of the best surprises of his life.

He was a vocational student enrolled in the air conditioning program at Fresno City College; his manual skills were excellent, but he was failing all the written assignments and tests. This was the fall semester of 1979, and his instructor referred him to the new Extended Family program for help.

The Extended Family counselor put Gary through a battery of tests at the college Diagnostic Center - the first step in identifying the cause of Gary's problem. After studying the results, the counselor called Gary in.

"The tests show your reading ability is at a third grade level, Gary; but did you know you have the comprehension level of a college student?"

Gary just sat there for a minute, then hesitantly asked, "Does this mean I'm not dumb?"

"Of course you're not dumb."

"But all through grammar school my teachers told me I was dumb. Now you tell me I'm not."

Gary listened intently while the counselor explained to him that because he could understand and follow oral instruction,

he could learn and did learn. The problem was not his comprehension; it was his reading ability.

Corrective measures were recommended and Gary left the counselor's office that day with a big grin on his face and enrolled in a special reading program at Fresno City College. He's still getting used to the idea that he's not dumb after all. Gary's still in the air conditioning program at FCC and will complete his education this year at 24.

Gary's story is not unique. He's one of many students whose lives have been changed and enriched through the Extended Family, an experimental program that began in the fall semester of 1979 and continued through spring semester 1980 at Fresno City College.

The program was funded through a grant from the local Comprehensive Employment Training Act sponsor, Fresno Employment Training Commission, to serve students primarily 18 to 21 years old, with a few students over 21.

Results of Extended Family Program

During the first semester, 133 students entered the program. Since the program was dealing with disadvantaged or handicapped students who were high risk and had learning difficulties, we didn't expect miracles, but we hoped for them. The first semester retention rate* for the Extended Family program was 94%. In the second semester 121 additional students entered the program, and this time the retention rate was 97%. Comparing our results with the regularly enrolled student retention rate of 79% during the same period ... we had our miracle.

In comparing grade point averages, that of the student body as a whole was 3.059 for the fall semester 1979, while that of the Extended Family participants was 2.349, a difference of only 0.710.

*Retention Rate: Those students who stay in school and complete programs.

Research and Design Project

The idea for the program got started in 1970. For years I had the nagging feeling that we weren't doing enough for disadvantaged and handicapped students. When Vocational Education funds became available, I finally had the chance to do something about it. I first talked to Dr. Ron Wood, consultant in Planning, Management and Evaluation Systems, and told him what I wanted to achieve. It was Ron who developed the step-by-step procedures we followed for the next 8 years in the Research and Design Project.

The total plan was divided into 4 phases. Phase 1 was the needs assessment from which goals and objectives were established for serving disadvantaged and physically handicapped students. Consultants who participated were Ron Wood, Ph.D., Roger Kaufman, Ph.D., Nathaniel Jackson, Ph.D., Gerry Garlock, Ph.D., Robert Ford, Ph.D. and David Kupfer, B.A.

Phase II consisted of three major parts: curriculum development, coordination of services, and development of student and program audit systems. Helping with Phase II were Corrigan & Associates (Dr. Robert Corrigan, assisted by Ward and Betty Corrigan) with Ward as the resident consultant for the entire Phase II project for 2 years.

Phase II: Program Development

The Corrigans provided training to administrators in SAFE* Planning, Management and Evaluation (PME/R) for management planning, and trained faculty members in SAFE* Delivering Predictable Learning Success for curriculum development. Following training the Corrigans worked periodically with the faculty teams as they were applying the steps in the SAFE processes.

Teams of teachers, counselors, administrators, and consultants determined the mastery (skills/knowledges/attitudes)

*SAFE - acronym for Systematic Approach for Effectiveness

required for employment in each of five target vocational education programs. They translated these programs into criterion referenced instructional courses which define what the students need to know, what they need to do, and what level of performance is necessary for them to get and hold a job. The five programs under investigation included Automotive Mechanics, Electronics, Licensed Vocational Nursing, Registered Nursing, and Office Occupations.

Each team then closely analyzed all required mastery (skills/knowledges/attitudes) to identify where problems were being encountered by the students and why these problems were being encountered.

The teams assessed each problem to answer two major questions: 1) What contribution did the student make to creating the problem? 2) What contribution did the methods or media of instruction make to creating the problem?

Some major student contributions to the problems identified included: 1) lack of required basic skills; 2) inability to cope with the reading requirements; 3) personality difficulties; 4) emotional troubles; 5) cultural differences; 6) inability to transfer knowledge from lecture to actual application; and 7) an inability to relate lab experience to classroom theory.

Some major instruction related contributions to the identified problem areas included: 1) learning steps that were too large for the students; 2) some materials used were beyond the abilities of the students; 3) methods of instruction didn't match the learning styles of the students; 4) students weren't being given sufficient practical application of what they were learning; 5) some required facilities or equipment were limited; and 6) there was a high priority need to more effectively respond to the unique affective domain needs of students.

Both student and instruction related contributions to the problems were then prioritized by each team according to how crucial they were in the total learning sequence, how crucial they were to mastery of key concepts, and which should be addressed first, given limited resources. Program strategies as well as student services were then developed to eliminate the identified problems.

Each of the five design teams identified alternative instructional methods and media which could be used to match the learning style of the target learners and eliminate the mastery problem areas. These alternatives were then translated into specific recommendations for change in the instructional methods and media of the five target problems.

Some common recommendations that came from all teams were: 1) the strengthening of remedial programs in the basic skills areas; 2) the creation of or expanded use of "hands-on" simulations or practice in the skills required of each program; 3) the creation of or acquisition of individualized audiovisual sequences that both reinforce the critical elements of mastery in the problem area and allow the student to review these points as frequently as required; and 4) intensified attention by the college to not only the academic but also the personal problem areas that contribute to student failure.

In response to the recurrent need for services to support the affective or feeling side of the student, an intensive counseling and guidance program called "The Extended Family" was developed. The Extended Family was designed by people who have shared similar life experiences to those encountered by the target students. Further, these people have survived the negative aspects of that life experience and succeeded in spite of them.

The Extended Family designers came from most ethnic groups and were either educators, counselors, students, or community

members. The Extended Family they developed is an innovative approach to helping the students help themselves to achieve their occupational/educational objectives. The details of the Extended Family can be found in following sections of this report.

Project Mobility

Out of Phase II came Project Mobility, a complete package of manuals, including an introduction and needs assessment, with information on curriculum analysis, with detailed analysis of Automotive Mechanics, Electronics, Licensed Vocational Nursing, Office Occupation and Registered Nursing; specific problem areas, their causes and their recommended solutions for identified hurdles that would keep disadvantaged and handicapped students from succeeding; specific how-to-do-it steps for other educators to perform their own analysis.

A Counseling and Guidance manual includes rationale, objectives and implementation plan for the Extended Family. This program was designed to eliminate the affective domain barriers to student success.

The Management Manual includes plans for achieving Affirmative Action and Sex Fairness objectives, and a long range plan for district-wide coordination of vocational education programs.

The Evaluation and Audit manual includes plans and computer programs for student identification and follow-up, fiscal audit, program outcomes evaluation and determining the reading difficulty of instructional materials.

Phase III: Implementation

All of these plans have been implemented in Phase III, and the Extended Family is part of that phase. I think it's the most rewarding part because it's directly related to serving each disadvantaged or handicapped student. With evaluation

and audit, although there is no direct benefit to the student, changes are brought about that will eventually improve services for the students.

Phase IV is a longitudinal evaluation study which provides for a study of benefits received by the students over a period of time, to determine if they are successful in their community life. The college external objective is to provide each disadvantaged and handicapped student with the training and services necessary for the achievement of his or her Independent Survival Point, so he or she can become self sufficient in the community. The external evaluation is designed to account for what takes place after the student leaves the college.

Internal evaluations keep track of what happens while the student is still in school, with expected outcomes for grade point average, program completion rate, retention, attitude requirements, affirmative action, program completion, personal growth and fulfillment, required skills and knowledge, and personal productive life. The Extended Family is the key to the whole system, because it provides for the audit process, has direct benefit to the student, establishes the bases for the evaluation process, treats the causes rather than the symptoms of failure, provides all the computer input for the management data, and provides individual attention to the student.

A clear explanation of the Extended Family's work was provided in a memo by Ward Corrigan and his committee to the project director.

"Months of work by our committee of educators, counselors, students and community members has resulted in the development of an intensive student support system which we have come to call the Extended Family. Its architects were from the Native American, Black, Chicano and White communities; and

our single focus was to eliminate any hurdles which are keeping disadvantaged and/or handicapped students of our same heritage and life experience from taking advantage of and succeeding in the 5 vocational education programs included in the Fresno City College Research and Design Project.

We have tried to use both our heads and our hearts to build a human support system that will work intensively with students as individual people, surround them with an environment of genuine caring, and provide them with carefully designed programs and services that can help them go from where they are to where they wish to be in life, by treating causes rather than symptoms.

The Extended Family was developed to serve the total person. This means that we are concerned with the cognitive, affective and psychomotor portions of each student; but with a very special emphasis on the affective or feeling side of the student. The Extended Family does not intend to tell students what they should be doing with their lives; but we do intend to educate the students on the range of opportunities available to them, help them specifically define their objective, give them the cold hard facts regarding what they will have to do to achieve their objective, and, given a total commitment on their part to take the necessary steps, provide them with any and all support that they will require to achieve their objective.

The Extended Family is a completely

LEARNER CENTERED support system. Until the learner succeeds, we have failed. Until the learner's needs are reconciled, we must change our methods and means of serving that student. Until the learner openly and successfully relates with the people involved in the Extended Family, we must change the people who are involved.

The Extended Family is dedicated to helping replace dependence with independence, system reliance with self-reliance, self-doubt with self-esteem, cultural confusion with cultural pride, aloneness with a sense of belonging and unemployment with full and rewarding employment.

The Extended Family asserts that there are significant differences between the needs of different minority disadvantaged and/or handicapped students. We further assert that students from these differing life experiences are more likely to seek and accept assistance from someone who has shared those same experiences. For these reasons, we have very deliberately structured our Extended Family to include counselors and peer counselors from all of the ethnic peoples represented by the students we will be serving. We have also deliberately structured our family to be responsive to the unique differences which exist between men and women from these peoples, and identified those characteristics that people implementing the Extended Family must have to distinguish themselves from "instant or closet" ethnic peoples. We have also included people with extensive experience in assessing and reconciling

the needs of learners with a wide array of physical handicaps.

Our objective is not to segregate learners and counselors into ethnic peoples of the same life experience. We are not saying that only a person from a particular ethnic background and life experience can help a student from that same experience and background. We are, however, deliberately making sure that if there is such a need on the student's part, we are prepared to meet that need. Our ultimate objective is to assist the student in becoming strong enough, successful enough, self-reliant enough and culturally proud enough to relate successfully with all people. We are realistic and experienced enough, however, to know that this isn't presently true of most of the learners with whom we will be working. Again, let us stress that the Extended Family is singularly LEARNER-CENTERED. The learner will ultimately determine the characteristics required of the counselors with whom he/she will relate. Our challenge and the intent of our efforts has been to anticipate the range of these learner needs, and to provide the personnel, programs and services required to meet the learners' needs. Ours will be a collective effort; but it will also dignify the requirement to use different, innovative and varied approaches to serve the unique needs of different learners.

We believe that the Extended Family program that we have designed comes closer to achieving these objectives than any other program of which we are aware. Only our

implementation of this program can verify this belief, but we have confidence in the preparation and planning we have completed to date, and the process of continuous evaluation and revision that we will employ throughout our implementation of the Extended Family."

Ward Corrigan's committee included Arturo Amaro, Walter Brooks, Monica Brown, Betty Coulter, Bill Day, Celia Gomez, Gary Graham, Beverly McCombs and Kehinde Solwaze, all from the Fresno area.

There were 9 overall objectives for the Extended Family Concept:

1. Develop in learners the capability to perform a self-inventory of their strengths/weaknesses and constructively use what they discover to help achieve their objectives.
2. Develop in learners the capability to effectively use the academic resources available to Fresno City College (on campus and in the community).
3. Develop in learners the capability to coordinate their use of the full range of noninstructional services available at Fresno City College.
4. Develop in learners the capability to identify their goals/objectives and the actions they must take to achieve them.
5. Develop in learners the capability to assess and improve their mental outlook and characteristics so that they will be able to accomplish any goal/objective they set.
6. Develop in learners the capability to adjust to the social and academic environment of Fresno City College.

7. Develop in learners the capability of feeling that they are an important part of something larger than themselves.

8. Develop greater cooperation and coordination between community resources and the learners (learners go to the community; community comes to the learners).

9. Develop the Extended Family as a viable and permanent component of Fresno City College (regardless of funding source).

The combined program design including Project Mobility and the Extended Family is presented as a WIN-WIN commitment for learners, teachers, administrators, counselors, parents, and community (industrial) representatives. Combined as a single thrust by all partners involved, the program is entitled a Learner-Centered Performance System (see Figure 11), designed to deliver predictable success for each learner.

The experiences at Fresno City College demonstrate most clearly that disadvantaged learners are not dumb (as is often stated by teachers and others as their reason NOT to invest in learner's self-improvement). Given the commitment to provide the required learning, technical and psychological support system for each learner through installation of a winning learners Self-Development Success Path, this biased and unfounded belief that disadvantaged learners are dumb can be eliminated forever. Commitment to install this documented WIN-WIN System could, in turn, eliminate the large number of current DROPOUTS - with the resulting necessity for long-term financial support (welfare) by the community because of their insufficient skills and/or commitment to become self-sufficient.

It isn't enough that we educate only those learners who are no trouble to educate. I believe the measure of our humanity as educators is closely tied to how we take care of the learners who can't make it without special help and effort: The proven technology is available. Practical necessities warrant its

use to the benefits of all learners and the community-at-large.

Special thanks are acknowledged to Patti Handley in re-writing and editing 10 years' worth of notes and project manuals for this article.

About the Author:

Chapter 21
The Jasper County Schools Program:
The Future Model for Collaborative Effectiveness in Education (Solomon Bonds)

Jasper County Schools, Ridgeland, South Carolina, with unanimous approval by the Board of Education launched in June 1981 a district-wide Predictable Learner-Mastery Delivery System.

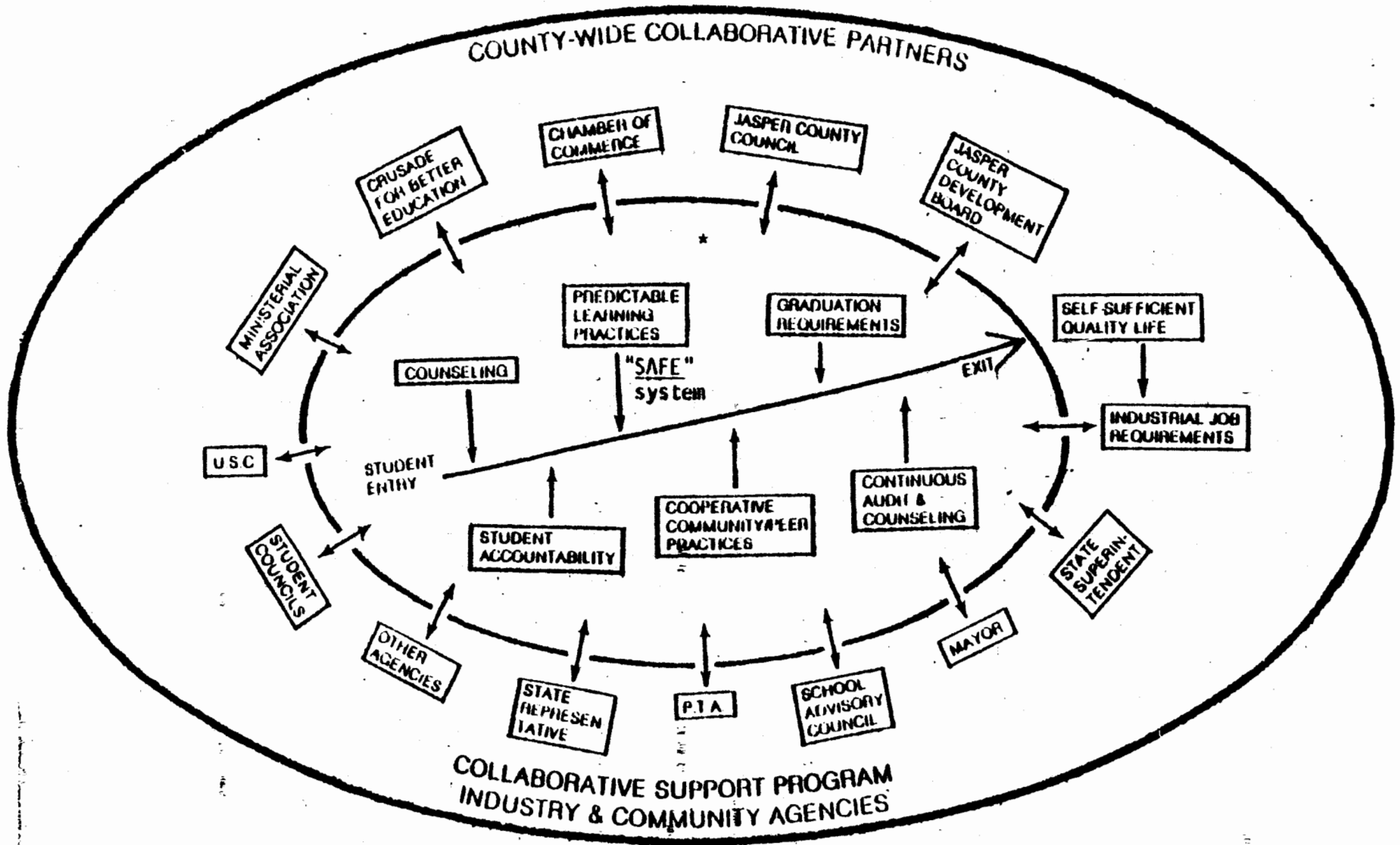
This commitment involved the following events:

- A. A five year program to install the Fresno City College model of a Learning-Centered Performance System. (Figure 16, page 196)
- B. The structured linkage between all community-wide agencies as a formal collaborative support program to support and to be partners in the community-wide Learning-Centered Delivery System. (Figure 17, page 212)
- C. The development and installation of a grades K-12 articulated delivery system for mastery learning designed to achieve specified EXIT (graduation) requirements.
- D. The qualification of every professional educator in the required skills to plan for and to deliver predictable success for all learners (mastery learning results).

As of this date, the school district has trained all teachers in the SAFE* (Systematic Approach for Effectiveness) skills to (A) Deliver Predictable Learning Success and, managers to (B) Deliver Maximum Productivity (1981-1982). Over the period of July 1982 - May 1983 the teachers have designed

WIN-WIN MODEL FOR LEARNERS, TEACHERS, COUNSELORS, ADMINISTRATORS, PARENTS, COMMUNITY

JASPER COUNTY-WIDE SCHOOLS



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FIGURE 17.

RIDGELAND AND HARDEVILLE, S.C.

*The Fresno City Extended Family Model presented in Chapter 20, Figure 16.

the Terminal Mastery Objectives and Interim Learning Objectives for grades K-12 Basic Skills Program for the district. Each teacher is expanding these achievements by deriving Learning Steps, selecting appropriate resources to elicit only correct responses by trainers, and beginning initial field-testing and revision of programs in all grade levels (K-12).

About the Jasper County Schools:
A Model for Collaboration in Education

Historical Perspective

Jasper County Schools is an isolated, rural school district located in the southeastern sector of South Carolina. Jasper County is the most sparsely populated county within the boundaries of the State of South Carolina. This school district provides a K-12 grade school program to 3,120 students distributed as follows: 1,710 elementary students in two elementary schools; 560 middle school students in three middle school and high schools. The student body (all grade levels) has a racial balance which includes 77% black students and 23% white students.

There is presently a serious lack of consolidated efforts to bring about a collaborative program of total involvement within the industrial and lay community as well as the school community. This must be established to plan for development of student competencies to increase their capabilities of becoming qualified members of an effective community labor force. This achievement will not only attract new industry to the locale but provide a better "Quality of Life" for all citizens.

In order to systematically increase the probability for successful graduation by each learner with those skills and knowledges to become gainfully employed and self sufficient as well as to meet one's physical, psychological, and spiritual needs, there had to be initiated within the Jasper County Schools an "ALL-OUT" drive for installing an effective

collaborative educational planning and implementation commitment.

The Jasper County School System had to address the problem of an accelerating rate of declining learner performance (grades K-12) in the school district; and the inherent need for the installation of a systematic, results-oriented, collaborative partnership program which would successfully plan for and would predictably reverse the constant failure trend that was in existence for learners within the Jasper County Schools, and; to assist future self-sufficiency and growth for the community-at-large.

Problem in General

The past Jasper County Model was based upon the Teacher-Centered typical college taught approach toward educational procedures. In this model children had been consistently the "LOSERS". The approach was not LEARNER-CENTERED but instead TEACHER-CENTERED.

Problem Solution

1. A five year plan to install the district Learner-Mastery Delivery System backed by the Board of Education and the community at large as collaborative partners.
2. The installation of the SAFE* Self-Directed Skills Training Programs for the DELIVERY OF PREDICTABLE LEARNING SUCCESS taught in our school district to all professionals.
3. A total district-wide commitment involving 300 people within this mutually accountable system to design and to install this Learning-Centered Performance System.

In a very recent interview and evaluation of where we are in the total program, results have shown that 80% of our

*SAFE: Systematic Approach For Effectiveness

total system (administrators and staff) now fully see the merits of the SAFE learner-mastery delivery system that is already leading us away from Teacher-Centered educational practices to predictable success for all our learners.

The Jasper County Schools Program

You are presented the installation plan (in progress) for Jasper County Schools developed by Mr. William Spires, Principal, West Hardeeville High School, and Mr. Walter Dodson, Principal, Jasper County Intermediate School.

The statement of the Mission, Mission Objective, and Performance Requirements for the School Board, Administration, and Teachers provide the focus for ultimate achievement.

The series of large blocks numbered 1.0 - 8.0 state the major activities or milestones to be performed by all concerned to achieve the stated Mission Objectives and Performance Requirements. Each major milestone (1.0 - 8.0) is further broken down into subactivities to be performed to accomplish each major milestone. (Figure 18, Mission Profile)

This plan will provide a realistic statement of activities one would be required to perform (3-5 years) to install a District-Wide Predictable Learner-Mastery Delivery System in their school district.

The final pages provide a concise statement of benefits to be derived by any school district making a similar commitment.

INSTALLING A DISTRICT-WIDE PREDICTABLE LEARNER MASTERY DELIVERY SYSTEM

MISSION: To deliver predictable success for all learners while providing each the skills and knowledge to

survive and to grow successfully in the world they are entering upon graduation.

MISSION OBJECTIVE: To design, to install, to monitor and to evaluate a district-wide predictable learning delivery system which will guarantee success for qualified and committed learners to achieve established graduation requirements.

PERFORMANCE REQUIREMENTS:

A. Leadership-for-Results: (Board Level)

The School Board will commit to those policies defining practices and accountability standards to successfully deliver predictable success for qualified learners as measured by each qualified learner achieving exit performance requirements (graduation standards).

B. Managing-for-Results Practices and Applications:
(Administrators)

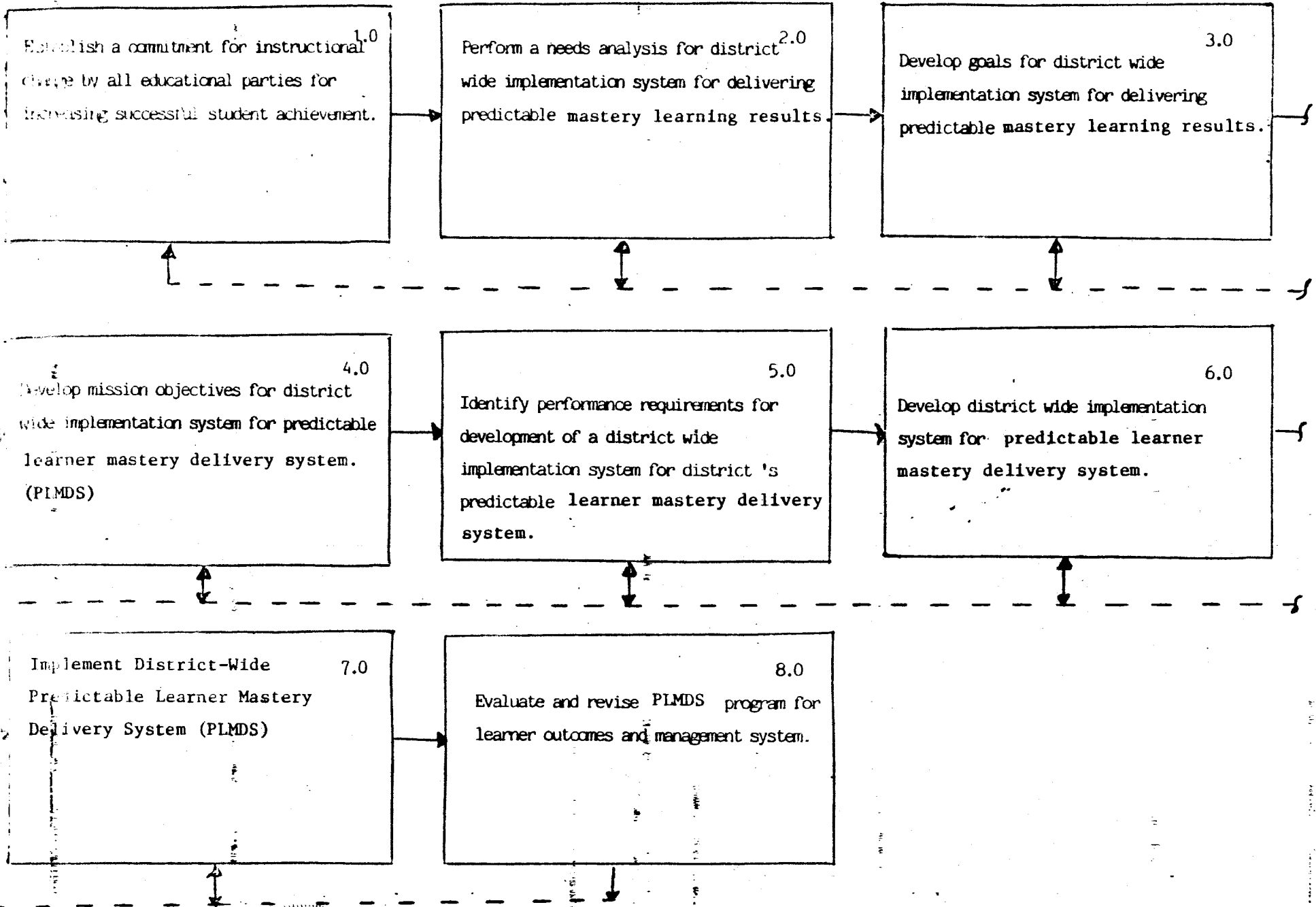
1. All administrators will be qualified in managing-for-results practices to apply the SAFE management-through-objectives processes for the delivery of maximum productivity in the district.
2. The district will be operated applying the "closed loop" SAFE management-for-results practices to be used in conjunction with those management-through-collaboration practices to plan, to manage and to evaluate cost-effective results (all levels, all schools).
3. The district will install a performance-based evaluation system for all professionals and for the organization specific to delivery of maximum productivity.

C. Predictable Learner Mastery Results: (Classrooms)

1. All teachers, counselors, curriculum coordinators, and administrators will be qualified with the SAFE skills and knowledge to apply predictable mastery learning/instruction practices.
2. The district will design, field-test and install a grades K-12 articulated predictable mastery learning curriculum which will deliver guaranteed achievement of defined graduation (exit) requirements by all qualified learners.
3. The evaluation of teachers will be based on their effective delivery of learning results through their design and implementation of the field-tested curriculum (at appropriate grade levels).
4. Graduation requirements will be revised based on identified needs.

MISSION PROFILE

FIGURE 18



- 1.0 Establish a commitment for instructional change by all educational parties for increasing successful student achievement (mastery learning results).
 - 1.1 Adopt a policy commitment by the Jasper County School Board for implementation of a system to deliver predictable learning success for the students of Jasper County.
 - 1.2 Obtain total administrative commitment at building level to successfully implement a program for successfully delivering predictable success for students.
 - 1.3 Implement the orientation training to the SAFE system for predictable learning success for all certified personnel within the Jasper County Schools.
 - 1.4 Provide orientation to community groups.
- 2.0 Perform a needs analysis for the district-wide implementation system for delivering predictable learning results..
 - 2.1 Perform a needs analysis on a district-wide basis in regards to district-wide student achievement.
 - 2.2 Perform a needs analysis on the building level in regards to student achievement.
- 3.0 Develop goals for district-wide implementation system for delivering predictable learning mastery results.
 - 3.1 Establish district-wide goals as a result of the needs analysis.

- 3.2 Establish internally consistent building level goals as a result of the building level needs analysis.
- 3.3 Define progressive installation phases for district-wide implementation system.
- 4.0 Develop mission objectives for district-wide implementation system for the predictable learner mastery delivery system.
 - 4.1 Derive graduation requirements for mastery learning.
 - 4.2 Develop an installation system for the systematic delivery of desired learning results in the Jasper County Schools (grades K-12).
 - 4.3 Develop procedures for implementation of the system-wide SAFE learning approach for predictable learning success (grades K-12).
- 5.0 Specify performance commitments for development of a district-wide implementation system for delivery of Predictable Learner Mastery results.
 - 5.1 Select district and school personnel who will become in-district Trainer-Managers for SAFE training.
 - 5.2 Provide training in SAFE: Delivering Predictable Learning Success (DPLS) for Trainer-Managers, central office and school administrators and supervisors.
 - 5.3 Provide training in SAFE: Planning, Managing and Evaluation for Results (PME/R) for administration and supervisory personnel.

- 5.4 Implement training for school personnel at each school site under direction of principal and trainer-managers.
- 5.5 Provide for State Certification credits for personnel on completion of training.
- 5.6 Provide for certification of all personnel in the Jasper County school system in the delivery of predictable learning success both new and those previously employed (on-going).
- 5.7 Utilize administration and supervisory personnel applying SAFE PME/R skills to develop management and implementation plans for installing the delivery system.
- 5.8 In task force approach using all district teaching personnel, develop skills continua including Terminal Performance Objectives (TPO's), Intermediate Performance Objectives (IPO's), and Criterion Measures (CM) in math, reading and writing (K-12) to meet state mandated Basic Skills Requirements.
- 5.9 Obtain approval and/or revision requirements for skills/TPO's/IPO's and CM's from all teachers at their appropriate grade levels.
- 5.10 Revise (per 5.9) and produce copies for field-test.
- 5.11 Field-test, evaluate and revise basic skills functional learning paths developed by teachers. Adopt K-12 functional learning paths in Basic Skills areas for district-wide implementation.
- 5.12 Expand design and development of delivery systems to all other subject matter areas (K-12) repeating 5.8 - 5.11.

- 6.0 Develop the district-wide implementation system for the Predictable Learner-Mastery Delivery System.
 - 6.1 Design and field test programs of instruction to achieve mastery learning standards (see 5.0).
 - 6.2 Revise programs for delivery of predictable learning success.
 - 6.3 Organize Jasper County management team for total program implementation by the Jasper County Schools.
 - 6.4 Communicate to staff established time lines and implementation procedure for delivery of predictable learner mastery program.
 - 6.5 Organize a quality control checks and balance system for professional staff of Jasper County School System.
 - 6.6 Design all operating plans for the system implementation.
 - 6.7 Install professional performance evaluation audit tracking for teachers and administrators specific to effective application of learning-centered practices.
- 7.0 Implement District-wide D.P.L.M.S. System.
 - 7.1 Initiate monitoring and evaluation of instructional programs for all classes, all learning and subject areas, all schools, all learners, all professionals.
 - 7.2 Initiate reporting of performance (criterion test scores) for all classes to principal(s) (Time schedules to be established).
 - 7.3 Submit reports on learner performance scores to superintendent (by individual schools) with proposed revision plans (all learners, all teachers).

- 7.4 Submit and revise requirements for extended field testing to increase level of performance for individual mastery learning programs in each school.
- 7.5 Initiate evaluation specific to quality of instruction defining effectiveness of teaching practices.
- 7.6 Implement district-wide learner mastery instructional programs (all grades, all learners, all subject areas).
- 8.0 Evaluate and revise D.P.L.M.S. program for learner mastery results and management system performance effectiveness.
 - 8.1 Evaluate building wide successful achievement of pre-stated learning results.
 - 8.2 Evaluate district-wide successful achievement of pre-stated learning results.
 - 8.3 Evaluate management and operations performance achievements.
 - 8.4 Identify discrepancies between pre-stated performance criteria in learning objectives and actual learner achievements (all areas).
 - 8.5 Determine revision requirements for learning paths (field-testing).
 - 8.6 Determine revisions required in management (operations system).
 - 8.7 Determine new personnel SAFE training schedules.
 - 8.8 Revise all system components as required for increased performance effectiveness.

8.9 Extend implementation plans to include subject areas for mastery learning (K-12) beyond basic skills continuum.

8.10 Present performance audit report to community members, parents, professional educators, and state agencies (when appropriate).

You are referred to Volume II, Section II, Chapter 9,* which presents the results of the Moss Point School District program. This chapter presents an explanation of the detailed SAFE practices performed to design, implement and control the predictable success for learners. Moss Point is one of two school districts in Mississippi who have collapsed the traditional negative connection between RACE and levels of learner achievement. The second is Newton Public Schools.

ACCOMPLISHMENTS OF A SUCCESSFULLY IMPLEMENTED
PREDICTABLE LEARNER MASTERY DELIVERY SYSTEM (PLMDS)

When implemented, the Predictable Learner Mastery Delivery System will accomplish the following for any school district:

1. Establishes a total learner-centered, results-oriented process for designing and implementing lesson plans and/or curricula assuring the delivery of the highest possible levels of predictable learner mastery results.
2. Develops competent professional personnel (teachers, curriculum designers, department heads, principals) with required learner mastery skills and competencies both to design programs and to implement total learner-centered instructional techniques assuring predictable learning success. This will be accomplished through the SAFE steps to deliver Learner Mastery results as follows:

*Cronin, H., and Moore, J. "The Moss Point Story: Climbing the Learning Ladder to Predictable Success," Volume II, Chapter 9.

- ° Diagnosis of learner's needs, characteristics and prerequisites
 - ° Statement of performance (learning) objectives for a curriculum, course, unit or lesson
 - ° Development of criteria and criterion-referenced measures to evaluate student achievement of objectives
 - ° Analysis of Cognitive/Affective/Psychomotor Learning Requirements (Knowledge, Skills, Attitudes) the student must master to achieve objective and criteria
 - ° Use of Cognitive/Affective/Psychomotor Taxonomies to derive and to sequence appropriate steps leading to mastery
 - ° Analysis of appropriate methods/media for instruction and learning to elicit only correct learner responses
 - ° Orientation to developing a Functional Learning Path, Test for Mastery Evaluation and Individualized Instructional techniques
 - ° Use of a closed-loop diagnostic/prescriptive/evaluation model for continuous sensing and revision of instruction leading to predictable learning mastery
3. Develops learner-centered student services to aid learners in setting their individual objectives; to provide data and requirements for achievement of objectives; and to assure all support required to assure achievement.
 4. Provides management-for-results planning process which will produce the highest level of predictable results by all users consistent with the most efficient use of limited resources.

5. Installs the comprehensive and effective planning, management and evaluation-for-results (PME/R) techniques system-wide including:
 - Needs Assessment
 - Definition of Goals
 - Statement of Performance Objectives
 - Determination of Performance Requirements
 - Identification of Constraints in Achieving Objectives
 - Derivation of Milestones, Functions and Tasks to be Performed
 - Analysis of Feasible Methods/Means/Alternatives
 - Cost-Effective Operational Plans to Achieve Objectives
 - scheduling for implementation
 - performance-based job descriptions
 - most cost-effective methods/means selections
 - Management Plans for Implementation, including:
 - monitoring events and specifications
 - reporting events and specifications
 - communication events and specifications
 - evaluation events and specifications - process or formative/summative evaluation checks
 - Performance Budgets linking resources to results to be achieved

6. Establishes the organization of the school district for maximum effectiveness and efficiency, tying in the functional relationships between community, school board, superintendent, administrators, teachers and learners specific to delivery of successful learning results.

7. Establishes performance-oriented job descriptions tied to measurable performance standards defining success (performance accountability standards).

8. Establishes a performance-based personnel performance evaluation system specific to pre-negotiated accountability standards to be achieved by staff (all levels)

} Performance Based Quality Controls

and pre-agreed to as feasible for achievement through negotiation prior to assignment.

9. All personnel provided required skills and knowledges to perform effectively to achieve their accountability standards.
10. Establishes and installs a management information system (MIS) to provide managers (all levels) the data required to monitor ongoing performance effectiveness - and to make required decisions based on only valid data.
11. Install continuous quality control procedures for evaluation of district effectiveness "along the way" (formative evaluation); and, at the end (summative evaluation). Provides for revision of district operations based on data derived from these specific performance evaluations. (Specific performance discrepancies in processes performed, outcome delivered, resources expended)
12. Establishes external Educational Performance Audit (EPA) to evaluate and report to the community and schools the ACTUAL achievement (annually) consistent with precommitted objectives and measurement standards (cost-effective outcome).
13. Revises the goals and objectives of the district based on changing needs and/or in response to less than effective performance of management-for-results practices (restatement of benefits stated in Chapter 11, Section II).
14. Ties program budgets to precommitted outcomes (objectives, etc.) as the way to tie resource allocations to expected results.

Achieving all of the aforementioned can predictably reverse the declining posture of education projected for the 1980's.

It should also be realized that all of the above can be systematically achieved in a reasonable time frame and within a reasonable investment program:

- With responsible managers (at every level) data necessary to maintain program on track is provided through pre-planned requirements for quality control and ultimate quality assurance to deliver predefined results.
- The key resources - people - are operating effectively and efficiently by reducing frustrations specific to who does what, when, why and how performance is to be negotiated (mutual accountability), monitored and evaluated.
- The responsible manager is assured of a high probability of successfully accomplishing priority performance commitments; and on time, within set resources allocated, while meeting predefined performance standards.
- An institution-wide commitment to priority performance results can be established by personnel at every level with the development of feasible planning, management and evaluating procedures for predictable personnel and institution-wide success.

Making a commitment to the system-wide application of these learning-centered principles, concepts, models, techniques and tools will produce the results required to restore the confidence of the community and, in turn, the commitment to provide resources for the future while establishing the most effective leadership for learning success.

This explanation of the benefits derived when implementing a district-wide Predictable Learning Mastery Delivery System is intended to give you an overview of the steps that we believe must be performed to satisfy the requirements for increasing the performance effectiveness of all schools in America.

Chapter 22

Investing in Education for a Positive Future

It can be predicted that after reading this book and/or examination of other meaningful reports or group orientation experiences discussing the benefits of the proposed commitment, the following statement might be made: "The proposed changes make sense but we don't have the money to proceed with this meaningful program."

The truth is that you do have money! What you perhaps don't have are the correct priorities for action and the means to control the best use of your limited resources to achieve required results for stated priorities.

Every year each school district will spend millions of dollars (ranging from \$1,000 to \$3,000 per student). These resources come from public taxes and they are usually expended without due regard for delivery of maximum productivity - cost-effective results.

The problem to be addressed by every school board is to assure the most effective and efficient use of these limited resources to deliver priority results for learners, parents, and the educational professionals.

As in any other business enterprise, the management of limited resources for our schools must be tied to the delivery of only effective and efficient results. Unless the school boards of America require the use of more effective management-for-results practices the spending of resources without concern for increased performance effectiveness will continue. In turn, the reality of predictable failure for our schools in the future can be our national reality.

COSTS VERSUS INVESTMENTS IN EDUCATION

We normally talk about costs of operation in education including salaries, fringe packages, teaching resources, etc. When resources are limited we ask "What costs shall be reduced?" This is the philosophy of cost-efficiency management - cutting budgets (costs) without a direct linkage to results to be delivered.

The future of education will rest on the commitment to an investment philosophy in order to deliver desired results. We must, like any other faltering enterprise, make the necessary capital expenditures to compete successfully.

We must initially invest in qualifying our professional educators with more effective practices to plan for and to deliver quality results for learners.

We must then invest in the development and testing of a learner-mastery delivery system which will deliver predictable success for all learners to achieve exit (graduation) mastery learning requirements.

We must also invest in the installation and operation of effective and efficient educational performance management systems.

Believe it or not, these investments will involve no more than $\frac{1}{2}\%$ to 1% of your cumulative annual budget over a 3 year period. One-half or more of these costs are for financial incentives for staff to perform the required initial training Year I in Learning-Centered practices, and those program installation activities required in Years 2 and 3 to install a Learning-Centered Performance System.

Please ask yourself the current costs in your school districts for the benefit package for your employees including health, life insurance and retirement (all levels); and the insurance costs on your physical assets.

Would it not be reasonable to invest in the quality life of your learners - and thereby the very quality life of the community in future years. You may call this investment in the future of your schools and your community your LIFE ASSURANCE PROGRAM for learners and for your community.

Selecting Your Consulting Resources

It is critical in your planning that you first define in concise measurable terms the exact performance requirements to be met in order to install a predictably successful District-Wide Learner-Mastery Delivery System. Having defined the performance requirements you will have established measurement standards to evaluate alternative methods and means required for installation. Without this discipline you may commit to resources who cannot deliver the required results specific to stated performance requirements.

You are presented below a statement of performance standards you can apply to evaluate alternative consulting teams and/or training resources for your program.

In reviewing candidates for selection as your possible training/consulting resource you are offered the following qualifying criteria to apply in your selection process:

- ° Be certain the candidate has an excellent performance record in the delivery of stated management-for-results (PME/R) skills both for administrators and teachers. Be certain that the candidate has a long and proven track record (10+ years) of successful training practices with educational clients where the consultant offers proven management-for-results skills meeting requirements stated in this paper.

- ° Be certain that the candidate has a proven track record of preparing professionals with required skills to deliver learner mastery results - who in turn have developed successful instructional learning applications delivering predictable learner

mastery results.

° Be certain that the candidate has extensively field-tested their management-for-results training systems for use by both administrators and/or teachers; and can therefore show multiple proven and successful applications as defined by users for entire school districts.

° Be certain that the candidate offers a proven training of trainers system to develop your professional team. A critical requirement for both successful long term district-wide applications is the built-in capability for the district professional team to take over as soon as feasible thereby eliminating any continuing requirement for the use of training/consulting resources. This must be a prime requirement as one dimension of the capability offered by the selected consultant team.

° Be certain that the consulting agency provides a money-back guarantee that all trainees will successfully achieve all stated training objectives using the training resources provided.

° Be certain that the proposed training programs are most cost-effective as compared with any other training alternatives while meeting accepted performance requirements for installing an educational Learning-Centered Performance System presented in this document.

REAL WORLD EDUCATIONAL ACCOUNTABILITY FOR EDUCATORS:

THE HANDWRITING ON THE WALL

The question may be asked by school boards, educational professionals and parents how real these proposals for change should be considered in the light of reduced finances and other operational forces.

We refer you to the quote from Thomas Jefferson cited at the beginning of this book as follows, "If a nation expects

to be ignorant and free, it expects what never was and never will be."

In December 1982, Governor Winter, State of Mississippi, called a special emergency session of the State Assembly in order to establish new performance requirements to be achieved by the Mississippi educational system in the coming decades.

Governor Winter established the following postulates as the basis for this new legislation:

A. That the economic survival and growth of the state of Mississippi is directly tied to the quality of educational programs provided learners;

B. That the future economic success and the quality of life of citizens will depend primarily on the capability of the state of Mississippi educational system (including all school districts):

1. To prepare all learners and thereby future citizens with those skills and knowledges required to succeed both in school and later in life following successful graduation;

2. To establish education as a performance system totally accountable for the planning and the delivery of Quality Results (predictably successful learners).

You are presented in Appendix B, a statement of the key performance requirements established by this landmark legislation entitled Mississippi Education Reform Act of 1982. The performance requirements of this reform act should be studied by every state legislative body, every state Department of Education and, indeed, every school district nationally.

The ultimate objective of this reported legislative Reform Act for the state of Mississippi is expressed as follows: "No later than July 1, 1986, the State Board of Education, acting through the Commission on School Accreditation, shall have fully established and implemented a permanent performance-based accreditation system, and all public elementary and secondary schools shall be accredited under such a system from that time forward."

For the first time in this nation a state-wide educational system (including all school districts) will be evaluated in terms of effectiveness of results delivered, i.e., quality of learning results achieved by all learners; and, in turn, to be accredited or non-accredited based on the quality of results (PERFORMANCE) delivered.

Accreditation or non-accreditation is tied directly to resources to be provided each school district. Nonperformance by schools, in a specific school district (that is where learners are failing to perform effectively) means that no money will be provided by the state to operate the schools in that district. The legislative commitments made by the state of Mississippi provide the leadership model for our nation and the comforting answer to Thomas Jefferson.

The commitment to deliver on this legal mandate will guarantee more effective performance by our schools and our learners -- the major beneficiaries.

Chapter 23 Summary and Conclusion: Where to Go from Here!

Volume I: Guaranteeing Effective Performance By Our Schools has focused on the REQUIREMENTS to be achieved by every educational partner to shift from the current failure performance profile reported by the National Commission on Excellence in Education to a predictable success story for each school district nationally.

The requirement to commit to the installation of proven Education-for-Results skills and practices is an absolute MUST if we are to deliver successful and effective performance in our schools.

The major responsibility to make this requirement a reality rests solely on the shoulders of our school board members (reference Dr. Merton Johnson).

The technical and political requirements to design a successful mastery learning delivery system have been presented (Dr. Gene Geisert); and the proven District-Wide Learning-Centered Performance System design with the required education-for-results practices to be applied are presented in the model for effective collaborative performance by all educational partners (Dean Richard Handley - The Fresno City College Program, and Superintendent Solomon Bonds - Jasper County Schools).

The achievement of the delivery of guaranteed increased effective performance by our schools can be accomplished with a ONE-TIME financial investment. Believe it or not, this investment will involve no more than $\frac{1}{2}\%$ to 1% of your cumulative annual budget over a 3 year period. One-half or more of these costs are for financial incentives for staff to perform the required initial training year 1 in Learning-Centered Practices, and those program installation activities required in Year 2 and 3 to install a Learning-Centered Performance System.

The data from a prepared District Performance Report Card will show the current level of performance by learners in one's school district. Given this performance profile, the school board is in the position to decide next steps, i.e., the decision to GO or NO GO to install more effective EDUCATION-FOR-RESULTS practices.

The proposed implementation steps for the Systematic Approach For Effectiveness (SAFE) (starting with the initial step to commit to proceed) are detailed in the chapter entitled Operation Yes! (Chapter 19)

WHERE DO WE GO FROM HERE?

It is important now that each educational partner evaluate the performance results to be achieved applying the education-for-results practices.

Multiple success stories are presented in Volume II: Delivering Predictable Success For Our Learners along with a detailed analysis of those learning-centered teaching practices to be applied in our classrooms by our teachers in order to deliver equal success for any school district. These success stories include many school districts who have successfully installed the Systematic Approach For Effectiveness (SAFE) practices.

It is imperative that every educational partner understand these Learner-Mastery How-To practices in order that they understand the absolute requirement to make the necessary investment to qualify all professionals with these skills assuring delivery of predictable success for our learners.

Without this investment in your professional staff you will not succeed to deliver effective performance results for learners.

EDUCATION-FOR-RESULTS:

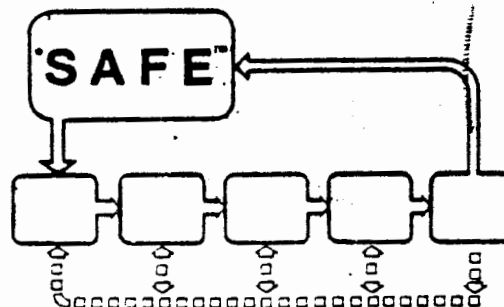
In Response to A NATION AT RISK

Volume II: Delivering Predictable Success for Our Learners

by

Robert E. Corrigan, Ph.D.

Betty O. Corrigan, M.A.



*Systematic Approach for Effectiveness

SAFE Learning Systems, Inc.
Post Office Box 5089
Anaheim, California 92804

A CODE OF EDUCATIONAL ACCOUNTABILITY

Education should be a completely learner-centered support system. Until the learner succeeds, we have failed. Until the learner's needs are met, we must change our methods and our means of serving that learner.

We must replace existing methods which are failing with those practices which will deliver success; and, we must qualify our professionals with these more effective practices in order to guarantee success.

We must all commit to the application of these practices, assuring continued success for all learners. Where these commitments will not be made, we must change the people involved.

Ward Corrigan, 1979
Vice President, Corrigan and Associates
(Deceased 1980)

THE PRIMARY COMMITMENT OF EDUCATION MUST BE THE DELIVERY OF
PREDICTABLE LEARNING SUCCESS FOR ALL LEARNERS

AN APPEAL TO ALL EDUCATIONAL PARTNERS

(School Board Members, Parents, Community Leaders, Administrators, and Teachers)

The current educational crises set forth on page one force each one of us to re-evaluate practices that we are currently applying in our schools. Also, where necessary, we must select and apply more effective professional practices to overcome these crises.

An initial and crucial step to be taken is to realize that the professional practices currently applied by our administrators and by our teachers have not delivered success for our learners.

Our present schooling practices are primarily TEACHING-CENTERED. These TEACHING-CENTERED practices focus on the question "What will our teachers teach?" This TEACHING-CENTERED approach, by its design, has not and can not deliver predictable success for our learners.

There is, however, substantial evidence demonstrating the effectiveness of a PROVEN LEARNING-CENTERED TECHNOLOGY which can guarantee the delivery of and the management of quality learning outcomes for ALL LEARNERS.

Therefore, the reported crises in the delivery of successful learning results are based on political not technical factors. The learning technology does exist which can guarantee success for our learners.

Rather than focusing on what a teacher will teach, we must shift our focus to the delivery of predictable success for our learners. This is done through a LEARNING-CENTERED approach; an approach that focuses on answering the question, "What do we do so that our learners will succeed?"

A LEARNING-CENTERED educational approach redirects all efforts to achieving predictable learning success and to applying those professional practices by teachers and administrators required to deliver guaranteed successful learning outcomes.

Refocusing on predictable learning results redefines curriculum design, curriculum implementation, and the nature of the management process (both for the administrator — and — for the teacher as the classroom manager of learning results).

To overcome the previously stated crises we must shift from ineffective professional practices to those practices which have been proven effective to succeed for learners.

We would appeal to educational partners, (parents, school board members, senior school administrators, principals, and teachers) to take the time and to make the effort to learn about LEARNING-CENTERED practices and their proven capability to deliver predictable success for our learners through more effective management of learning results.

The final achievement derived from an understanding and the application of LEARNING-CENTERED practices will be that everyone (as a team) can refocus and, in turn, can commit to, and be assured of the delivery of success for our learners.

With such a commitment by each school district, these crises will become a forgotten threat.

Of greatest importance will be the regaining of the public's confidence in our ability to deliver quality results for our learners.

Dr. Leon Lessinger, Superintendent
Beverly Hills School District, Beverly Hills, CA

Dr. Jack Ward, Associate Superintendent
Mendocino County, California

Dr. Robert Kane, Consultant
Teacher Preparation & Licensing Committee
State of California

Dr. Nolan Estes, Professor of Education, University of Texas

Dr. James McPhail, Chairman, Department of
Educational Administration & Supervision
University of Southern Miss.

Dr. Hosea Grisham, Superintendent
North Panola County School, Mississippi
President, Mississippi Association of
School Administrators

Dr. Hines Cronin, Superintendent
Moss Point School District, Moss Point, Mississippi

Dr. Mel Buckley, Superintendent
Newton Public School, Newton, Miss.

Dr. Robert Morgan, Director
Learning Systems Institute, Florida State University
Tallahassee, FLA

Dr. Roger A. Kaufman, Professor of Education
Florida State University
Tallahassee, FLA

Dr. Homer Coker, Teacher Corp. Program
Georgia State University, Atlanta, GA

Dr. Annette Kearney, Assistant Director
National Council for Negro Women
New York, New York

Dr. John Picton
Beaverton, Oregon

Dr. Louis Zeyen
Deputy Executive Director
American Association of School Administrators

* Dr. William Spady, Director
National Center for Improvement of Learning
Arlington, VA

Dr. Gene Geisert, Professor of Education
St. Johns University, Jamaica, New York

Dr. Al Hoyer
Minneapolis Unified School District, Minnesota

Dr. Wilfred Landrus
Chapman College, Professor of Education
Orange, CA

Dr. Robert Corrigan
Corrigan and Associates, Anaheim, California

Mrs. Betty Corrigan
Corrigan and Associates, Anaheim, California

Dedicated to the teachers of America,
in whose hands rests the promise
of success for today's learners
and tomorrow's citizens.

EDUCATION-FOR-RESULTS:

In Response To: A NATION AT RISK

VOLUME II: DELIVERING PREDICTABLE SUCCESS FOR OUR LEARNERS

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FOREWORD

On April 26, 1983, the National Commission For Excellence in Education made its report to the nation on the level of performance effectiveness of our schools. The report was, to say the least, most disheartening. The Commission For Excellence states that we are a nation at risk because of this CRISIS in effective performance.

The key concern reported is the steady and continuous decline in test scores for learners over the last 20+ years. Other areas dealing with inadequate curriculum offerings, classroom discipline, and ineffective teaching and teachers are also cited.

In our EDUCATION-FOR-RESULTS: VOLUME I: Guaranteeing Effective Performance By Our Schools, the REQUIREMENTS are presented to move from the currently reported failure by our schools to a predictable shining success story for each school, each learner, and each professional educator.

These requirements must be met by each educational partner (parents, school board members, teachers, administrators, counselors, and learners) to plan for and to guarantee the delivery of effective performance by our schools. The proven means to accomplish this objective are in place for immediate use.

In Volume I, the design of the Learner-Mastery Delivery System is offered as the PROVEN way to guarantee the delivery of predictable success for all learners.

In Volume II, the reader is presented the "proof of the pudding" - the research of 20+ years by multiple successful practitioners across the nation who have installed this Learner-Mastery Delivery System.

The results achieved clearly demonstrate that the bottom line can be PREDICTABLE success for all learners and all teachers in future years.

The delivery of this promised success will require the substitution of proposed LEARNING-CENTERED instructional practices for the traditional teacher-centered practices learned in college/universities and used in most classrooms today.

Volume II is dedicated to the teachers of America who are THE HOPE for the delivery of a future success story for our schools. We are presenting to teachers new ideas for their consideration specific to theirs and others accountability requirements to deliver predictable success for our learners.

Emphasis is placed on the design and use of proposed Learning-Centered teaching practices to assure the delivery of predictable success for our learners; the proof of the pudding provided showing the clear effectiveness of these mastery-learning teaching practices over traditional teacher methods; and, an appeal to all educational partners to make the commitment to install these practices NOW as the means to SAVE our schools.

As THE HOPE for the future success of our schools, teachers are offered these new sets of teaching practices which can guarantee success for learners in the future.

Given the commitment by teachers to learn and apply these practices, we appeal to all educational partners to consider a new model of professional accountability by the teaching profession and others which can return the dignity of the teaching profession to its highest level and provide appropriate financial and professional rewards for the teacher

professionals based on success to be achieved for learners, teachers, and parents.

The time is NOW to be totally realistic; to refocus on the use of more effective practices for assured delivery of predictable success for our learners; and for the use of most effective managing-for-results practices to achieve this objective with the best use of limited resources.

Shifting from the current concept of failure to one of guaranteed increased performance effectiveness -- the proven means are available, awaiting only the commitment by all members of the educational partnership to act to WIN!

Contributing Practitioners

VOLUME II: DELIVERING PREDICTABLE SUCCESS FOR OUR LEARNERS

1. George Bailey, Prior Superintendent of Schools, Northglenn Colorado
2. Mary Ellen Blanton, Assistant Superintendent for Instruction, Orange Unified School District, Orange, California
3. Mel Buckley, Superintendent, Newton Public Schools, Newton, Mississippi
4. John R. Champlin, Professor of Education, Texas Tech, Lubbock, Texas
5. Betty O. Corrigan, Vice President, SAFE Learning Systems, Inc., Garden Grove, California
6. Robert E. Corrigan Sr., President, SAFE Learning Systems, Inc., Garden Grove, California
7. Ward L. Corrigan, Deceased, Vice President, SAFE Learning Systems, Inc., Garden Grove, California
8. C. Hines Cronin, Superintendent, Moss Point School District, Moss Point, Mississippi
9. Harvie L. Guest, Executive Director for Curriculum and Instruction, School District No. 12, Adams County, Northglenn, Colorado
10. Donald W. Johnson, Prior Assistant Superintendent for Instruction, Duval County Schools, Jacksonville, Florida
11. Charlayne Lamb, Teacher, South Panola School District, Batesville, Mississippi
12. Jim C. Moore, Assistant Superintendent, Moss Point School District, Moss Point, Mississippi
13. Robert M. Morgan, Director, Learning Systems Institute, Florida State University, Tallahassee, Florida
14. Gale Pattison, Superintendent, Orange Unified School District, Orange, California
15. Homer Coker, Professor of Education, Georgia State University, Atlanta, Georgia

Contributing Practitioners

VOLUME I: GUARANTEEING EFFECTIVE PERFORMANCE

BY OUR SCHOOLS

1. Dolores T. Aaron, Assistant Superintendent, Child Advocacy Unit, New Orleans Public Schools, New Orleans, Louisiana
2. Solomon Bonds, Chief Administrative Officer, Jasper County Schools, Ridgeland, South Carolina
3. Betty O. Corrigan, Vice President, SAFE Learning Systems, Inc., Garden Grove, California
4. Robert E. Corrigan, Sr., President, SAFE Learning Systems, Inc., Garden Grove, California
5. Robert E. Corrigan Jr., Vice President, SAFE Learning Systems, Inc., Garden Grove, California
6. Ward L. Corrigan, Deceased, Vice President, SAFE Learning Systems, Inc., Garden Grove, California
7. Nolan Estes, Professor of Education, University of Texas, Austin, Texas
8. Shirley Fenstermaker, Prior School Board Member, Dayton Public Schools, Dayton, Ohio
9. Gene Geisert, Professor of Education, St. Johns University, Jamaica, New York
10. Richard Handley, Prior Assistant Dean, Vocational Education, Fresno City College, Fresno, California
11. Merton H. Johnson, Director, Metro II, St. Paul, Minnesota
12. Wilfred Landrus, Professor of Education, Chapman College, Orange, California
13. John Ficton, Prior President, Alaska Methodist University, Anchorage, Alaska
14. C. Hines Cronin, Superintendent, Moss Point Separate and Independent School District, Moss Point, Mississippi

Guide to the Reader

DEFINING PROVEN EDUCATION-FOR-RESULTS PRACTICES

You are offered the following publications entitled Education-For-Results: Volume I: GUARANTEEING EFFECTIVE PERFORMANCE BY OUR SCHOOLS and Volume II: DELIVERING PREDICTABLE SUCCESS FOR OUR LEARNERS. These publications have been designed to be read by every educational partner including parents, school board members, superintendents, administrators, teachers, counselors, learners, and the community-at-large including legislators (state and federal).

This stated requirement is based on the fact that everybody has an important stake in the success of our national system of education; and, each is accountable to perform an important function to deliver success for our schools.

We must think of ourselves as being an educational partner-ship!

As it exists today, too often responsibility for success in education is placed primarily on one of the partners (teachers) without a realistic understanding that all partners are accountable for delivering success for our schools.

Volume I is dedicated to the school boards of America. However, Volume I should be read by every educational partner in order that each partner concisely understands the stated REQUIREMENTS for the design and delivery of predictable success for our schools in the light of the current national crises reported by the Commission on Excellence in Education.

Volume I is divided into several independent but interconnected sections in order to provide each educational partner a structured yet logical set of building blocks leading to

these outcomes:

- (A) A concise understanding of the challenges we currently face - and - the requirements to be achieved in order to be successful in future years (Section I)
- (B) A concise understanding of the requirements to be met in order to build an effective business-like educational enterprise. These requirements must be understood by all concerned -- namely, those who pay the bills (parents, and community members), and those responsible for performing effectively to deliver required quality results (administrators, teachers, school board members, learners, and parents). (Section II)
- (C) An understanding of required education-for-results practices to be applied by educational managers (every level) in order to deliver predictable quality results for a school district including:
 - (1) Those lessons learned from business and industry to be most effective managers-for-results;
 - (2) Those proven Learning-Centered instruction and learning practices to be applied by teachers and curriculum directors in order to deliver PREDICTABLE Learner Mastery Results. These practices are based on 20+ years of proven effectiveness of results for learners delivered by multiple school districts in various educational applications (Sections II and III).
- (D) An understanding of the design requirements for a Learning-Centered Performance System installation which can assure success for all learners in every school district nationally. (Sections III and IV)

- (E) Those proposed steps to be taken to install a successful Learning-Centered Performance System in a school district applying the Systematic Approach for Effectiveness (SAFE) practices. (Sections III and IV)
- (G) The requirement to look at our educational system as a major producer of the quality life for every future citizen and for our nation. (Section V)
- (G) The absolute demand to invest required resources in our educational system to guarantee a future for all concerned. We must all understand the requirement to establish an investment policy which will pay dividends for our schools; and not to continue with planning which is based on spending (costs) without linking resources to delivery of most cost-effective results. (Section V)

Thus, Volume I presents:

- (1) Important requirements for change to be understood and, in turn, be accomplished by every partner in education in order to substitute current failure with success;
- (2) Those proven results-focused means and practices which can deliver predictable success for our schools;
- (3) The proven Learning-Centered Performance System proposed to be installed in every school district to assure future success for all learners and all educators;
- (4) The realization by the parents (the payer of the bills) that the delivery of success for our schools is feasible for each school district while requiring a reasonable ONE-TIME financial investment.

Hopefully, upon completion of the reading of Volumes I and II, every school board and superintendent will act to seriously investigate proposed education-for-results practices which can guarantee more effective performance by each school district nationally.

DESIGN OF VOLUME II:
DELIVERING PREDICTABLE SUCCESS FOR OUR LEARNERS

Volume II is dedicated to the teachers of America as THE HOPE for the delivery of success for all current learners and future citizens.

Volume II argues the case for a new and more effective relationship between teachers and the community by replacing the current industrial union model with a more professional QUID PRO QUO relationship wherein teachers monitor their own performance effectiveness similar to the medical profession.

In Volume I the reader is presented the REQUIREMENTS for success by learners, teachers, and administrators, and given the blueprint for successful implementation.

In Volume II we focus on those Learning-Centered practices to be used by teachers in the classroom in order to deliver predictable success for all learners (a proven capability).

These Learning-Centered practices have been extensively proven through applications by teachers over a 20 year development program involving multiple school districts which are large and small, urban and rural, highly minority learner concentrated, and for rich and poor districts. You are presented in Volume II the actual case histories of dramatic success by teachers applying these more effective learning-centered practices.

One immediate report of great significance is the demonstrated capability in two school districts in the state of Mississippi to have collapsed the normally reported negative relationship between RACE (socioeconomic status) and levels of learning achievements. In these districts they can no longer differentiate between achievements of black and white students. In applying these proven learning-centered practices, EVERY kid is a WINNER (high achiever).

The educational partners are presented in Volume II the challenge to apply these most effective Learning-Centered instructional, learning, and management practices as the proven means to deliver predictable success for learners, parents, and each professional educator in the immediate future.

Through application of these practices we can assure a secure nation.

Volume II must be read by every educational partner so that each will understand concisely the basic HOW-TO's (practices) to deliver the promised shining success stories in every school district nationally.

Interested educational partners are referred to audio tapes with appropriate visuals and video tapes which can provide further significant information by practitioners to better understand discussed Learning-Centered education-for-results practices.

The desired objective to be achieved following the reading of Volumes I and II (Education-For-Results) and the review of the available orientation audio and/or video tape sequences is that all responsible educational partners will have the required knowledge necessary to make the decision to commit to deliver PREDICTABLE success for learners in their school district -- our first national priority for educational results.

EDUCATION-FOR-RESULTS:

In Response To: A NATION AT RISK

VOLUME II: DELIVERING PREDICTABLE SUCCESS FOR OUR LEARNERS

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APPENDICES

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**APPENDIX B: Mississippi Education Reform Act of 1982 —
A Landmark Model for Our Nation**

**APPENDIX C: Reports by Practitioners of Performance Effectiveness
of SAFE Management-For-Results Practices**

1. Dr. C. Hines Cronin

2. Dr. John Picton

**APPENDIX D: About the Corrigan:
National Applications of Corrigan & Associates**

APPENDIX A: SAFE Orientation and Skills Training Systems

The following SAFE components are available to be used for the orientation of individuals and/or groups in order to learn about the particulars of Mastery Learning practices and Managing-For-Results practices proposed for installation in our schools.

- I. Individual reading Sources (Responding to "A NATION AT RISK"):
 - ° EDUCATION-FOR-RESULTS: Volume I: Guaranteeing Effective Performance By Our Schools
 - ° EDUCATION-FOR-RESULTS: Volume II: Delivering Predictable Success For Our Learners
- II. A) Audio-Visual Orientation Sequences: Presented by national leaders (Lessinger, Zeyen, others) and practitioners of SAFE practices including Duval County Schools, Orange Unified School District, Fresno City College, and the SAFE designers, Robert and Betty Corrigan (for use as a self-directed and/or group study program.
- B) Video Tape Sequences: Installing a Learner Mastery Delivery System.
- III. Group Orientation Series (regional presentations):
 - A. One day orientation seminar for board members and top educational leaders. Assuring Success for a Nation at Risk. This one-day program offers a detailed analysis of the requirements for installing a district-wide Learning-Centered Performance System (regional meeting for teams from different school districts including school board members and educational administrators).

- B. One day inservice programs: INSTALLING A LEARNING-CENTERED PERFORMANCE SYSTEM. Group directed by trained leaders provided group and individual interactions responding with programmed audio-visual sequences to establish understanding of (a) defining needs; (b) comparing goals and objectives; (c) writing and critique of performance objectives; (d) benefit analysis of Mastery-Learning practices for delivering predictable success for all learners.

Following the completion of selected orientation books, audio-visual sequences, video tape sequences and the completion of selected SAFE group orientation and/or inservice components, the school board would move to the

- C. Commitment to the installation of a multi-year Learning-Centered Performance in your school district by making the following decisions to proceed:

- 1) A Partial Commitment -- Selecting a beginning step with one area of implementation which could be:
 - a) a school or cluster of schools;
 - b) a program level: special education, vocational education, elementary, secondary, or one area district within a larger urban district.

--OR--

- 2) A total district-wide commitment of the three year installation of a Learning-Centered Performance System for your school district. (Review Section V: Blueprints for Success)

The design of the individual SAFE Skills Training Systems are discussed in the following pages.

One Day Clinic for School Board Members
and/or Executive Educational Managers

ASSURING SUCCESS FOR A NATION AT RISK:
GUARANTEEING EFFECTIVE PERFORMANCE BY OUR SCHOOLS

- I. ORIENTATION: DELIVERING SUCCESS FOR EDUCATION IN THE 1980's:
 - Current realities facing educational leaders (financial, political, academic)
 - Major issues to be resolved
 - The key to success - delivering maximum productivity in education

- II. INSTALLING A PREDICTABLE LEARNER MASTERY DELIVERY SYSTEM:
 - A Win-Win Approach (learners, community, educators)

 - A. ORGANIZING TO DELIVER MAXIMUM PRODUCTIVITY:
 - Planning, Managing and Evaluation for Required Results

 - B. BUDGETING FOR RESULTS:
 - Linking limited resources to delivering of Required Results (Cost-Effective performance results)

 - C. COMMITTING TO THE DELIVERY OF PREDICTABLE LEARNER MASTERY RESULTS
 - Guaranteed Delivery of Learner Success (all grade levels, all content areas, all students, all teachers)

- III. REGAINING THE CONFIDENCE OF THE PUBLIC TAXPAYER:
 - Linking cost-effective operations with the annual performance audit

- IV. DISCUSSION - ANSWERS - QUESTIONS:
 - Evaluation

PROGRAM ENDS

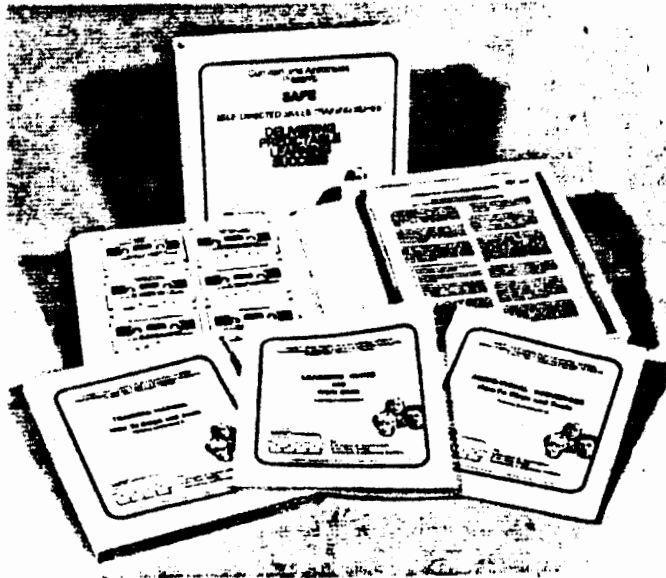
-- SPECIAL OFFER --

Faced with being forced into making undesirable compromises between academic, financial and political requirements, you will leave the Clinic with an effective "hands-on" (step-by-step) decision-making model.

This step-by-step decision-making tool presented to you in this Clinic will lead you to the best short and long term compromise decisions offering you minimum risk consistent with maximum gain (Example - HOW TO make those difficult decisions such as cutting programs and/or personnel while being responsive to political and academic constraints inherent therein).

PRESENTING OUR SAFE SELF-DIRECTED TRAINING KITS

MONEY-BACK GUARANTEED SUCCESS FOR EDUCATIONAL PROFESSIONALS



Each SAFE Self-Directed Skills Training Series provides these self-directed Skills Training Components:

- A. LEARNING GUIDE & WORKBOOK**
You are directed Step-by-Step with this tutorial guide to complete successive reading, audio-visual sequences, and how-to practicum exercises for individual instructional UNITS.
- B. TRAINING MANUAL: HOW-TO STEPS AND TOOLS**
You are presented all need-to-know and do concepts, principles and practicum steps to design and to install results-oriented plans which will deliver predictable success when skills are correctly applied.
- C. AUDIO-VISUAL SEQUENCE: HOW TO STEPS AND TOOLS PLUS AUDIO TAPES CONTAINED IN AUDIO CASSETTES**
You are presented audio cassettes to be played in conjunction with visuals to explain concepts and steps presented in training.

Each self-directed learning Unit is checked for correctness of application by use of pre-defined criteria standards and revision loops.

Trainees are continuously directed step-by-step by the use of the training Manual, the A-V sequences and each series of Application Exercises. A process of continuous feedback using criteria for correction is offered at every step.

While learning the SAFE skills, each trainee will produce lesson plans (learning units) or management plans which can be used in the classroom or in the school.

TRAINING OBJECTIVE:

To provide each PIP trainee of the SAFE Series — those guaranteed skills to plan, manage, and evaluate for the delivery of quality results (all applications); and in turn, to fulfill the State-level mandates for:

1. Accountability standards, and
2. Competency based instructional standards.

- A MONEY-BACK GUARANTEE OF SUCCESS
- ALL SAFE SELF-DIRECTED TRAINING COMPONENTS
- CERTIFICATE OF ACHIEVEMENT
- CRITIQUE OF YOUR PROGRAM

You will be required to complete ALL activities as stated in the SAFE SELF-DIRECTED SKILLS TRAINING PROGRAM to achieve predictable success. Upon completion, you will send us your completed LEARNING GUIDE containing your trial lesson plan or management plan and your notebook containing answers to unit questions and definitions of key terms. We will return these with a written critique and issue your certificate

SAFE KIT: Delivering Predictable Learning Success

SAFE Self-Directed Training Units

- Unit 1. Delivering Predictable Learning Success: Applying A Competency-Based/Mastery Learning Technology
- Unit 2. Assessment of Needs
- Unit 3. The Writing and Critique of Performance Objectives
- Unit 4. Stating the Learning-Centered Curriculum Objective
- Unit 5. The Curriculum Analysis Process: Phase I
- Unit 6. Establishing Learner Characteristics and Prerequisites
- Unit 7. Analyze Major Cognitive/Affective/Psychomotor Requirements
- Unit 8. Deriving and Stating Terminal Performance Objectives (T.P.O.'s)
- Unit 9. Deriving Performance Specifications and Criterion Tests/Measures
- Unit 10. Curriculum Analysis Process: Phase II
- Unit 11. Deriving Intermediate Performance Objectives (I.P.O.'s) and Criterion Measures
- Unit 12. Analysis of Learning Step Requirements
- Unit 13. Deriving and Stating Learning Steps and Criteria
- Unit 14. Analyzing and Deriving Methods/Media Alternatives
- Unit 15. Curriculum Synthesis
- Unit 16. Designing a Functional Learning Path:
A. Sequencing T.P.O.'s, I.P.O.'s and Learning Steps
- Unit 17. Designing a Functional Learning Path:
B. Methods/Media Selections for Predictable Learning
- Unit 18. Produce Field Test Methods/Media
- Unit 19. Implement Learning Centered Program/Evaluate and Revise

SAFE KIT: Planning, Managing and Evaluating for Results

SAFE Self-Directed Training Unit Titles

- Unit 1. Organizing to Deliver Maximum Productivity
- Unit 2. Assessment of Needs
- Unit 3. Define Goals and Mission Statement
- Unit 4. State Mission Objective
- Unit 5. Determine Performance Requirements
- Unit 6. Determine Constraints
- Unit 7. Derive Mission Profile
- Unit 8. Perform Function Analysis
- Unit 9. Perform Task Analysis
- Unit 10. Perform Methods/means Analysis
- Unit 11. State Feasibility Go/No Go
- Unit 12. Overview and Introduction to System Synthesis in the PWE Model: Planning-the-Work and Working-the-Plan
- Unit 13. Planning-The-Work: Designing the Operations Plan (Time Line Schedules, Personnel, Methods/Mean Selections, Job Descriptions/Assignments)
- Unit 14. Planning-The-Work: Designing the Management Plan (Personnel, Performance Monitoring, Quality Controls, Evaluation Schedules, Methods/Mean Selection)
- Unit 15. Planning-The-Work: Designing the Support Plan
- Unit 16. Planning-The-Work: Establishing the Program Budget
- Unit 17. Working-The-Plan: Installing, Implementing, Evaluating and Revising the Cost-Effective Plan

WHAT LOUISIANA PROFESSIONAL IMPROVEMENT PROGRAM (PIP) PARTICIPANTS SAY

Mrs. Troy Williams, Teacher, Fairview School, Allen Parish:

"Delivering Predictable Learning Success is a program to be praised by present day educators. The realization that professional practices currently applied have not delivered mastery of skills for our learners should tell us something.

A shift from teaching-centered to learning-centered practices refocuses on new skills and practices designed through the eyes of the learner. If we practice the SAFE way presented by Corrigan & Associates, we establish a learning path which assures the learner to proceed step-by-step from points of entry to achievement of the terminal objectives.

Implementation of a closed-loop model such as this is truly a Systematic Approach for Educational Effectiveness.

P.S. Your firm has done a great job in organization and presentation of materials."

Mr. Terry Chain, Teacher, Buras High School, Plaquemines Parish

"This program has proved to be a very worthwhile experience for me! I plan to use much of what I have learned in my day-to-day lesson planning.

Please send me a Certificate of Achievement of inservice PIP points.

Please send me information about your other programs."

PIP Participants are taking SAFE Home Study Programs in the following Parishes:

Orleans, St. Charles, Jefferson, Catahoula, Plaquemines, St. Martin, St. Bernard, Iberia, Caddo, East Baton Rouge, Terrebonne, Livingston, Allen, St. Helena.

Mrs. Joyce B. August, Principal, Carver Elementary, St. Charles Parish:

Please allow me to take this opportunity to convey to you how much I enjoyed and profited from your home study course PME/R.

The preciseness and organization of the course helped me to plan a very effective program in my school. With the PME/R method the directions were so concise and clear that I knew exactly what I wanted to do, the procedures I would take, the cost, personnel needed, time lines, support services, etc. needed to be successful in my endeavor.

Thank you, Corrigan's, you have definitely been a tremendous help to me.

I highly recommend your program to all administrators who want to be successful."

Mr. John Smith, Principal, and 53 Faculty Members, Alcee Fortier High School, Orleans Parish; (Evaluation responses)

A. Select a score from 0 (worst) to 10 (best) indicating your judgement of the SAFE Skills Training Program.

N=53 Mean=8.15 Median=9.1 Mode=9

B. Please give reasons why you selected the number above. (Sample of answers)

Good organization . . . Excellent materials . . . Easy to follow . . . Feeling of having accomplished by doing . . . Extremely informative and helpful to me as a teacher . . . Most effective in helping me to make better preparations, assessing student needs or developing plans of action . . . SAFE Training was nearly perfect.

C. Would you recommend SAFE program to other teachers?

YES-51 NO-0 Undecided-2

(*Comment: "I want to try it in my classroom first")

PROVEN SUCCESS STORIES BY ENTIRE SCHOOL DISTRICTS APPLYING SAFE PRACTICES TO DESIGN FOR AND TO DELIVER PREDICTABLE LEARNING SUCCESS*

Duval County Schools, Jacksonville, Florida (1969-present)

With district personnel applying SAFE skills to design all instructional programs, the district moved from a position of district-wide failure (1969) with the majority of learners being 3 grade levels below national norms, and all schools non-accredited - to a majority of students performing at or above national norms and all schools accredited in 1979-80 - cited by the Office of Education as an exemplary learning success model (1976) for disadvantaged learners in Math applying SAFE skills and practices.

Orange Unified School District, Orange, California (1969-present)

Total district-wide commitment (1970 to present) to Systematic Approach for Effectiveness (SAFE) practices and application with current results (1980) being that the Orange Unified School District is in first position in Math and first position in Reading and Written Expression for the 30 largest school districts in California.

Moss Point Municipal Separate School District, Moss Point, Mississippi (1977-present)

Applying SAFE practices, Moss Point developed five year management plans, articulated curricula in all subject areas K-12, and is in process of completing Functional Learning Paths. District developed Criterion Reference Tests are strongly correlated with CAT 77. Evaluation, grades 9-12 in 1980-81 and 1981-82, found no significant difference in scores between blacks and whites whereas in previous years there had been bi-modal distributions attributed to race. . . . race does not seem to be a systematic factor in determining how much a student learns from year to year."

Application of SAFE PME/R practices has moved the district finances from a deficit position to a balanced position with reserves.

Newton Public Schools, Newton, Mississippi (1978-present)

With a student population 60% black, 40% white and 64% in the free lunch program, Newton students scored as a group in the 32nd %tile on the State Assessment Testing (CAT 70) in 1977. In 1978 all teachers were trained and started applying SAFE practices. First grade scores in 1979 were at the 49th %tile; in 1980 at the 51st %tile; in 1981 at the 53rd %tile and in 1982 at the 62nd %tile. "The steady growth from 1979 is attributed to the progressive installation of SAFE and the quantum leap to the 62nd %tile in 1982 represents completion of the SAFE model for 1st grade. Across the grades only one class was not above national norms (4th grade at the 49th %tile)." State Evaluation reported . . . "Newton Schools were unusual in Mississippi because you could not predict race or socio-economic status from achievement scores . . . Most schools tend to present two distinct curves for achievement (bi-modal) that reflect race and/or socio-economic factors."

SAFE: DELIVERING PREDICTABLE LEARNING SUCCESS

TERMINAL PERFORMANCE OBJECTIVES

The following presents the objectives, agenda, products and evaluation for series of independent but sequential totally practicum-oriented inservice steps in Delivering Predictable Learner success. Cumulatively, the steps provide skills, knowledge and application of all processes in the Model for curriculum development to assure predictable instruction/learning success for competency-based/learning mastery programs.

On the completion of the SAFE DPLS training series each participant will demonstrate successful achievement (mastery) of each process step objective and associated performance evaluation standards. In addition each graduate will demonstrate his/her competency to successfully DESIGN, INSTALL, MANAGE and EVALUATE competency-based mastery learning programs which will deliver predictable mastery learning results for learners being taught. Achievement will be evaluated by evaluation checklists and products produced in each independent section.

DPLS Section I

- UNIT 1.** Each participant will correctly state and explain the steps and Tools of Curriculum Analysis in the DPLS model for assuring predictable learner success and will distinguish between an Open-Loop, Teaching-Centered Model and a Closed-Loop Learning-Centered Model; comparing advantages and disadvantages.
- UNIT 2.** In a curriculum problem area of his/her choice, each participant will perform a problem analysis and produce a simulated Need Assessment which will meet criteria specified in the DPLS materials.
- UNIT 3.** Upon completion of the programmed A-V Sequence "The Writing and Critique of Performance Objectives," each participant will write performance (behavioral) objectives which meet all criteria specified in the DPLS evaluation criteria checklist, and will critique the products of others.

AGENDA AND ACTIVITIES

- Introduction, Objectives and Agenda
- Orientation to the DPLS Model
- Practicum - Problem Analysis and Need Assessment
- The Writing and Critique of Performance Objectives
- Practicum - Performance Objectives

PRODUCTS AND EVALUATION - Each participant and/or Trio will produce a Need Assessment simulation and sample performance objective(s) which meet criteria in the DPLS materials as concurred upon during group critique following product development practicum by participants and the trainer.

DPLS Section 2

- UNIT 4.** Each participant will correctly define Performance Objectives with appropriate performance requirements defining terminal success for a course, unit or lesson plan.
- UNIT 6.** Each participant will correctly apply DPLS analysis procedures for deriving and stating specific Learner Characteristics and entry prerequisites, skills and knowledges.
- UNIT 7.** Each participant will correctly apply DPLS analysis procedures for deriving and stating "Need-to-Know" cognitive, affective and psychomotor requirements which represent mastery level knowledge and skills and behavior to achieve the top level (curriculum, course, unit, or lesson) objective.

AGENDA AND ACTIVITIES

- Practicum - Curriculum Objectives
- Practicum - Analysis of Learner Characteristics and Prerequisites
- Practicum - Analysis of Cognitive/Affective/Psychomotor Learning Requirements for Mastery (Use of Bloom's, Krathwohl's, Corrigan's taxonomies to determine knowledge, skills, and attitudes to be learned for mastery).
- Critique of Products.

PRODUCTS AND EVALUATION - Curriculum Objectives, Learner Characteristics and Prerequisites and Cognitive/Affective/Psychomotor Analysis produced by each participant and/or trio will be evaluated as correctly meeting criteria stated in the DPLS materials through concurrence in group critique by participants and by the trainer.

DPLS Section 3

- UNIT 8.** Each participant will correctly apply DPLS analysis procedures for deriving and stating Terminal Performance Objectives (T.P.O.s) specific to the Need-to-Know/Do cognitive, affective skill requirements necessary for achieving the stated Curriculum, Course, Unit or Lesson Objective and associated performance requirements.
- UNIT 9.** Each participant will correctly apply the DPLS analysis procedures for deriving and stating associated Terminal Criterion-referenced measures specific to each T.P.O.
- UNIT 11.** Each participant will correctly apply DPLS skills to derive Need-to-Know/Do cognitive/affective learning requirements for the achievement of each Terminal Performance Objective (T.P.O.).

AGENDA AND ACTIVITIES

- Practicum - Terminal Performance Objectives (TPO's)
- Practicum - Criterion-Referenced Measures for TPO's
- Practicum - Analysis of Intermediate Learning Requirements (Cognitive/Affective/Psychomotor) to achieve TPO's
- Critique of Products

PRODUCTS AND EVALUATION - Terminal Performance Objectives, Criterion-Referenced Measures and Analysis of Intermediate Learning Requirements (Cognitive/Affective/Psychomotor) produced by each participant and/or trio will meet criteria stated in DPLS materials as concurred upon by participants and trainer through group critique and individual evaluation.

DPLS Section 4

- Objectives:
1. Each participant will correctly derive Intermediate Performance Objectives (I.P.O.s) for content-skills analysis defining Intermediate level learning requirements.
 2. Each participant will correctly derive criterion-measures for achievement of each I.P.O.
- UNIT 12.** Each participant will correctly apply DPLS processes to derive Need-to-Know learning requirements for each I.P.O.
- UNIT 13.** Each participant will correctly derive Learning Steps and criterion measures specific to each I.P.O.
- UNIT 14.** Each participant will derive alternative method-means which will feasibly achieve stated Learning Steps; and assess the advantages and disadvantages of these alternatives for most cost-effective and predictable learning results.

AGENDA AND ACTIVITIES

- Practicum - Intermediate Performance Objectives and Criterion Measures
- Practicum - Use of taxonomies to develop Learning Step Sequences for IPO's
- Practicum - Learning Steps and Criteria
- Practicum - Method/Media Analysis for Learning Steps

DPLS Section 5

UNIT 16. Each participant will correctly apply *DPLS* processes to derive the most effective Functional Learning Path specific to instructional Courses, Blocks and Units assuring delivery of Predictable Competency-Based Learner Mastery Outcomes/ Results.

UNIT 17. Each participant will correctly apply *DPLS* processes to select the most cost-effective methods-media combinations for functional learning path designs and installation.

AGENDA AND ACTIVITIES

- Practicum - Developing a Functional Learning Path
- Programming Techniques for producing Learner Success
 - individually paced
 - group paced

OVERVIEW - Identification of areas for which Learning Sequences and Methods/Media must be developed.

- Selection of Methods/Media for Functional Learning Path
- Specifications for Methods/Media/Materials to be developed
 - Learning materials
 - Instructional materials
 - Evaluation instruments

PRODUCTS AND EVALUATION - Functional Learning Path developed by participants will meet criteria specified in the *DPLS* materials.

DPLS Section 6

UNIT 18. Each participant will correctly learn *DPLS* processes to complete the total classroom/school planning for field test implementation, evaluation and revision for delivering predictable learner success.

AGENDA AND ACTIVITIES

- Overview - Developing and Validating *DPLS* Courses, Units, Lesson Plans for Predictable Learner Success
 - Field test, implementation, evaluation, revision steps
- Concepts and Principles in Developing Evaluation Instruments
 - . Diagnostic Tests
 - . Threshold Knowledge Tests
 - . Criterion Referenced Tests vs. Standardized Tests
 - . Cognitive Learning Styles
 - . Skill Demonstration
 - . Formative/Summative Evaluation

DPLS Section 7

UNIT 19. Each participant will correctly learn the requirements for field testing a DPLS program/course/unit/lesson plan to assure predictable success for learners through modifications based on actual learner performance. In addition each participant will state correctly all requirements for developing the management plan for classroom implementation. They will, in turn, correctly simulate the required steps and processes to be performed to achieve all planning for implementation.

PRODUCTS AND EVALUATION - Simulated plans for implementation of DPLS programs, course/unit/lesson plan; and, for sensing and correctly implementing plans increasing the effectiveness for delivering predictable learner results.

SAFE SERIES: DELIVERING MAXIMUM PRODUCTIVITY:
Planning, Managing and Evaluating for Required Results

Training Objectives

The following presents the objectives, agenda, products and evaluation for the SAFE Series -- Delivering Maximum Productivity: Planning, Managing and Evaluating for Results (PME/R). Skills acquired in this series can be used to develop results-oriented management plans for the operation, management, support, evaluation and delivery of cost-effective operational and management programs. The series is divided into 17 Units, each unit prerequisite to the following units in the series. Cumulatively, all units provide skills and knowledge required for delivering required results. Within the series, participants will develop sample applications (plans) which can be used "on the job".

On the completion of the SAFE PME/R training series each participant will demonstrate successful achievement (mastery) of each process step objective and associated performance evaluation standards. In addition, each graduate will demonstrate his/her competency to successfully DESIGN, INSTALL, MANAGE and EVALUATE programs which will deliver predictable results. Achievement will be evaluated by evaluation checklists and products produced in each independent section.

- UNIT 1. Each participant will correctly identify the process steps in the PME/R Model.
- UNIT 2. In a problem area of his/her choice, each participant and/or Trio will correctly perform a problem analysis and simulated needs assessment meeting criteria specified in the evaluation checklist.
- UNIT 3. Each participant and/or Trio will derive a correctly stated goal, mission statement, and mission objective meeting criteria stated for these steps in the PME/R materials.
- UNIT 4.

AGENDA AND ACTIVITIES

- ° Group discussion of Planning Steps
- ° Overview of PME/R Closed-Loop Management Process Model and the Steps of System Analysis
- ° Application - Problem Analysis and Simulated Need Assessment
- ° Application - Deriving Goals and Mission Statement
- ° Application - Stating Mission Objectives
- ° Group Critique - Mission Objectives

PRODUCTS AND EVALUATION

Needs Assessments, Goals, Mission Statements, and Mission Objectives will meet criteria as concurred upon by participants and by the trainer in group and individual critiques.

- UNIT 5. Each participant will derive correctly stated Performance Requirements for the Mission Objective previously produced which will meet criteria stated in the PME/R materials.
- UNIT 6. Each participant will analyze Constraints related to the feasibility of accomplishing the Mission Objective and Performance Requirements.
- UNIT 7. Each participant will derive a Mission Profile which represents the major milestones required to achieve the Mission Objective and Performance Requirements, meeting criteria for these processes stated in PME/R materials.

AGENDA AND ACTIVITIES

- ° Application - Deriving Performance Requirements
- ° Group Critique - Performance Requirements
- ° Application - Deriving Constraints
- ° Overview - A Step Toward Problem Solving
- ° Application - Deriving Mission Profile
- ° Group Critique - Constraints and Mission Profile

PRODUCTS AND EVALUATION

Performance Requirements, Constraints and Mission Profile will meet PME/R evaluation criteria as concurred upon by participants and trainer in group and individual critiques.

- UNIT 8. Each participant and/or Trio will correctly perform a Function Analysis derived from the Mission Profile.
- UNIT 9. Each participant will correctly perform a Task Analysis for one or more functions in the Function Analysis.
- UNIT 10. Each participant will correctly perform a Methods/Mean Analysis to identify alternate ways and means for implementing functions and tasks.
- UNIT 11. Each participant will perform a Feasibility Go/No Go check on the steps applied in System Analysis for the problem selected.

AGENDA AND ACTIVITIES

- ° Application - Function Analysis
- ° Group Critique - Function Analysis
- ° Application - Task Analysis
- ° Application - Methods/Means Analysis
- ° Application - Feasibility Go/No Go
- ° Group discussion of applications
- ° Discussion of "real-world" application of Analysis Steps to problems of differing complexity requiring varying degrees of accountability or levels of expectancy.

PRODUCTS AND EVALUATION

Function, Tasks, and Methods/Media Analysis will meet criteria for these steps stated in PME/R materials.

UNIT 12. Each participant will identify the processes of System Synthesis in the PME/R model.

UNIT 13. Each participant and/or Trio will produce an operational plan for achievement of functions and tasks to achieve the Mission Objective including Time Line schedules, Personnel requirements, Job Descriptions and Method/Means selection.

AGENDA AND ACTIVITIES

- ° Overview of System Synthesis (using System Analysis Products)
 - ° Selecting Alternate Strategies
 - ° Developing Operations Plans
 - ° Determining Personnel Requirements and developing Job Descriptions
 - ° Selecting Methods/Means
 - ° Developing Management and Support Plans
 - ° Developing Program Budgets
- ° Application - Schedule Operational Activities
- ° Application - Determine Personnel Types for Functions/Tasks
- ° Application - Determine Number of Personnel by Type (An Initial Approximation)
- ° Application - Establish the Cost-Effective Index for Selecting Methods/Means

- ° Application - Final Methods/Means Selection
- ° Application - Check Final Personnel Assignments for Methods/Means Selection

PRODUCTS AND EVALUATION

Operational plans produced by each participant and/or Trio will meet criteria stated in the PME/R materials.

UNIT 14. Each participant and/or trio will develop a management plan for managing and evaluating the operational plan, functions and tasks previously specified for accomplishing the Mission Objective and Performance Requirements.

AGENDA AND ACTIVITIES

- ° Overview - Specifying Management Requirements
- ° Application - Develop a Basic Responsibility-Oriented Organization
- ° Application - Check Compatibility of Organization Pattern with Critical Operational Functions
- ° Application - Schedule of formative/summative Evaluation Requirements
- ° Application - Specify Management Personnel Requirements
- ° Application - Determine Basic Management Controls to be Used (Reporting, Monitoring, Adjusting)
- ° Application - Select Management Methods/Means
- ° Application - Make Final Adjustments in Management Plan Management Information System Requirements

PRODUCTS AND EVALUATION

Management Plans will contain all elements and meet criteria stated in PME/R materials.

UNIT 15. Each participant and/or trio will develop a support plan for supporting the operations and management plans previously produced for achieving the Mission Objective.

UNIT 16. Each participant and/or trio will develop a Program Budget (or Zero-based Budget) which specifies fiscal requirements for implementing the operations, management and support plans to achieve program success.

AGENDA AND ACTIVITIES

- ° Application - Specifying Support Requirements
- ° Application - Scheduling Support Requirements
- ° Application - Personnel Required
- ° Application - Methods/Mean Required
- ° Application - Identification of time-shared support for operations and management
- ° Application - Developing a Program Budget for Cost-Effectiveness Controls
- ° Application - Budgets for Functions in Profile
- ° Application - Composite Program Budget
- ° Application - Making feasible trade-offs
- ° Review of entire plan reflecting all System Analysis and Synthesis processes and steps.

PRODUCTS AND EVALUATION

These final steps will produce a complete results-oriented plan for all requirements for implementation of the Mission Objective developed through all training units. All products will meet criteria stated in the PME/R materials.

UNIT 17. Each participant and/or the trio will review and analyze those PME/R management requirements to WORK-THE-PLAN including the 14 steps for:

- | | |
|------------------|---|
| (A) installing | } the cost-effective
implementation plan |
| (B) implementing | |
| (C) evaluating | |
| (D) revising | |

In addition, the participant will evaluate the major benefits to be derived through applying the SAFE PME/R "managing-for-results" practices and skills on the job in order to deliver maximum productivity outcomes/results.

CORRIGAN & ASSOCIATES PRESENTS:

SAFE SKILLS TRAINING SERIES:

Money Back Guarantee for Purchasers of SAFE Training Kits

Corrigan & Associates presents with the purchase of each SAFE skills training SERIES KIT of materials, our **MONEY-BACK GUARANTEE** for the purchase price *in the event that*; a qualified professional trainee does *not* achieve the SAFE skills training objectives stated for a specific SAFE Self-Directed Training Series.

This written MONEY-BACK guarantee for each SAFE Self-Directed training Series Kit will be honored **ONLY** after evidence is presented that a professional trainee did perform all training activities **EX-ACTLY AS DIRECTED** for the designated SAFE skills training SERIES.

Each SAFE Self-Directed skills training SERIES requires that a qualified professional as the trainee follow carefully prescribed implementation steps and written activities in order to develop those competencies necessary to achieve defined SAFE interim and terminal training objectives and criteria established for each SAFE SERIES.

At each learning STEP a trainee is required:

- A. to execute and to apply defined STEPS to produce a written sample product;
- B. to critique the product developed at each STEP against *preset* performance standards stated in the materials;
- C. to identify any *discrepancies between the sample product developed by the trainee* and that required at each STEP — and — to make written changes (as required) to satisfy stated preset design criteria defining successful performance at that STEP;
- D. to execute written revisions of the sample product for each STEP (as required) based on discrepancies identified following comparison with preset design standards to be achieved at that STEP;
- E. to complete written answers to questions designed to indicate a trainee's understanding of each SAFE STEP with all prior steps;
- F. to make a comparison of written answers for each SAFE STEP with correct answers provided, and;

G. *where a written answer is wrong*, as evidenced by a comparison with the correct answers provided (for each Step), to rewrite the answer to each question until it is correct.

All of the stated written exercises discussed above and which are required to be performed by a SAFE trainee will be contained in a *single Workbook* which is *authored* by that trainee to whom our written guarantee is assigned, a copy of which is signed and returned to the company by the trainee before beginning one's Self-Directed Training program.

In the event an authorized SAFE trainee wishes to apply for a rebate of the purchase price of a specific *SAFE Self-Directed Training Series* (numbered), this authorized trainee *must submit* a copy of his/her actual *Self-Directed Workbook* completed in his/her SAFE training SERIES KIT. Any deviation from the established prescribed Steps and performance standards stated above will *automatically disqualify that individual* as a candidate for a rebate of the purchase price of the assigned SAFE Self-Directed Training SERIES KIT.

This *Workbook* will be accompanied by a notebook prepared by the trainee in which are presented correctly written answers to all questions presented in each of the nineteen (19) training units, and key terms required to be defined in each training unit.

Each purchaser or trainee assigned to complete a designated SAFE Program (Kit) will be required to submit a signed and dated copy of the money back guarantee included in each SAFE training kit to the Company within a period of 45 days from the delivery date of a SAFE training kit. This signed and dated copy will be mailed to: Corrigan & Associates, P.O. Box 5089, Anaheim, California 92804.

The money back guarantee with each SAFE kit will be valid for a time period of no more than 200 days from the date the SAFE guarantee is signed and dated by the individual who will be using the designated SAFE learning kit. This sets the time period for the completion of all training units (1-17) contained in the **WORKBOOK** referenced in this SAFE money back guarantee.

Name _____ Position _____ Date _____
Address _____

Retain signed original and return carbon copy to: Corrigan & Associates, P.O. Box 5089, Anaheim, CA 92804

CORRIGAN & ASSOCIATES PRESENTS:

SAFE SKILLS TRAINING SERIES:

Money Back Guarantee for Purchasers of SAFE Training Kits

Corrigan & Associates presents with the purchase of each SAFE skills training SERIES KIT of materials, our **MONEY-BACK GUARANTEE** for the purchase price *in the event that*; a qualified professional trainee does *not* achieve the SAFE skills training objectives stated for a specific SAFE Self-Directed Training Series.

This written MONEY-BACK guarantee for each SAFE Self-Directed training Series Kit will be honored **ONLY** after evidence is presented that a professional trainee did perform all training activities **EXACTLY AS DIRECTED** for the designated SAFE skills training SERIES.

Each SAFE Self-Directed skills training SERIES requires that a qualified professional as the trainee follow carefully prescribed implementation steps and written activities in order to develop those competencies necessary to achieve defined SAFE interim and terminal training objectives and criteria established for each SAFE SERIES.

At each learning STEP a trainee is required:

- A. to execute and to apply defined STEPS to produce a written sample product;
- B. to critique the product developed at each STEP against *preset* performance standards stated in the materials;
- C. to identify any *discrepancies between the sample product developed by the trainee* and that required at each STEP — and — to make written changes (as required) to satisfy stated preset design criteria defining successful performance at that STEP;
- D. to execute written revisions of the sample product for each STEP (as required) based on discrepancies identified following comparison with preset design standards to be achieved at that STEP;
- E. to complete written answers to questions designed to indicate a trainee's understanding of each SAFE STEP with all prior steps;
- F. to make a comparison of written answers for each SAFE STEP with correct answers provided, and;

G. *where a written answer is wrong*, as evidenced by a comparison with the correct answers provided (for each Step), to rewrite the answer to each question until it is correct.

All of the stated written exercises discussed above and which are required to be performed by a SAFE trainee will be contained in a *single Workbook* which is *authored* by that trainee to whom our written guarantee is assigned, a copy of which is signed and returned to the company by the trainee before beginning one's Self-Directed Training program.

In the event an authorized SAFE trainee wishes to apply for a rebate of the purchase price of a specific *SAFE Self-Directed Training Series* (numbered), this authorized trainee *must submit* a copy of his/her actual *Self-Directed Workbook* completed in his/her SAFE training SERIES KIT. Any deviation from the established prescribed Steps and performance standards stated above will *automatically disqualify that individual* as a candidate for a rebate of the purchase price of the assigned SAFE Self-Directed Training SERIES KIT.

This *Workbook* will be accompanied by a notebook prepared by the trainee in which are presented correctly written answers to all questions presented in each of the nineteen (19) training units, and key terms required to be defined in each training unit.

Each purchaser or trainee assigned to complete a designated SAFE Program (Kit) will be required to submit a signed and dated copy of the money back guarantee included in each SAFE training kit to the Company within a period of 45 days from the delivery date of a SAFE training kit. This signed and dated copy will be mailed to: Corrigan & Associates, P.O. Box 5089, Anaheim, California 92804.

The money back guarantee with each SAFE kit will be valid for a time period of no more than 200 days from the date the SAFE guarantee is signed and dated by the individual who will be using the designated SAFE learning kit. This sets the time period for the completion of all training units (1-19) contained in the **WORKBOOK** referenced in this SAFE money back guarantee.

DEVELOPMENT STEPS FOR LEARNING-CENTERED CURRICULUM AND MANAGING-FOR-RESULTS SAFE SELF-DIRECTED SKILLS TRAINING SYSTEMS

The SAFE Self-Directed Training Systems have evolved through progressive field-testing and revision loops for all programs. There have been three (3) complete re-writes and revisions based on data received from working with over 50 school districts, universities and organizations, 1960-1981. The objectives for the SAFE training programs were not only that educational professionals acquire specified skills, knowledge and practices, but also that they might apply these practices to produce learning programs and management plans which would produce success for learners. Our capability to offer our money-back performance guarantee for each SAFE Self-Directed Training series is predicated on the performance data obtained from trainees. This allows us to predict success for all trainees and, in turn, for all learners using learning programs designed by educators who have applied the SAFE learning-centered professional practices and skills.

SOME CLIENTS OF CORRIGAN & ASSOCIATES

<p><i>Alaska Methodist University</i> <i>Alaska State Department of Education</i> <i>Archdiocese of Chicago—School Board</i> <i>Archdiocese of Los Angeles—School Board</i> <i>Archdiocese of San Diego</i> <i>Arizona State Department of Education</i> <i>Atascadero Unified School District—California</i> <i>Atlanta Unified School District, Atlanta, GA</i> <i>Beverly Hills Unified School District—California</i> <i>Butte County Superintendent of Schools Office—California</i> <i>California Association of Elementary School Administrators</i> <i>California Community Colleges (Statewide program involving 120 presidents, superintendents, chancellors, deans, administrators, and faculty)</i> <i>California State Department of Education—Compensatory Education Division</i> <i>Chaffey Union High School District, Ontario, California</i> <i>Chapman College, Masters Degree Program, Orange, California</i> <i>Chico State College—Title III PACE Center—California</i> <i>Concordia Parish Schools, Concordia, LA</i> <i>Duval County Unified School District—Florida</i> <i>Educational Coordinating Council—Oregon</i> <i>Episcopal Church, Chancellors Office—Washington, D.C.</i> <i>Fresno City College—Fresno, California</i> <i>Fresno County Superintendent of Schools Office</i> <i>Greenville Unified School District—California</i> <i>Los Angeles City Schools, California</i> <i>Los Angeles County Superintendent of Schools Office—Special Education Division</i> <i>Louisiana State Department of Education</i> <i>Metro II-6 districts in the Minneapolis/St. Paul area</i> <i>Mass Point District—Mass Point, Mississippi</i></p>	<p><i>New Orleans Public School, Louisiana</i> <i>Newark Public Schools, Newark, New Jersey</i> <i>Newton Public Schools District—Mississippi</i> <i>North Panola Unified School District—Mississippi</i> <i>Northwest Regional Educational Laboratory—Portland, Oregon</i> <i>Norwalk-La Mirada Unified School—California</i> <i>Oakland Community College—Michigan</i> <i>Operation PEP (Preparing Educational Planners)—California</i> <i>Orange Unified School District—California</i> <i>Oregon Education Association</i> <i>Oregon Elementary and Secondary School Administrators</i> <i>Oregon Higher Education Administrators</i> <i>Oregon State Department of Education</i> <i>Oxnard Union High School District</i> <i>Pittsburg Public School Board—Middle Schools</i> <i>Plumas County Office of The Superintendent of Schools</i> <i>St. Ambrose College, Davenport, Iowa</i> <i>St. Paul Public Schools, St. Paul, Minn.</i> <i>Salinas Union High School District, Salinas, California</i> <i>San Diego Unified School District—California</i> <i>San Joaquin Valley Community College Council for Occupational Education</i> <i>South Carolina Department of Corrections</i> <i>Southern University, Baton Rouge, LA</i> <i>State Center Community College District—California</i> <i>University of Arizona—Tempe</i> <i>University of California at Riverside—California</i> <i>University of Florida—Gainesville</i> <i>University of Northern Florida</i> <i>University of Southern Carolina—Columbia</i> <i>University of South Dakota—Black Hills</i> <i>University of Southern Mississippi (15 school district superintendents)</i> <i>U.S. Office of Education—NCIES</i></p>
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**APPENDIX B: Mississippi Education Reform Act of 1982 —
A Landmark Model for Our Nation**

KEY IMPLEMENTATION REQUIREMENTS

You are presented below a summary of key implementation requirements established for the Education Reform Act of 1982 by the state of Mississippi. The successful fulfillment of these and other requirements will assure the achievement of the final objective for the State of Mississippi educational system as stated in 37-17-6 above.

Section 37-1-2

The Legislature finds and determines that the quality of public education and its effect upon the social, cultural and economic enhancement of the people of Mississippi is a matter of public policy, the object of which is the education and performance of its children and youth. The Legislature hereby declares the following to be the policy of the State of Mississippi:

(a) That the students, parents, general citizenry, local schoolteachers and administrators, local governments, local school boards, and state government have a joint and shared responsibility for the quality of education delivered through the public education system in the State of Mississippi;

(c) To ensure that all students master the most essential parts of a basic education;

(g) That excellence and high achievement of all students should be the ultimate goal;

(h) To encourage the common efforts of students, parents, teachers, administrators and business and professional leaders for the establishment of specific goals for performance;

(j) That the return on public education which is the single largest investment for the state be the effectiveness of the delivery system and the product it is designed to produce;

(k) That the investment in public education can be justified on the basis of the economic benefits that will accrue both to the individual and to society, recognizing that the return on such investment is long term and dramatic progress is not immediate;

(l) That emphasis must be placed upon early mastery of the skills necessary to success in school and that quality, performance-based early childhood education programs are an essential element of a comprehensive educational system;

(m) That local school districts and their public schools be required to account for the product of their efforts;

(n) That the children of this state receive a period of instruction sufficient to train each in the basic educational skills adequate for the student to take his or her place in society and make a contribution as a citizen of this state, and that all children be encouraged to continue their education until they have completed high school;

(o) To establish an accreditation system based upon measurable elements in school known to be related to instructional effectiveness, to establish a credible process for measuring and rating schools, to establish a method for monitoring continued performance, and to provide for a state response when performance is inadequate.

Section 37-1-3

(1) The State Board of Education shall adopt rules and regulations and set standards and policies for the organization, operation, management, planning, budgeting and programs of the State Department of Education.

(a) The board is directed to identify all functions of the department that contribute to or comprise a part of the state system of educational accountability and to establish and maintain within the department the necessary organizational structure, policies and procedures for effectively coordinating such functions. Such policies and procedures shall clearly fix and delineate responsibilities for various aspects of the system and for overall coordination of the total system and its effective management.

(b) The board shall establish and maintain a system-wide plan of performance, policy and directions of public education not otherwise provided for.

(c) The board shall effectively use the personnel and resources of the department to enhance technical assistance to school districts in instruction and management therein.

(e) the board shall establish and maintain within the State Department of Education a central management capacity under the direction of the State Superintendent of Education.

(f) The board with recommendations from the superintendent shall design and maintain a five-year plan and program for educational improvement that shall set forth objectives for system performance and development and be the basis for budget requests and legislative initiatives.

(2) The State Board of Education shall adopt and maintain a curriculum and a course of study to be used in the public schools that is designed to prepare the state's children and youth to be productive, informed, creative citizens, workers and leaders, and it shall regulate all matters arising in the practical administration of the school system not otherwise provided for.

Section 37-3-2

(1) There is hereby established within the State Department of Education the Commission on Teacher and Administrator Education, Certification and Development. It shall be the purpose and duty of the commission to make recommendations to the State Board of Education regarding standards for the preparation, certification and continuing professional development of those who teach or perform tasks of an educational nature in the public schools of Mississippi.

(7) It shall be the duty of the commission to:

(a) Set standards and criteria, subject to the approval of the State Board of Education, for all public teacher education programs in the state;

(b) Recommend to the State Board of Education each year approval or disapproval of each public teacher education program in the state;

(e) Review and evaluate objective measures of teacher performance, such as test scores, which may form part of the certification process, and to make recommendations for their use;

(j) Hire expert consultants with approval of the State Board of Education;

(12) Each district shall develop a plan to provide in-service training for beginning teachers. This plan shall include means of addressing needs for improvement that are determined through the evaluation of on-the-job performance.

(14) As part of the rules and criteria for the renewal of teacher certificates in all fields, there shall be established a procedure whereby after July 1, 1984, every certified teacher shall be required to successfully complete the prescribed in-service training staff development plan approved by the Commission on School Accreditation as provided in Section 37-17-8, Mississippi Code of 1972. This plan shall include means of addressing needs for improvement that are determined through the evaluation of on-th-job performance.

(15) The commission shall develop and present to the State Board of Education no later than August 1, 1984, a plan for implementing a program to encourage and reward financially professional development in teachers, school administrators and other certified school personnel. The plan shall include, but not be limited to, criteria to guide participants in planning their professional development; standards of balance, breadth and vigorousness for such plans; criteria for their evaluation and approval; and procedures for administering the programs.

(16) The State Board of Education may adopt rules and criteria for a Professional Development Program based upon the plan presented by the commission.

Section 37-3-4

(1) There is hereby established on July 1, 1984, within the State Department of Education, the School Executive Management Institute. The director shall be appointed by the State Board of Education upon recommendation by the State Superintendent of Public Education. The State Superintendent of Public Education shall, with the approval of the State Board of Education, assign sufficient staff members from the State Department of Education to the institute.

(2) It shall be the purpose and duty of the institute to conduct thorough empirical studies and analyses of the school management, needs of the local school districts throughout the state, to make recommendations to the State Board of Education regarding standards and programs of training that aid in the development of administrative and management skills of local school administrators, and to conduct such programs related to these purposes as they are implemented under guidelines established by the State Board of Education.

(3) The State Board of Education shall develop and implement through the School Executive Management Institute a program for the development of administrative and management skills of local school administrators under which all local school administrators shall be required to participate.

Section 37-17-6

(1) No later than July 1, 1986, the State Board of Education, acting through the Commission on School Accreditation, shall have fully established and implemented a permanent performance-based accreditation system, and all public elementary and secondary schools shall be accredited under such a system from that time forward. Nothing in this section shall be deemed to require a nonpublic school which receives no local, state or federal funds of support to become accredited by the State Board of Education.

(2) In order to assist the work of the Commission on School Accreditation in the implementation of a performance-based system of school accreditation, there is hereby established within the State Department of Education a Performance-Based School Assessment Task Force.

(4) It shall be the duty of the task force to undertake a study and to propose a plan to establish guidelines and criteria for a performance-based school accreditation system and to report to the Commission on School Accreditation on or before April 30, 1984, on such a study and plan, and it shall further be the duty of the task force to conduct a study and to make recommendations to the State Board of Education through the Commission on School Accreditation concerning curriculum and courses of study to be used in the public schools that are best designed to prepare the state's children and youth to be productive, informed and creative citizens, workers and leaders. Such a study and plan should take into account, but not necessarily be limited to, the following factors relating to performance-based school accreditation:

- (a) The role and behavior of the school principal;
- (b) The amount of time given to instruction (hours per day and days per year), especially in fundamentals;
- (c) The availability and quality of preschool programs and the level of preparedness of children who have been in those programs;
- (d) School-wide student discipline practices and policies;
- (e) The emphasis placed on acquisition of basic skills;
- (f) The commitment to bringing all children to a minimum level of achievement;
- (g) The nature and quality of feedback given to students about their level of performance and the amount of reinforcement given to learning;
- (h) Teacher preparedness as reflected in lesson plans, learning objectives, assessment criteria, and materials;
- (i) Classroom decorum, discipline and management;
- (j) The use of mastery learning techniques, direct instruction and active teaching in each classroom;
- (k) The amount of time on task in all learning situations, and methods of assessing time on task as a measure of teacher effectiveness;
- (l) The availability and use of diagnostic measurements in grade placement, assessment of a need for compensatory work or remediation, and academic achievement;
- (m) The proper sequencing of subject matter from class to class and grade level to grade level;

(n) The coordination of curriculum throughout the system so that teachers know what has been taught in previous grades and what will be taught in subsequent grades.

(7) Once the task force has made its report to the Commission on School Accreditation, the State Board of Education, acting through the Commission on School Accreditation, shall develop by July 1, 1984, an interim performance-based accreditation system, based on said report of the task force for use in accrediting schools in the state. To ensure that a workable system is adopted, the State Department of Education, through the Commission on School Accreditation, shall undertake a two-year field testing and implementation period of the proposed performance-based accreditation system.

(8) In conjunction with a performance-based accreditation system, the State Board of Education shall revise the current schedule of classes of accreditation to better reflect the performance of a school. Such a revised schedule of classes of accreditation shall be in place by school year 1986-1987 and shall be used with the performance-based accreditation system.

(9) As part of the transition to performance-based accreditation, the State Board of Education shall, not later than July 1, 1984, create an accreditation audit unit under the Commission on School Accreditation. This audit unit shall be made up of full-time employees of the State Department of Education who are trained as accreditation auditors. This audit unit shall conduct field audits of schools on a random basis or when ordered by the Commission on School Accreditation, to determine whether schools are complying with accreditation standards. The audit unit shall also train the evaluators set forth in subsection 10 of this section. The audit unit shall report directly to the Commission on School Accreditation on the result of all audits.

(10) The Commission on School Accreditation, beginning in school year 1984-1985, shall by December 1, 1984, select, approve, train and assign all evaluators who conduct on-site accreditation reviews. Prior to this action, the commission shall have established guidelines and criteria for the selection and training of all evaluators and shall have obtained the approval of the State Board of Education of these guidelines and criteria.

Beginning in school year 1984-1985, all on-site accreditation reviews shall be submitted directly to the Commission on School Accreditation.

(11) It shall be the duty of the State Educational Finance Commission to conduct a survey of the educational needs of each county in the state from the standpoint of the efficiency of operating schools and school districts and to develop a plan relating to school district and school attendance center consolidation and reorganization. The State Educational Finance Commission shall submit such report to the State Board of Education not later than July 1, 1985. From and after July 1, 1986, the State Board of Education, acting through the Commission on School Accreditation, shall require school districts to comply with said plan as a criteria for meeting accreditation standards. The State Board of Education shall, for those schools failing to meet accreditation standards, establish a program of development to be complied with in order to receive state funds, except as otherwise provided in Section 206, Mississippi Constitution of 1890. The state board, in establishing these standards, shall provide for notice to schools and sufficient time and aid to enable schools to attempt to meet these standards.

Section 37-17-8

(1) The State Board of Education shall, through the Commission on School Accreditation, establish criteria for comprehensive in-service staff development plans. These criteria shall: (a) include, but not be limited to, formula and guidelines for allocating state funds for in-service training to local school districts which have an approved plan; (b) provide that such funds may not be allocated to local school districts which do not have approved plans, and (c) require that a certain portion of the funds allocated pursuant to an approved plan be used exclusively for the purpose of providing staff development training for beginning teachers within that local school district and for no other purpose. The board shall each year make recommendations to the Legislature concerning the amount of funds which shall be appropriated for this purpose.

(2) Beginning in school year 1984-1985, and each school year thereafter, every school district shall submit to the Commission

on School Accreditation for its approval a comprehensive in-service training staff development plan to be used in that school district. Before the plan is submitted to the commission, the plan shall have been prepared by a district committee appointed by the district superintendent and consisting of teachers, administrators, school board members, and lay people, and it shall have been approved by the district superintendent.

Section 26.

(1) (b) "Early Childhood Education Program" as used in this subsection means a program adopted by a local school district that will provide a nine-month school-year preschool program.

(2) (a) Paragraphs (a), (b), (c) and (d) of this subsection shall be referred to as the "Mississippi Reading Improvement Program," the purpose of which shall be to provide an early childhood education program that assists in the instruction of basic skills. The State Board of Education is hereby authorized, empowered and directed to implement a statewide system of assistant reading instructors in the first, second and third grades.

(b) The program shall be implemented in phases over a period of three (3) years. Beginning with the 1983-1984 school year, there shall be one (1) assistant reading instructor assigned to each first-grade class within the State of Mississippi. Such assistant reading instructor shall assist pupils in actual instruction under the strict supervision of a certified teacher. Beginning with the 1984-1985 school year, there shall be one (1) assistant reading instructor assigned to each first and second-grade class within the State of Mississippi. Beginning with the 1985-1986 school year, there shall be one (1) assistant reading instructor assigned to each first-, second-, and third-grade class within the State of Mississippi.

REQUIREMENTS FOR SUCCESSFUL IMPLEMENTATION
OF THE MISSISSIPPI EDUCATION REFORM ACT

The significance of the reported Mississippi Education Reform Act of 1982 rests with the meaning of the key terms used in stating the performance objective expressed in Section 37-17-6 (see page 1, last paragraph, as follows):

- (1) permanent - in the future, forever in time, without modification.
- (2) performance-based - focuses solely on measurable RESULTS to be delivered by the district as a whole; by each school in the district; by each professional in each school and at the central office - specific to the delivery of predictable learning success by all learners (grades K-12).
- (3) accreditation system - coordinated program by the state department of education to EVALUATE the measured effectiveness of the district's performance (quality of results) and to approve or disapprove state funds to operate the district based on accreditation performance standards.

Additional significant implementation requirements for the Mississippi Education Reform Act of 1982 include:

37-1-2(A). The stated commitment that future educational performance results in the State of Mississippi to be achieved is a mutual accountability partnership including every participant - "have a joint and shared responsibility for the quality of education delivered" (37-1-2(A)).

This commitment will require the implementation of a PERFORMANCE SYSTEM encompassing all districts in the state; linked to state level educational agencies where in all are mutually accountable for the management of and the delivery of quality learner-mastery

results in every district. As a state-wide PERFORMANCE SYSTEM* all professionals must be qualified with new skills and competencies (administrators and teachers) to implement performance-based (results-focused) learner-centered** management, and instructional practices (reference Figure 1).

Within the state-wide performance system each school district becomes a sub-system of the whole. Each district becomes its own educational performance system wherein every participant performs his/her job as a member of the district-wide performance system (reference Figure 2).

Each district will be required to be organized and to be effectively operated (to plan for, to install, and to evaluate) assuring delivery of quality results for learners.

A performance audit will involve the actual measurement by an audit team of How Well the district has performed (against performance-based plans) as measured by actual results delivered for the district; for each school; and, for each professional as related primarily to learner-mastery results delivered. Any detected discrepancies in performance effectiveness standards at any level would be reported and recommendations for change in practices communicated.

These stated performance audit requirements will demand that a COMMON performance-based (management-for-results) process be applied at every level and by every participant within the state-wide educational performance system in order to guarantee internal consistency and compatibility between every accountable educational

*PERFORMANCE SYSTEM: The sum total of the parts of an organization (people); working independently and in interaction; each accomplishing one's assigned job performance requirements; thereby achieving organizational objective(s) - (delivering required RESULTS/Outcomes).

**LEARNER-CENTERED TECHNOLOGY: Those instructional/learning practices which guarantee predictable success for Learners.

partner specific to:

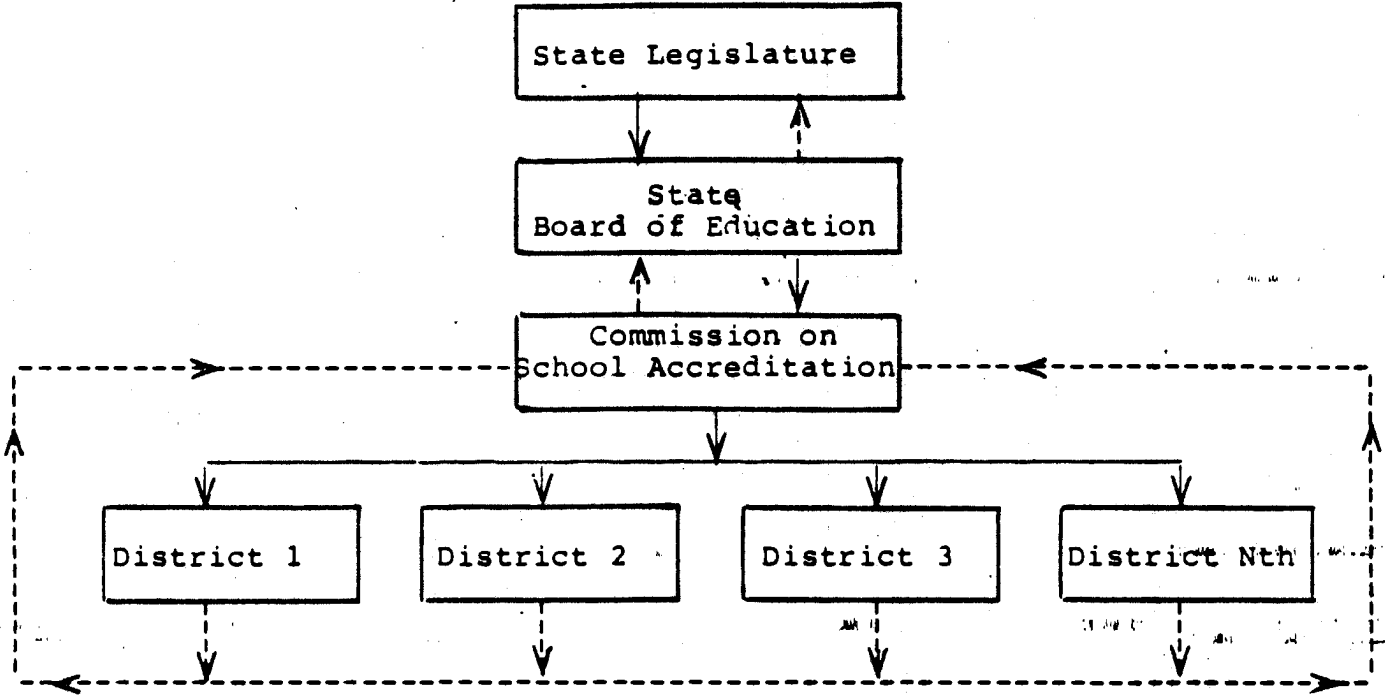
- (1) The deriving and stating of measurable standards defining performance results to be delivered and to be audited later by an external audit team;
- (2) Planning process steps performed by administrators and teachers to derive plans to deliver most cost-effective results;
- (3) Internal and continuous performance auditing within a district to install through quality controls checks; to sense deviation from plan; and to make required corrections IN TIME to navigate to a successful conclusion.

All of the requirements stated above must be met in order to plan, install and operate a successful STATE-WIDE Learner-Mastery Delivery System.

FIGURE 1.

State-wide implementation of the permanent performance-based accreditation system

STATE OF MISSISSIPPI



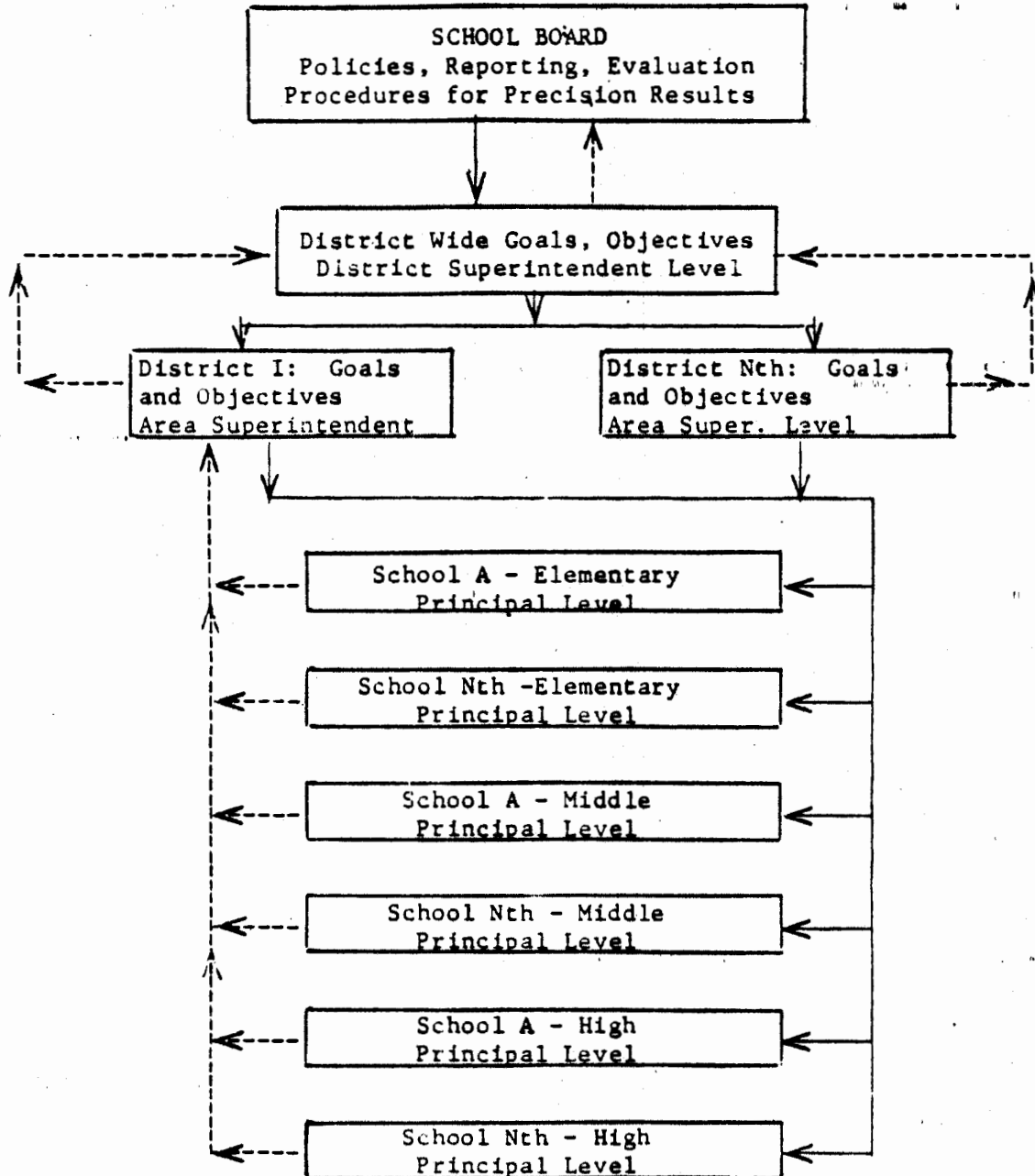
SOLID LINES (————>) Downward flow of accountability linkages between all educational agencies specific to State Legislature; to State Board of Education; to Commission on School Accreditation; and down to each school district (1 to Nth) State-wide.

DOTTED LINES (<-----) Upward flow of accountability showing linkages for feedback of individual school districts (audit tracking and reporting); to Commission on School Accreditation; to State Board of Education; and to the State Legislature.

FIGURE 2.

Linkages between levels of performance accountability and audit tracking in a school district

DELIVERING PRECISION MANAGING-FOR-RESULTS PRACTICES



SOLID LINES (————>): Downward flow of Accountability Requirements specific to District Level Performance Targets

DOTED LINES (<-----): Upward flow of performance data from bottom level (schools) to top levels including Area Superintendents, District Superintendent and the School Board for performance review and decision making by appropriate management levels.

**APPENDIX C: Reports by Practitioners of Performance Effectiveness
of SAFE Management-For-Results Practices**

1. Dr. C. Hines Cronin

2. Dr. John Picton

Moss Point Municipal Separate School District

DR. C. H. CRONIN, SUPERINTENDENT
Post Office Box 727
Moss Point, Mississippi 38863
Telephone 601-475-1533

ASSISTANT SUPERINTENDENT
DR. JIM C. MOORE

DIRECTORS
MR. DAVID MEADOWS, ELEMENTARY
DR. VIRGINIA HOLLIMON, SPECIAL EDUCATION

DIRECTORS
MR. MARVIN W. TAYLOR, FINANCE
MR. ROGER D. SARTOR, VOCATIONAL EDUCATION

September 27, 1982

Dr. Robert Corrigan
P. O. Box 5089
Anaheim, CA 92804

Dear Dr. Corrigan:

In response to your question of my experience through the application of systems with educational finance, the total issue of educational management must be considered. Finance represents only purchasing power with available money--which in turn reflects willingness of the public to tax themselves for the delivery of educational services for learners. In all instances, law and the availability of money imposes the constraint of limitations in total amounts, cash flow, and purpose for use. For effective management against these constraints, a disciplined process for money allocations against priorities must be established as a component for management.

It is the disciplined process imposed by the systems approach which has proved most successful in the two school districts where I was superintendent. In both districts, the financial conditions of the school districts have moved from constrained programs due to a lack of money to an improved program with carry-over funds. Although all needs are not met, the priorities were established, adequately funded and publicly supported. The bottom line is that funds were managed to meet predetermined critical needs. Thus the disciplined process of systems operationally defined the needs, and the requirements and constraints of finance provided management criteria for allocations and expenditures.

Hopefully, the use of systems approach for management which incorporates finance will be implemented by other school districts. It can establish a decision-making posture of control with assurances of effective use of educational dollars.

Sincerely,



C. H. Cronin
Superintendent

SAFE PERFORMANCE EFFECTIVENESS DEFINED

Dr. John Picton, Prior President
Alaska Methodist University

DATE: March 6, 1980

TO: Potential Users of Systems Analysis for Education (S.A.F.E.)
FROM: Dr. John O. Picton, former Research and Development Specialist,
Northwest Regional Educational Laboratory, Portland, Oregon
RE: The use of S.A.F.E. at a Regional Educational Laboratory

In 1968 Dr. Robert Corrigan and Betty Corrigan were contracted to work with Drs. Charles Jung and John Picton of the Northwest Regional Educational Laboratory to apply Systems Analysis for Education (S.A.F.E.) processes to develop a complete 10-year program analysis for "Program 100: Developing Instructional Systems to Improve Teacher Competencies." The effort was to plan, design, implement and evaluate a program involving Northwest regional groups to identify, develop and disseminate viable and feasible instructional systems to produce predictable learner behavioral outcomes in the schools and colleges of the Northwest and to conduct a series of basic research studies related to the programmatic effort.

The systems analysis which was performed under the direction of the Corrigans proved to be very effective and useful as attested by the facts that: the resulting plan was used for the entire duration of the program; the quality of the planning enabled us to secure funding over the years to continue the program; we were able to complete the total program as specified in approximately nine years instead of the projected ten years; the program products have proven so successful that they are currently used throughout the entire nation and in many foreign countries as well. In fact, even though the products were designed to be used within the educational community, many of them have been used, as written, by such groups as the U.S. Air Force; executives of large multinational corporations; federal, state and local governments; and a broad range of social service agencies.

It is very clear to those of us who worked in Program 100 over the years that we probably would not have been as successful as we were if we had not used a process of initial planning such as S.A.F.E. It is also very possible that the entire Program 100 might have been phased out because of changes in funding priorities on the national level had we not been able to document our entire program and progress (using S.A.F.E. processes) and accurately predict the cost benefits of various options.

Those of us who have learned and applied the systems analysis process to complex problems find that it can be very productive when properly applied.

If you have further questions concerning my experience in using the process I may be contacted at:

7675 S. W. 136th Avenue
Beaverton, Oregon 97005
(503) 643-5837

APPENDIX D: About the Corrigan:
National Applications of Corrigan & Associates

Introduction
THE CORRIGANS, THE DEVELOPERS
OF THE SAFE SKILLS TRAINING PROGRAMS

The SAFE (Systematic Approach For Effectiveness) management-for-results skills and practices have been perfected over a period of twenty years through the efforts of Dr. Robert E. Corrigan,* Mrs. Betty O. Corrigan** and the late Mr. Ward L. Corrigan .

The focus of the 20-year development program has been to evolve and test-out the most effective management problem-solving and decision-making practices which will deliver precise and predictable COST-EFFECTIVE outcomes in any management application.

Dr. Robert Corrigan has extensive experience in business and education. As a system analyst with Douglas Aircraft Company he derived the initial SAFE practices entitled, Management-Through-Objectives (MTO). He used these SAFE management practices as a successful consultant with Rheem Califone Corporation to design the first teaching machine. With North American Aviation Co. he assisted in the design of the Minuteman Missile Systems.

As Vice President of Litton Industries he applied his SAFE skills to design and to manage the successful development of instructional materials offering predictable success for trainees.

Dr. Corrigan and Mrs. Betty Corrigan designed and directed a Masters Degree Program entitled: Instructional System Technology at Chapman College in Orange, California. During this period they finalized their SAFE processes to deliver predictable and cost-effective results in all management applications; and, also to deliver predictable success for all qualified trainees or learners in any instructional setting (business, education, government). These techniques have been applied by the Corrigan's to develop the SAFE skills training program: **Delivering Maximum Productivity: Planning, Managing, and Evaluating for Required Results.**

The SAFE skills training programs have evolved to their current level of GUARANTEED and PREDICTABLE SUCCESS for EACH trainee through progressive applications and revisions in over fifty educational institutions, selected governmental applications, and in management applications under the direction of Dr. Corrigan.

*PhD in Clinical and Industrial Psychology
**Masters Degree in Education

To: Members of the Board of Education, Superintendent and Key Administrators

From: Dr. Robert E. Corrigan, President

SUBJECT: NATIONAL APPLICATIONS OF CORRIGAN & ASSOCIATES
Planning, Management and Evaluation (PME) System Methods - and
Predictable Learner Mastery Processes

The installation of and acceptance of Corrigan & Associates' RESULTS-ORIENTED Planning, Management and Evaluation (PME) and Predictable Learner Mastery methods has grown steadily over the past 20 years. During this span of years, Corrigan & Associates has proceeded in carefully designed, systematic steps to develop, field-test, and to validate the performance effectiveness of the results-oriented methods for both management and mastery learning.

In this period of time, (1959-1979) Dr. Robert E., Mrs. Betty O. and Ward L. Corrigan have:

- o Designed and extensively field-tested the GROUP TUTORIALS (learning kits) to test out the capability of the Corrigan systems for producing the highest levels of PREDICTABLE LEARNER MASTERY (they achieved 60-80% predictable Learning Gains for all subjects - and - with all types of learners - (including non-reading, low achievers) (1959-1969)
- o Installed a two (2) years Masters Degree Program at Chapman College, Orange, California in the Graduate School of Education, offering the degree in Instructional System Technology. Graduated some 100 master's candidates (1964-1969)
- o Installed System-wide PME and Predictable Learner Mastery applications for entire Colleges and/school districts - with striking successes. Corrigan & Associates trained all personnel and consulted in the required steps for installation.
 - Duval County School District, Jacksonville, Florida (1969-79)
 - Plumas Unified School District, Quincy, California (1972-73)
 - Oakland Community College, Birmingham, Michigan (1965-68)
 - Fresno City College, Fresno, California (1976-80)

- o Trained some 5000 educational professionals involving over 50 educational clients in PME management and/or mastery learning skills (1965-1979). These clients represent (A) grades K-12 districts, (B) Higher Educational Institutions, and (C) national, state and regional agencies including the U.S. Office of Education (1960-80)
- o Directed national clinics in PME (performance-based management) Systems and Effective Leadership for Learning by Invitation from the American Association for School Administrators, U.S. Office of Education (Title III - Higher Education), others.
- o Initiated the design and installation of the external Education Performance Audit (EPA) for more effective evaluation of ALL parts of the educational delivery system (tying financial resources to desired Results); and, for the reporting to the public, the Board of Education and key administrators the state of performance effectiveness of the school district in the delivery of desired RESULTS; and appropriate changes to increase district-wide performance effectiveness.

In order to provide you a more detailed profile of the professional accomplishments of Corrigan & Associates - and - to provide you the means of checking with clients served by us, we include for your review, the attached documents referenced as Sections A, B, C, and D.

SECTION A: Key Districts (Nationally) for K-12 grade levels applying Corrigan & Associates PME System methods (Management and/or Mastery Learning)

SECTION B: Key institutions of Higher Learning applying Corrigan & Associates PME System Methods.

SECTION C: Applications of the Corrigan & Associates Mastery Learning methods via Instruction/Learning Systems (Group Tutorials and Self-instructional programmed texts) which achieve the highest levels of PREDICTABLE Learner Mastery - and - in particular for helping the disadvantaged, non-performing learner with reading and comprehension skills to show dramatic learning gains.

SECTION D: National platforms provided Corrigan & Associates as experts in the installation of the proposed Comprehensive and Long-Range PME System.

For additional information kindly direct inquiries via our mailing address or telephone number presented in our letterhead.

4. Dr. Alan Cuma, New Orleans Public School Past President, Principals Association (1976-1979) - McMain High School (504) 822-4985

Trained 100+ principals in PME management skills (1976). Continued PME management training for secondary principals (1978-79) as part of SCIP program (Secondary Curriculum Improvement Program). Also trained 100 K-Tip teachers in Curriculum process to design for and achieve Predictable Learner Mastery.

5. Dr. Hines Cronin - Superintendent of Schools, Moss Point, Mississippi. Telephone (601) 475-1533 (1979-79)

Dr. Cronin has made a commitment to a District-wide PME System installation including both management and mastery learner methods. Corrigan & Associates is in the process of installing the Corrigan PME system methods for all professionals.

6. Dr. Mel Buckley, Superintendent of Schools, Newton, Mississippi (1979) Telephone (601) 683-2451

Corrigan & Associates has trained ALL Administrators and Teachers in PME (Curriculum) methods District-wide PME installation in process. This program is carefully designed to achieve State Accountability performance requirements.

7. Dr. Al Hoyer, Minneapolis Public Schools Coordinator Operation P.E.R. (State Level Accountability Telephone (612) 824-5865

Intensive training program involving five key school districts learning the Corrigan PME processes (Planning, Management, Evaluation). The skills were applied to meeting State-wide PER (Planning, Evaluation, Reporting) mandates. See: Performance evaluations prepared by project director - Dr. Merton Johnson. Call Dr. Merton Johnson, Telephone: (612) 331-9960.

SECTION B: Key Institutions of Higher Learning

Key systems trained by Corrigan & Associates resulting in large scale applications of PME processes learned by administrators and faculty.

1. Dr. John Tirrell, Past Director of Governmental Affairs, Association of Junior/Community Colleges, Washington, D.C. Past President of Oakland Community College, the 1st institution nationally to commit to total installation of a learner-centered program involving all faculty (150) and administration. Telephone Number (301) 229-8736.

SECTION A: Key Districts Nationally (K-12 grade levels)

1. **Contact**
Dr. John Grieder, Duval County Schools, Jacksonville, Florida
Telephone: (904) 388-2896

Duval County Schools, Jacksonville, Florida, (1969-79)

- Applying the training of trainers model for institutionalizing the Corrigan's mastery learning design process, over 2,000 district personnel were trained.

The Corrigan MASTERY LEARNING process was applied to the design and installation of comprehensive (K-8th grade) reading and math programs, as well as programs in other subject matter areas (K-12). Produced highest levels of predictable learner mastery for all grades and all types of learners. Acknowledged by USOE as exemplary model for national application. Established the PROVEN effectiveness of Corrigan's Training of Trainers model to train large numbers of professionals who apply methods successfully and with particular successes with low achieving learners.

2. **Dr. John Malarkey, Superintendent of Schools, Plumas County Schools, Quincy, California (1972-73)**

Introduced PME and Predictable Mastery models throughout entire school district. Has been successfully applied over last 6-8 years. Has been able to offset problems other districts are presently experiencing because of Proposition 13 requirements and accountability requirements. Telephone (916) 283-2200.

3. **Dr. Annette Kearney (Past-Assistant Superintendent, Newark Public Schools, Newark, New Jersey) Present Position: National Program Director for the NATIONAL COUNCIL FOR NEGRO WOMEN. New York City. Telephone: (212) 687-5870**

Newark Public Schools (1976-1977)

Trained 100 principals, key supervisors and senior administrators in PME Management and Mastery Learning methods. Practices learned were applied directly to meet requirements for State-wide T & E (Thorough and Efficient) mandates for system-wide change. Newark schools were acknowledged and commended on the excellence of plans and operations in meeting State and local requirements.

4. Community College Senior Administrators, State of California (1974-75) Chancellor's Office, State of California Community Colleges:

- Division of Occupational Education: trained all staff in this division in Corrigan Planning, Management and Evaluation (PME) methods.
- Trained 110 participants from State-wide Community College System including Presidents, Superintendents, Board Members, Deans and faculty in Corrigan & Associates (PME) Management skills.

(See enclosures) letter of recommendation (Vice Chancellor) and evaluations of Corrigan & Associates trainers and PME training program.

5. St. Ambrose College. Davenport, Iowa.

Reference: Father James Kelleher
Advanced Institutional Development Program (AIDP) Coordinator
Title III Telephone (319) 324-1681

Trained 30 key faculty and administrators in PME skills, leading to University installation of planning, management, and Evaluation (PME) Skills.

(See enclosures) Letter of recommendation from Father James Kelleher & President, Mr. William Bakrow. Telephone (309) 324-1681

San Joaquin Valley Community College Council for Occupational Education (SJVCCCOE)

- Trained 30 key faculty members in Corrigan's Mastery Learning curriculum design process to design learner-centered Basic Skills curriculum for installation in Fall, 1979. Contact: Dr. Dave Bochman, President, SJVCCCOE, Dean of College of The Sequoias, Visalia, California. Telephone (209) 733-2050

Oakland Community College, Bloomfield Hills, Michigan, (1965-68)

- Trained all faculty and administrators (175) in the installation of a comprehensive learner-centered, college-wide program.
- Corrigan's Mastery Learning curriculum design process applied to design ALL curricula in ALL areas (academic and vocational/occupational)
- Installed Performance-Based Management System Procedures
- Produced 59 self-instructional programmed texts in selected areas. These linear self-instructional programs have been acknowledged as among the most effective units for assuring learning success.

2. Dr. John Picton, Past President, Alaska Methodist University, Anchorage, Alaska. (1973-74).

Presently President of own consulting firm, Telesis Inc., Beaverton, Oregon, Telephone (503) 643-5837.

- Trained all faculty (60+) in Mastery Learning curriculum design methods. Applied Corrigan processes to program designs in all areas of curriculum application. Applied PME management methods for senior administrators including the office of the President.

3. Fresno City College, Project: MOBILITY and Extended Family (Guidance Counseling Model) (Mr. Richard Handley - Associate Dean of Instruction, Project Director, Telephone (209) 442-4600

Fresno City College, Fresno, California (1975-present)

- Phase II Research and Design Program — trained administrators and faculty in skills required to install comprehensive management and curriculum design processes to increase learning success for disadvantaged learners; in five selected vocational/occupational areas support systems to aid disadvantage youth to commit to and to succeed in achieving career/vocational objectives.
- Phase II proposal was granted by USOE for \$300,000 to achieve the above. In addition, the Department of Labor granted \$395,000 to install the Counseling/Guidance System. Both proposals were written by Corrigan and Associates. All objectives of the Phase II proposal were met or exceeded. The Extended Family proposal is in progress and on schedule. An additional Title III SDIP Grant (1979-80) to begin installation of a PME system in the Fresno college has been awarded (\$95,000). (1 yr grant)

SECTION C: Application of Corrigan & Associates Mastery Learning techniques applied in development of commercially available learning systems (Group Tutorials - and Self-Instructional Linear Programs)

1. **The Group Tutorials: (1960-69)**

The TUTORIALS were developed and field tested involving several thousand learners to validate the Corrigan process model for achieving Predictable Learning Mastery. The results of this program assures that others will achieve comparable results if curriculum design is applied as directed in the development of curriculum or Lesson Plans for use in teaching.

Alamitos School District, Garden Grove, California

- **Group Tutorials deliver PREDICTABLE LEARNING (60%-80% learning gains) for all levels of learners, including disadvantaged youth with reading problems.**
- Validated with several thousand learners in (California - and - nationally)
- Large scale independent field test of Group Tutorials in Oregon producing results reported above (Performed by Oregon Department of Higher Education - State Department of Education)
- Verified the capability of the Corrigan Mastery-Learning process to the design and delivery predictable learning success in any subject matter area (60% learning gain or better for specified learning objectives). See Corrigan Skills Training programs.

2. **Trans World Airlines, (1962-63)**

- Trained TWA personnel to design their program for training and qualifying all flight personnel for flying the DC-9 aircraft system (applying Corrigan's Mastery-Learning design processes).

Results: FAA acknowledged the courses to be best ever for qualifying personnel with required knowledge and skills assured Predictable Mastery for flight personnel. Sold to other airlines by TWA as first qualified training system approved by the FAA.

3. Oakland Community College. Bloomfield Hills, Michigan (1965-68)

Produced 59 self-instruction commercially available programs in multiple subjects areas. Will achieve 90%-90% results: i.e., ninety percent of learners will achieve 90% or better on post criterion test questions provided.

SECTION D: National Platforms

1. Chapman College, Orange, California (1964-69)

Dr. Robert E. Corrigan - Chairperson, Graduate School,
Department of Instructional System Technology

- Offered Masters Degree in Instructional System Technology
- Granted 3.5 million dollars for USOE Experienced Teachers Fellowship Program to train Master Degree Candidates - three year grant. (1965-1968)

Reference: Dr. Wilfred Landrus - Past Dean of Education
(1965-1969)

Current Faculty Member - Chapman College, Orange, CA
Telephone: (714) 997-6776

2. Operation PEP. State of California (1965-68)

- Directed the First State-wide program for installing Corrigan & Associates PME System methods. OPERATION PEP (Preparing Educational Planners). State of California (Federal program funding \$2.9 m).
- Trained 125 key administrators (State-wide) Lead to statewide installation of PME methods in all Title III enters - and - many school Districts.

3. Northglenn, Colorado, Adams County School District No. 12 (1979)

Contact: Dr. George Bailey, Superintendent of Schools
Telephone: (303) 451-1561

Completed Educational Performance Audit (EPA) developed by Corrigan & Associates to assess status of an institution in the design and installation of a Learner - Centered PME Performance System.

4. Address by Dr. R. Corrigan, at request and invitation from Dr. Anita Alan, Director AIDP Title III Program U.S. Office of Education, D.C. entitled Planning, Management, and Evaluation (PME): The Handwriting is on the Wall.

Presentation for 80 presidents and program directors of AIDP Title III grants; address designed to define the meaning of PME - and - the steps for application; widely distributed to all Colleges and Universities. Set national standards for PME System installation requirements for Title III, AIDP.

5. American Association of School Administrators, Atlantic City, New Jersey, and New Orleans, Louisiana, February 14-17, (1976 and 1979) National Conventions. First clinic nationally on performance based PME management practices (1976). Directed one of six (6) major clinics, over a 4 day period addressing the issue: Effective Leadership for Learning: The Challenge of the 80's (1979). The clinic title was the keynote of the AASA national convention. In February 1980, Dr. Corrigan made a presentation entitled: Improving Confidence in Your Schools: How You Can Win. Call Dr. Louis Zeyen, Assistant Director, American Associates of School Administrators. Telephone: (703) 528-0700.
6. Association of California School Administrator, Project Leadership. See - Letter of Commendation.

SECTION I:

**PROFESSIONAL TEACHING PRACTICES TO DELIVER
PREDICTABLE SUCCESS FOR OUR LEARNERS**

Chapter 1

Teachers: The Hope of America for Successful Schools in Our Future

Chapter 2

**Current Teaching Practices Evaluated Against the Delivery of Student Growth
(Learning Gains) — A Zero Correlation (Homer Coker)**

Chapter 3

**Comparing Learning-Centered Practices with
Teaching-Centered Practices for Delivering Learner-Mastery Results**

Chapter 4

**Proven Learning-Centered Practices for Educational Professionals:
The Alamitos Group Tutorial Program**

Chapter 5

**Accountability for Instructional Management (AIM):
Focusing on Professional Practices for the Delivery of Quality Learning Results**

Chapter 1

Teachers: The Hope of America for Successful Schools in Our Future

Introduction

Our world of public education is in chaos. The requirement is presented to reverse this predictable continuing negative trend.

We propose that the hope for success for education lies with our teachers - those who are directly involved in delivering success for learners.

We must terminate the defensive, paranoid world of adversary relations among our teachers, our managers, and our parents.

We must return the teacher's image to one of credibility and professionalism evidenced through discipline, skills and caring. This can be one of the most important single commitments for our nation's survival and growth. This can only be accomplished through a 3-way mutual commitment between and among the community (board, parents, industry, government), the teachers and the administrators, based on the sole focus of delivery of success for our learners. Such a commitment can only be achieved through a rational process offering dignity for all.

The current status in education is predictable loss for every partner - a Lose-Lose model. The capability to change things around from a Lose-Lose to a Win-Win model can only be accomplished through the teaching profession. The profession, the heart for delivering learner success, can effectively move the world of education to a winning model for all.

A last chance is presented for each American citizen to commit to processes to rebuild our national public school system based on rational and reasonable standards of (a) mutual interdependency, and (b) mutual accountability between all those concerned as it will affect the future destiny of our nation and the success of our children who will define our national future destiny.

An appeal is directed to the teaching profession of America to establish those teaching practices and standards specific to the model of Due Care and Disciplined Caring which will, in turn, define those teaching practices required to deliver predictable Learner Mastery results for today's children and all future generations of children in the United States of America.

This appeal is postulated on the reality that without such a brave and super professional commitment by the teaching profession our children's future and thereby our nation's survival, is in real jeopardy, due to a consistently declining quality of learning results.

A three way Quid Pro Quo model of mutual accountability among the community (the employer) and the professional educator (teachers and administrators) is proposed. The focus of the Quid Pro Quo model of mutual interdependency and mutual accountability is the delivery of predictable learner success in our schools.

This proposed commitment by ALL of the partners of the educational enterprise is based on new concepts defining the role and function of each of the partners in delivering skills to be mastered by teachers, administrators, and community leaders, including Boards of Education. Complexity is discussed only in terms of NEED-TO-KNOW and/or NEED-TO-DO skills and requirements to deliver predictable success for our learners. The statement too often heard in the past from educators, that "this proposal (any proposal) is too complex" is reduced to its only meaningful base when answered with the question, "To accomplish what?"

In the proposed model to follow, the teacher becomes THE critical "player" in the business of education. As such, the community, financial, and political support requirements to back the teacher in delivering learner mastery success becomes crucial. The role of all administrators becomes one of SUPPORT to the successful delivery of learner success in the classroom.

The ideas presented can lead to a WIN-WIN model for all concerned (learners, teachers, administrators and the parent and community). It will require the reformulation of self-perception by all concerned of appropriate roles and functions; a reorganization of school priorities for the schooling process; a redefinition of performance standards to be achieved by each partner; a commitment by each partner to be accountable for self-performance; and, a rational and constructive plan to establish a CREED for defining mutual interdependency requirements among and between each of "us."

Implementing the proposed changes, our learners succeed; the teaching profession's positive image is returned; the basis for proper compensation for the teaching profession and resources for the schools is established on Quid Pro Quo inter and intra performance agreements between the partners.

If these ideas are rejected, our national and personal futures are to be seriously and predictably jeopardized.

Dr. Leon Lessinger has proposed application in education of his concept of Disciplined Caring within which there are three elements, Due Process, Due Regard, and Due Diligence. He has also distinguished between "practice teaching" and "teaching practices" and proposed that teachers should be held accountable for:

...knowing and using those ideas and procedures which research and the state of the art recognize as "good practice". In short, 'professional practice' is the appropriate standard of professional accountability.

We propose that these ideas be incorporated into a 3-way Quid Pro Quo Model to re-establish teaching as a dignified profession. The hope of American education lies in the teachers who can provide learners with knowledge and skills required to succeed in our society. Teachers cannot be held totally accountable for each child's success, since there is also the domain of accountability for the learner and the parents. But teachers can be held accountable for the practices they employ. The teaching profession can adopt reasonable standards of good practice for holding teachers accountable, as the medical profession holds doctors accountable for good practice. Once standards are developed, the profession and the teachers can hold themselves accountable in a self-regulating system. The measure of good teaching practice is predictable mastery learning results.

Teachers can also hold teacher colleges accountable for equipping graduates with competency in required practices.

If teachers hold themselves accountable, then they should be dignified and rewarded for their professional applications within the 3-way Quid Pro Quo Model in which the community and administrators are also accountable for appropriate functions and practices.

The following requirements must be met to initiate and implement a Professional Standards 3-way Quid Pro Quo Model.

Focus for Setting Practices

Standardized teacher practices must focus on Quality of Learning (Mastery Results) and successful delivery of Quality Learning. This will require shifting from the conventional commitment to Quality Instruction and the resulting management of Quality Instruction.

The difference between Quality Instruction and Quality Learning lies in the focus of questions asked to design lesson

plans and curricula. If Quality Instruction is the commitment, the question is, "What will I teach?" The planning is based on what the teacher will present, what materials will be used, and how instruction is to be managed.

If Quality Learning is the commitment, the question is "What must our learners learn?" All planning is focused on determining, first, everything the learner must accomplish. Then consideration is given to the optimal ways and means for the learner to learn. Finally, materials and teaching instructional strategies are selected to promote the type of learning required. In Quality Learning, teaching and/or instructional practices become subordinate to learning requirements and are implemented to assure the delivery of predictable learner mastery results.

Through analysis of requirements for implementing Quality Learning and Disciplined Caring, these "good practices" competencies can be identified and standards set.

Professional Adoption and Commitment

The teaching professional leadership, as an initial quality assurance step, would demand the introduction of the most effective and proven practices for Learner Mastery design, instruction, and the management of the delivery of predictable learner mastery results. The profession would demand the learning of these skills by all teachers in every school in America. The result will be common processes defining required teaching practices which will deliver predictable Learning Mastery Results.

The adoption of standard teaching practices and appropriate performance standards for effective evaluation and criteria would influence the type of training provided by Teacher Colleges. Graduates would be required to meet professional standards, and colleges could be monitored by the profession to assure that new teachers entering the field have been provided required competencies and practices to meet measurable standards. This

could establish a truly professional collaborative model between those in the field, the practitioners, and those responsible for training the new recruits.

Adoption of standardized teaching practices would allow the profession to become self-regulating. Teachers, knowing accountability standards, could evaluate and monitor their own performance. Peer evaluation would become possible. Evaluation by administrators would be governed by standards which would be universally applied.. Due Process and Due Care could become the rule, not the exception, once professional standards are the basis for accountability and evaluation.

The results would be the measurable achievement by all teachers and learners as the profession as a whole applies these new practices and continues to incorporate future advances. This could represent a profession-wide commitment for all to only those teaching practices which assure predictable learner success.

This highest level of professionalism sets the stage for the return of hope for our schools.

Teacher Accountability

It is suggested that all teachers (NEA, teacher unions, etc.) commit to being responsible for appropriate TEACHER PRACTICES to assure the delivery of predictable learner (mastery) success in every classroom. These practices would set accountability standards for teachers expressed as measurable performance defined in terms of their self-regulated teaching practices.

This model of professional accountability for the teaching profession would replace the often inappropriate model of accountability, in which the teacher is held TOTALLY accountable for success of each child, without regard to mutual accountability requirements by parents and learners. The latter is not feasible because environmental and parental influences outside the

classroom are beyond the direct control of the teacher.

The teacher cannot be realistically held solely accountable for the success of EACH LEARNER, but the teacher can be held accountable for the quality and relevance of those standardized teacher practices which, when properly applied, will deliver learner mastery results if the learner cooperates and performs, as required, to achieve his learning assignments.

It is here that the parent is the fulcrum for learner motivation, adding a crucial element in support to the teacher and learner.

The Teaching Profession Model: Application and Benefits

To reestablish teaching as a dignified profession, it is proposed that the teaching profession could start by modeling itself after the medical profession; i.e., establish a teacher's professional accountability model solely committed to resolving the critical needs of our learners, as physicians serve patients. The profession might develop a "teachers oath" defining accountability requirements as stated in the physician's Hippocratic Oath.

By performing these recommended steps, our teachers become a creditable hope and a national treasure linked to the successful future for coming generations; become the primary instrument to guarantee the delivery of successful future generations; become self-regulating with internal standards for quality control and quality assurance of effective instructional/learning/teaching practices delivering predictable success for learners; become monitors for establishing required competencies (practices) for graduating teachers; and for the design of university courses and performance objectives and standards which assure the development of required teacher competencies (practices) for successful application in the classroom to deliver predictable learner-mastery results.

When the Professional Standards Model is coupled with the 3-way Quid Pro Quo Model, the awards to the teaching profession in money, dignity, and the contribution to the future of our nation will be multiple. The future of public education would be in the hands of those who are qualified to deliver predictable success for our children; and, the educator would be totally accountable to the learner - as the doctor is accountable to his patient.

The need for a similar commitment by all parents and the other members of the community is equally critical.

A 3-Way Quid Pro Quo Model

Quid Pro Quo, literally translated means "this is for that." It implies giving or exchanging one thing for another, or one thing in place of another. If this were applied to the teaching profession, teachers would agree to provide and be accountable for "good practice" resulting in predictable learner success in exchange for their salaries and benefits.

Within the public education enterprise, there are other groups who should also be involved in Quid Pro Quo - the community and the administrators. The community includes parents, business and industry, taxpayers, special interest groups, retired teachers, non-parents or anyone interested in schools, and learners - all represented by the Board of Education. Administrators include Superintendent, Assistant Superintendents, Central Office staff, Principals, or anyone in an administrative position, as well as support personnel.

For the community, Quid Pro Quo implies that the community provide resources to the schools in exchange for the delivery of successful graduates. Successful graduates would possess the required competencies to become contributing self-sufficient community members.

Quid Pro Quo for administrators and support staff implies that in exchange for their salaries they will provide effective and efficient management, instructional design and support practices to assure that teachers can fulfill their commitments to deliver learner's success.

The proposed Professional Standards commitment, if enacted by the teaching profession, **MUST** be completely understood and totally supported by the parents and community leadership. The community, as the employer, must be prepared to support this brave, professional transition by agreeing up-front to a continuing mutual accountability relationship among community, teachers, administrators, to deliver learner success. All must demonstrate their willingness to shift to a 3-way QUID PRO QUO model of mutual accountability based on this notion of a Professional Standards teacher practices model.

The organizational charts for our school should be redrawn to focus the delivery of learner results supported by all educational components. This is opposed to the conventional organization for a school district which shows the Board at the top supported by Superintendent, other Administrators, Divisions and Schools. The learner is rarely identified. (See Figures 1 and 2, pages 12 and 13)

Community/Board Accountability

School Boards, representing the Community, must agree on the idea that they should qualify themselves with required **MANAGEMENT/PLANNING** skills and knowledge that would establish appropriate policies; derive realistic and feasible priorities for action; and derive organizational/program evaluation procedures.

They must learn to keep out of day-to-day operations while holding those responsible to be totally accountable for delivery of required results.

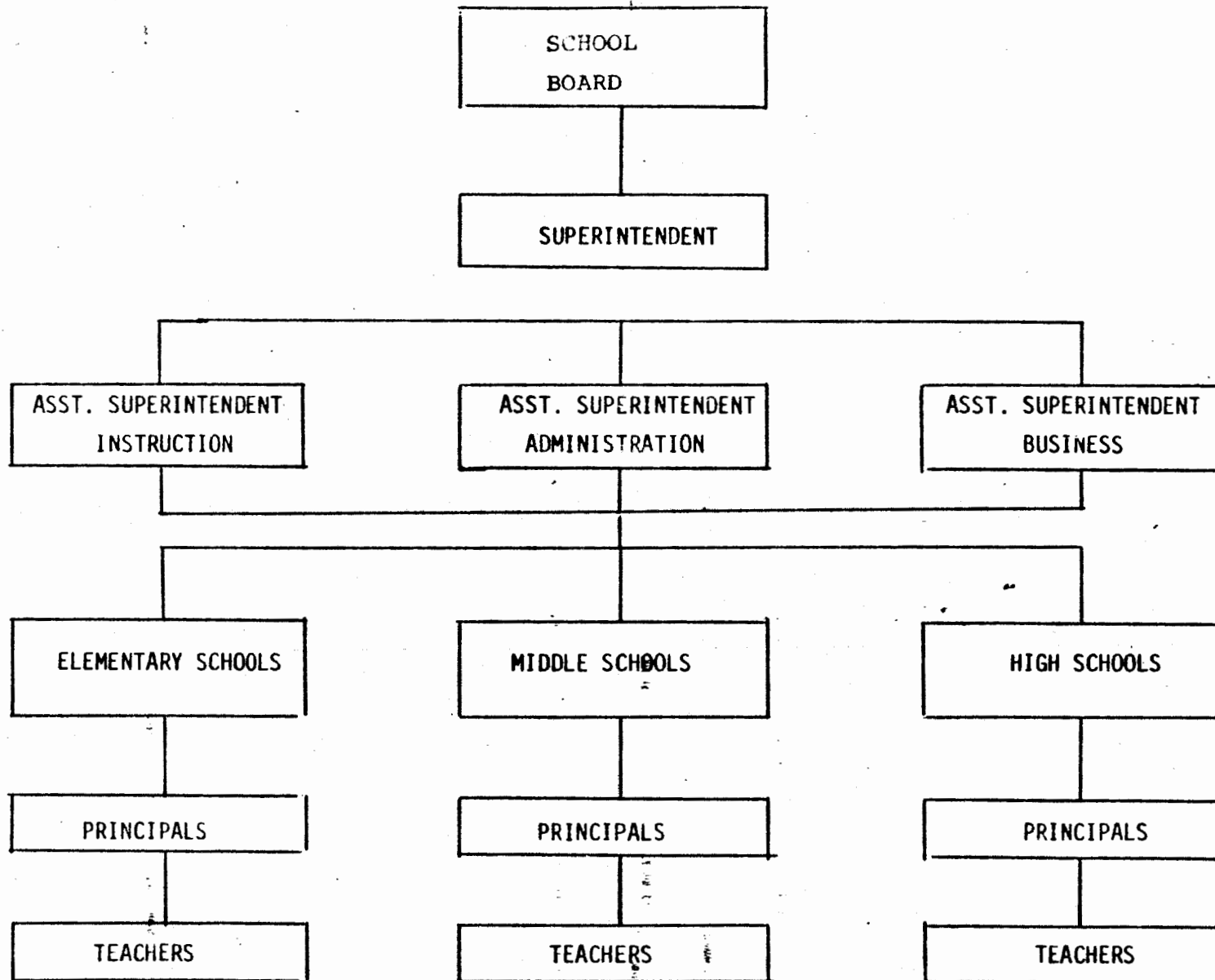


FIGURE 1. Typical Organization Chart for Today's School Districts.

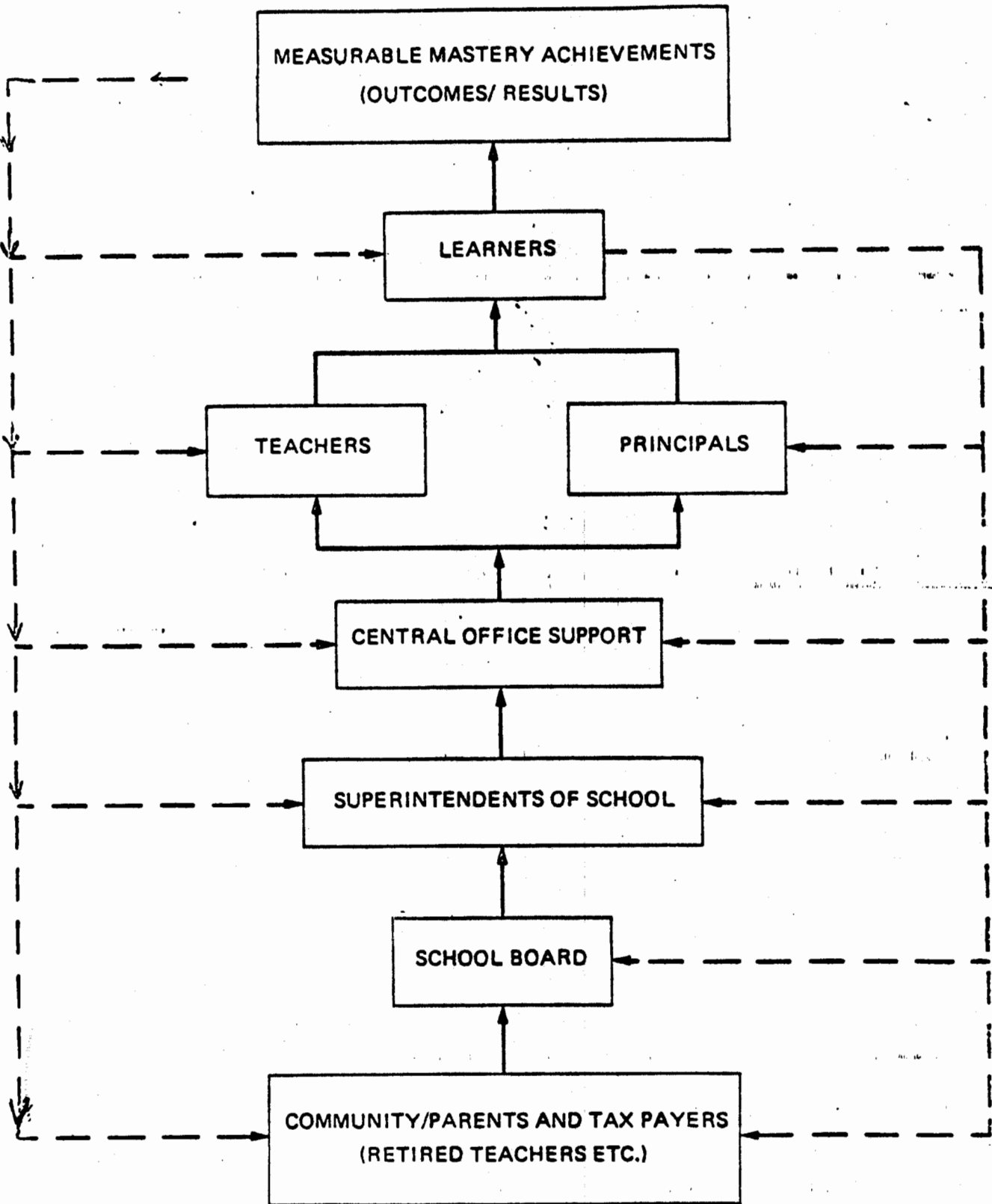


FIGURE 2. A functional organization chart specific to delivering predictable learning mastery as the prime target of the teaching profession.

The Community and Board will allocate resources to support programs designed to meet policies and priorities based on the needs of learners and community. All programs would be totally performance-based and personally accountable for delivery of most COST-EFFECTIVE results.

Administrator Accountability

The administration (central office personnel, principals, department heads) must be organized solely to deliver learner success. This requires that learner success is the only focus. Everything else is subordinate to this achievement. Thus, the critical function of the administrator is to SUPPORT the teacher and the principal. In turn, the principal becomes responsible for managing activities to support the teacher's delivery in the classroom.

The administrators would be accountable for implementing efficient and effective planning, management and evaluation techniques which assure delivery of program and district objectives via the successful practices applied by teachers delivering predictable learning mastery outcomes.

Teacher Accountability

Teachers would be accountable for meeting professional standards of "good practices" in delivering successful results for learners. Teacher evaluation in this new model would be performed by TEACHERS and PRINCIPALS to evaluate the delivery of established TEACHER PRACTICES expressed by concise measurable standards as approved by the teaching profession.

The evaluation would be used as a constructive tool by teachers evaluating their peers to identify measurable discrepancies from standardized teaching practices related to the delivery of mastery results for learners.

Principals, as accountable learning managers, would be responsible for identifying teacher performance deficiencies.

If necessary, the administrator must apply due process steps with teachers leading to their removal when performance deficiencies so warrant.

Parent-Learner Accountability

In the final analysis, the ultimate accountability for the success of a learner must lie with the parent and that learner in combination. The teacher can and will help to motivate the learner to apply him/her self to achieve success; but the learner must be self-motivated to commit to learning. In this model of mutual accountability between parents, teachers and learners, the accountability of a learner's efforts must rest with the parent and child in combination.

Quid Pro Quo Negotiation

The industrial union negotiation model currently used by teachers and/or administrators, would be replaced with the teacher/administrator practice standards model. Professionals/teachers/administrators would agree to performance evaluation for the delivery of effective instructional-learning practices and/or management of same against defined professional standards. In turn, these achievements would be a basis for salary increases and for the approval of required resources provided by the community (people, money, materials, equipment) to assure successful delivery of predictable learner success (mastery) in the classroom.

Through the proposed Professional Standards Model and the 3-way Quid Pro Quo Model, we introduce a WIN-WIN model for all.

We hope that after careful review you will accept the validity of the proposal; and that you will commit to action with full-scale implementation on a national scale.

Your decision will impact on the future peace and security of our children and perhaps the very survival and growth of our nation.

Chapter 2

Current Teaching Practices Evaluated Against the Delivery of Student Growth (Learning Gains) — A Zero Correlation (Homer Coker)

Dr. Homer Coker
Professor of Education
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Little evidence exists to show a relationship between mastery of a given set of competencies by teachers - and effective teaching as measured by successful learning results. Here are some startling preliminary findings that call into question some of our most sacred ideas about how an effective teacher behaves - and - the results produced specific to success for learners.

Published research of fifty years ago clearly indicated that the validity of trained supervisors' judgments or ratings of teacher effectiveness as measured by student growth (learning test scores) was zero. The research showed that the least effective teacher in a school was just as likely to be rated effective by a supervisor as the most effective one.

In 1959, Medley and Mitzel conducted a study which verified these findings. They found that skilled observers - supervisors and administrators who rated the effectiveness of their teachers - produced ratings of teaching effectiveness which were unrelated to measures of pupil learning gain. This surprising finding led them to another: All the studies they could find relating ratings of teacher effectiveness to reasonably objective measures of pupil outcome also showed no relationship. They concluded that reasonably sophisticated observers using high-inference rating scales* were unable to identify what actually influenced student learning.

Their findings should have raised serious questions about the basis on which school systems and colleges of education and school systems train and evaluate teachers, but they were ignored. There is little evidence to suggest that this unfortunate state of affairs has changed over the past twenty years. However, our recent work further supports their conclusion and clarifies what it may mean.

In 1973-74, we gathered lists of competencies being used by various states with competency based teacher education programs. We asked three (3) committees of teachers (a total of 55) to cull from these lists of competencies they felt were basic to teaching in any context. The resulting competencies were then distributed to a larger sample of teachers who confirmed that they were, in

* High inference rating scales: based only on opinion, conjecture and abstract standards not on measureable criteria

fact, generic. But rather than assuming that these competencies must be valid indicators of pupil learning, as has been common in many states, we began a validation process.

In order to obtain more objective, behavioral measures of these competencies, we began by identifying five well developed, low-inference* classroom observation instruments which contained ** items reflecting our list of competencies. Low-inference measures are those which record the predetermined and well-defined behaviors that occur in the classroom using a coding system rather than asking the observer to make an abstract rating based on a variety of behaviors. We then asked the developers of these observation instruments or researchers familiar with them, to identify the items in each instrument which were good indicators of the target competencies. Our validation process consisted of having trained observers use all five instruments in a sample of 100 classrooms over a two-year period. Measures of student achievement and self-concept were obtained at the beginning and end of each year. A measure of family socioeconomic status was obtained for each student. Scores for the targeted teaching competencies were obtained from the five observation instruments for each classroom and related to the measures of pupil growth. Significant relationships found between teacher behavior and student achievement are reported in Table 1.

Since, by definition, possession of each competence should make a teacher more effective, all the relationships should be positive; but five of 15 significant relationships were negative. In addition, one significant relationship was positive in the secondary grades but negative in the elementary grades, and another was positive for mathematics but negative for language.

Among the teacher behaviors found to be related to decreased achievement gain are the following: *Using non-verbal communication skills; Pausing, eliciting, and Responding to student questions; and Giving pupils a voice in decision making.* Using feedback from pupils to modify teaching related negatively in the elementary grades but positively in high school. One-to-one counseling related negatively with language development but positively with mathematics.

Most teacher educators, administrators, or other experts would agree with the teachers in their belief that all of these are behaviors that should characterize effective teachers rather than ineffective ones. Yet these data (stable over two separate years) either contradict these beliefs or indicate that they are sometimes true and sometimes untrue. The most recent literature reviews indicate that other recent research tends to confirm at least some of these findings.

* Low-inference rating scales define teacher behavior in concise measureable criteria.

** The five instruments used were: FLACCS, OSCAR 5V, TPOR, STARS and CASES.

Table 1. Teacher Behaviors Significantly Related to:
Achievement Gains in Both Years*

- I. *Negatively related*
- 3B-T Pauses, elicits, and responds to student questions
 - 4C-T Uses nonverbal communication skills
 - 5D-T When student not on task, teacher makes contact
 - 8D-T Provides opportunity for students to have voice in decision making
 - 8E-T Evidence of praise and/or rewards in operation
- II. *Positively related*
- 2A-T Selects goals and objectives appropriate to pupil needs
 - 2D-T Involves students in organizing and planning
 - 3A-T Gives clear, explicit directions
 - 4A-T Demonstrates proper listening skills
 - 4B-T Respects individual's right to speak
 - 6A-T Maintains self-control in classroom situations and with students
- III. *Negatively related relationship in elementary grades, positively related in high school*
- 5A-T Uses student feedback, verbal and nonverbal, to modify teaching practices
- IV. *Positively related with elementary mathematics and negatively with elementary language arts.*
- 9C-T Evidence of opportunity for one-to-one counseling

p < .05

Relationships between teacher competencies and learning gains in pupil self concept (Table 2) are even less in agreement with the expectations of practitioners. Seven of 12 competencies are negatively related to growth in self-concept; among these, two - *Selects goals and objectives appropriate to pupils' needs* and *Involving students in organizing and planning* - were found to be mixed across grade levels.

Making contact with a student who is not on task, and non-verbal communication related negatively with both kinds of gains (achievement and self-concept).

There was one behavior - *Evidence of Praise and/or rewards* - that was positively related to self-concept learner gains but negatively related to learning achievement. Another item, *Utilizing student feed back (verbal and non-verbal)*, related positively to both kinds of gains in high school but negatively with achievement in the elementary grades.

Behaviors that were related in the expected direction (positive learner performances) included *Listening to students; respecting the pupil's right to speak; selecting goals and objectives appropriate to students; involving students in organizing and planning; giving clear, explicit directions; and maintaining self-control.*

Table 2. Teacher Behaviors Significantly Related to Self-Concept Gains in Both Years

- I. *Negatively related*
- 3C-T Uses a variety of methods, verbal and nonverbal
 - 4A-T Demonstrates proper listening skills
 - 4C-T Uses nonverbal communication skills
 - 5D-T When student not on task, teacher makes contact
 - 8F-T Supportive classroom management
- II. *Positively related*
- 5A-T Uses student feedback, verbal and nonverbal, to modify teaching practices
 - 6A-T Maintains self-control in classroom situations and with students
 - 8E-T Evidence of praise and/or rewards in operation
 - 9A-T Accepts and incorporates student ideas
 - 9C-T Evidence of opportunity for one-to-one counseling
- III. *Negatively related in intermediate grades, positively related in primary grades*
- 2A-T Selects goals and objectives appropriate to pupil needs
- IV. *Positively related except negative with physical appearance in intermediate and secondary grades*
- 2D-T Involves students in organizing and planning

$p < .05$

Two behaviors - Supportive classroom management and Using a variety of methods (verbal and non-verbal) related negatively with self-concept but did not relate with achievement. Another item, Accepting and using student ideas, related positively with self-concept but not with achievement.

One behavior, Maintains self-control in classroom situations and with students, was positively related to both learner self-concept and learner achievement gains. A final behavior, Evidence of one-to-one counseling, was positively related to self-concept and had opposite relationships with gains in mathematics and language.

The inconsistency of relations with different outcomes; the frequent violations of expectations, sometimes only at certain grade levels, and the number of competencies that failed to relate at all - these lend little support to our common assumption that beliefs of teachers or experts about the nature of effective teaching are generally correct.

Summary and Conclusions

The research that currently exists indicates that at least some of the competencies our teacher training programs are teaching may well reduce teacher effectiveness rather than increase it. Although findings are strongly suggestive, we are not positive. The reason is that for many years the methodology used to study the problem was defective, being based on subjective ratings rather than on objective measurements of teacher behavior. To this very day such ratings are almost universally used for teaching evaluation, despite considerable evidence that they are not valid.

The way to improve instruction in the schools (as measured by learning success) is by up-grading the teaching - by improving teachers' ability to create and maintain classroom conditions under which pupils receive maximum benefits (actually achieve predictable learning success) from the facilities, instructional materials, and supervision provided by the schools. *Without teachers competent to use them, all of these supports, including support personnel, are ineffective* - and - thus, delivering the reported failure rather than success for learners.

An effective program for upgrading teacher competence must, first of all, be based upon Learning-Centered PROCESSES known to result in greater teacher effectiveness - namely predictable student learning gains. The competencies a teacher must have are ones which will assure the teacher's ability to promote predictable pupil learning success in the situation in which that teacher works (the classroom).

The only way of ensuring that this is true is to establish the *validity* of the competencies empirically - to demonstrate that pupils of teachers who possess the competency show greater learning gains toward the learning objectives of the school than pupils of teachers who lack such competencies. There is no other way.

Improvement in teaching effectiveness (predictable Learning success) can be sought via two routes: by getting better teachers than the ones you have now or by improving those you have. The former route becomes less practical every year; the simple fact is that most of the teachers in the schools today will still be a part of the teaching force *ten or more years from now*. Any substantial improvement in teaching must therefore, be achieved by increasing the effectiveness of those currently employed.

Chapter 3

Comparing Learning-Centered Practices with Teaching-Centered Practices for Delivering Learner-Mastery Results

Introduction

Our present schooling practices are primarily TEACHING-CENTERED. These TEACHING-CENTERED practices focus on the question, "What will our teachers teach?" This TEACHING-CENTERED approach has not delivered winning programs for our learners.

Rather than focusing on what a teacher will teach, we must shift our focus to success for our learners. This is done through a LEARNING-CENTERED approach; an approach that focuses on the question, "What will our learners learn?"

A LEARNING-CENTERED educational approach redirects all efforts to achieving learning success and to applying those professional practices by teachers and administrators required to deliver predictable learner mastery results.

Refocusing to deliver mastery learning results redefines curriculum design, curriculum implementation, and the nature of the management process (both for the administrator and for the teacher as the classroom manager of learning results).

We would appeal to each educational partner (parents, school board members, senior school administrators, principals, and teachers) to take the time and to make the effort to learn about these proven LEARNING-CENTERED practices and their capability to deliver mastery results for our learners, and in turn, effective management practices for delivering mastery learning results.

The final achievement derived from understanding and applying proven LEARNING-CENTERED practices will be that

everyone (as a team) can refocus and, in turn, can commit to assured success for our learners.

Comparing Teaching-Centered with Learning-Centered Practices

The primary commitment of education must be the delivery of predictable learning success for all learners. Predictable learning success is the ONLY business or product of our schools.

The KEY to the delivery of predictable mastery for all learners will be the shifting from current traditional instructional methods to the new and proven Learning-Centered (MASTERY) technology.

You are presented on pages 26 and 27 Table 3, which examines the critical differences between the traditional (teaching-centered) instructional technology and the new and proven Learning-Centered technology. These tables ask key questions and provide information for both teaching-centered and learning-centered technologies.

The key questions asked to make a realistic comparison between these technologies are as follows:

1. What is the FOCUS for instruction?
2. What is the model of instruction involved?
3. Who is the Star?
4. What is the focus of design?
5. What is the anticipated distribution of test scores for learners applying alternative instructional strategies?
6. What is the model of evaluation (standards and methods)?
7. How is instructional effectiveness (Learner-Mastery Results) linked to class size?
8. How are costs of instruction compared between practices?
9. Historical View: What are the results delivered (reported long-term effectiveness of the alternative instructional practices)?

A careful analysis of the answers to the questions will sharply focus on the requirement to shift to universal application of the proven and more effective Learner Mastery practices by all teachers.

EVALUATING TRADITIONAL LESSON PLANNING PRACTICES

Today's teachers, as graduates of teacher training institutions, have been trained to focus primarily on the MANAGEMENT-OF-INSTRUCTION. They have been trained to ask and to answer these questions when preparing their lesson plans:

1. What shall I teach (cover) and in what time period?
2. What teaching activities will I perform to accomplish my instructional objective?
3. What resources (materials) will I use to teach the ideas, concepts, etc. to be taught to learners?
4. What will be the final test items to sample (measure) what has been covered?

In the traditional approach, the focus of lesson planning is on the teacher as the manager of instruction and on the teacher's activities to be performed in the instructional process.

These traditional teaching-centered practices, however, fail to focus on the prime referent of instruction - the Learner, and the learner's predictable success.

FOCUSING ON THE DELIVERY OF SUCCESSFUL LEARNING RESULTS

The effectiveness of any instructional program or process, in the final analysis, can only be evaluated by the level of success achieved by learners (as measured by their CORRECT LEARNING RESPONSES).

THE PRIMARY COMMITMENT OF EDUCATION MUST BE THE DELIVERY OF PREDICTABLE LEARNING SUCCESS FOR ALL LEARNERS

MAJOR CONCERN:

Which instructional technology should teachers and learners be practicing in our classrooms nationally in order to achieve the primary commitment of education in the 80s?

THE BASIC ISSUE TO BE RESOLVED BY ALL EDUCATIONAL PARTNERS* IS: WHICH OF THESE TWO ALTERNATIVE INSTRUCTIONAL TECHNOLOGIES WILL BEST ACHIEVE THE STATED PRIMARY COMMITMENT OF EDUCATION (NATIONALLY) – THE DELIVERY OF PREDICTABLE SUCCESS FOR ALL LEARNERS.

(*School Boards, Parents, Community, Administrators, Teachers, Learners)

EXAMINE AND COMPARE THE TWO INSTRUCTIONAL APPROACHES PRESENTED BELOW ENTITLED
TEACHING-CENTERED TECHNOLOGY AND LEARNING-CENTERED TECHNOLOGY,
AND DECIDE WHICH IS BEST FOR OUR LEARNERS.

• WHAT ARE THE KEY QUESTIONS ASKED IN THE DESIGN AND IMPLEMENTATION OF ALTERNATIVE INSTRUCTIONAL TECHNOLOGIES?

TRADITIONAL TEACHING-CENTERED TECHNOLOGY

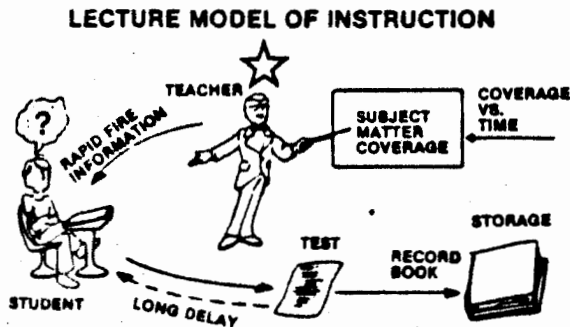
What shall I (the teacher) cover in a defined time schedule; what resources will I use to cover the material, and what test questions will I present to sample the material I have covered?

(A KNOWLEDGE-DISPENSING APPROACH TO INSTRUCTION)

• WHAT IS THE MODEL OF INSTRUCTION APPLIED?

TRADITIONAL TEACHING TECHNOLOGY

(Teaching-Centered Practices)



LECTURE MODEL OF INSTRUCTION

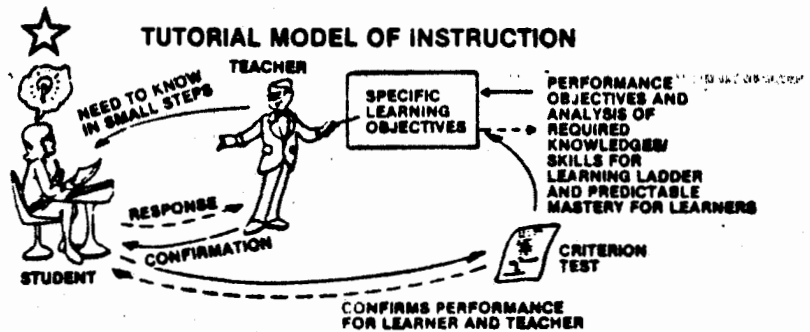
NEW & PROVEN LEARNING-CENTERED TECHNOLOGY

What do we (all educational partners) need to do (plan, design, implement and revise) to guarantee that our learners will achieve predictable success in accomplishing defined learning targets (objectives and criteria)?

(AN ARCHITECTURAL-ENGINEERING PROCESS TO DELIVER PREDICTABLE LEARNING SUCCESS)

NEW AND PROVEN LEARNING-CENTERED TECHNOLOGY

(Learning-Centered Practices)



TUTORIAL MODEL OF INSTRUCTION

WHO IS THE STAR? – THE TEACHER

- Statement of INSTRUCTIONAL Objectives and Outcomes
- ONE-WAY communication flow between teacher and learner
- No formal provision for guided testing of correctness of responses of learners at defined activities
- COVERAGE of material in specified calendar time periods
- Test SAMPLES materials covered during instruction
- Learners play passive role
- Totally TEACHER-CENTERED activities

• WHAT IS THE FOCUS OF DESIGN?

MANAGEMENT OF INSTRUCTION:

- Teacher-controlled activities
- Focus of lesson planning is EFFICIENCY of operation by designing through the EYES OF THE TEACHER

WHO IS THE STAR? – THE INDIVIDUAL LEARNER

- Statement of Learning Objectives and Outcomes
- Continuous and structured TUTORIAL (two-way) interactions between teacher and learners
- Pacing of instruction BASED SOLELY on measured success by learners at progressive learning steps
- Criterion testing vs. norm reference testing
- Learners play continuous ACTIVE Role
- Required field-testing until Tutorial instruction delivers PREDICTABLE learning success

MANAGEMENT OF THE DELIVERY OF PREDICTABLE SUCCESS FOR LEARNERS (RESULTS)

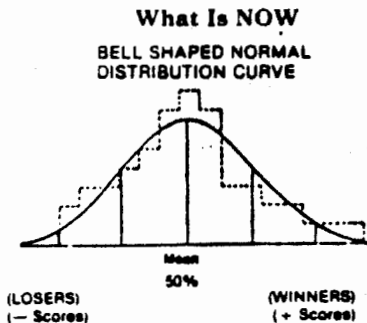
- Focus on QUALITY OF RESULTS produced (effectiveness) for learners
- Applications of architectural/engineering process to guarantee the delivery of predictable learning success (Programmed instructional methods)
- Program designed through the eyes of the learner (NOT the teacher) for predictable results.

TABLE 3

THE PRIMARY COMMITMENT OF EDUCATION MUST BE THE DELIVERY OF PREDICTABLE LEARNING SUCCESS FOR ALL LEARNERS

• WHAT IS THE ANTICIPATED DISTRIBUTION OF TEST SCORES FOR LEARNERS APPLYING ALTERNATIVE INSTRUCTIONAL TECHNOLOGIES?

TRADITIONAL TEACHING TECHNOLOGY



- 50% LOSERS (or more) – 50% WINNERS (or less)
- Measures effectiveness (results) of the teaching process
- Bell-curve distribution of test scores reflects performance by the teacher as a manager of the coverage of content vs. focusing on the delivery of learning outcomes

• WHAT IS THE MODEL OF EVALUATION (Standards and Methods)

NORM REFERENT TESTING: compares how well a learner compares with all other learners

Score A, B, C, D, F applying Bell-Shaped curve distribution format (see above).

This Bell-Shaped curve violates the requirements for its use – namely: must be limited to:

- (a) CHANCE distribution of scores
- (b) under no circumstances can there be a guided intervention to control outcomes

• HOW IS INSTRUCTIONAL EFFECTIVENESS LINKED TO CLASS SIZE?

- Requires fewer and fewer students for a single classroom teacher

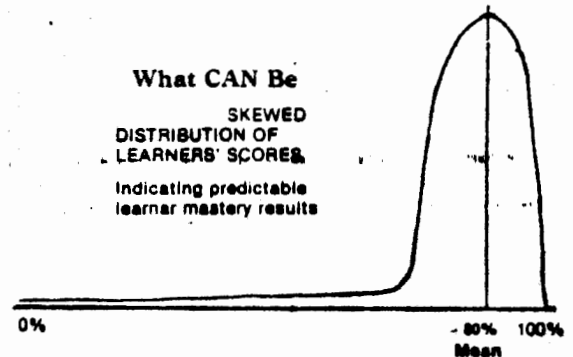
• HOW ARE COSTS OF INSTRUCTION COMPARED BETWEEN PRACTICES?

- SIGNIFICANT COST INCREASES – currently 80-85% of all costs of education are in teacher salaries.

• HISTORICAL VIEW: WHAT ARE THE RESULTS DELIVERED (REPORTED LONG-TERM EFFECTIVENESS) OF THE ALTERNATIVE INSTRUCTIONAL PRACTICES?

- Progressive and INCREASED DECLINE in level of test scores for learners (1950-1982)
- Reported national crises in the effectiveness (results delivered) for learners in our schools
- Increasing number of learners as LOSERS
- Loss of confidence by parents, community, professional educators
- Can not deliver success for learners by design: Teacher Management Focus vs. Learning-Results Focus

NEW & PROVEN LEARNING-CENTERED TECHNOLOGY



- Greatest majority winners – Means 80% and above
- Skewed distribution of test scores above measures the effectiveness (results) of the Learning-Centered instructional process – PROGRAMMED INSTRUCTION
- Test results achieved by designing through the eyes of the learner vs. the teacher
- Represents guaranteed success for learners

CRITERIA REFERENT TESTING: each individual learner evaluated ONLY in terms of one's self-achievement of stated learning objectives and criteria test items. No group norms.

- Predictable achievement by 80-90% of target learners of stated Learning Objective(s)
- Achievement of criteria test items for learning objectives

- Can, in fact, show delivery of significant GAINS in learning scores while increasing size of class.
- Can easily increase ratio of teacher to learner (30-40:1) without reduction in effectiveness of learning results (Delivery of Predictable Learning Success)
- Research Data shows: Predictable, positively skewed distribution of test scores for learners with up to 60 students with one teacher and one teacher aide.

- SIGNIFICANT COST REDUCTIONS – reduction in the percentage of educational costs for teachers' salaries consistent with increased effectiveness of learning results.

- Delivery of predictable success for learners can be a reality based on proven research data

- Can deliver the skewed distribution of learner test scores (above) with ALL LEARNERS BEING WINNERS for ALL grades – elementary, middle, high schools

CAN THERE BE ANY DOUBT AS TO WHICH INSTRUCTIONAL/LEARNING TECHNOLOGY WE MUST REQUIRE BE USED IN OUR CLASSROOMS?

In order for teachers to be able to design and to implement instructional programs which will deliver only correct learner responses, they must learn to apply new learning-centered practices*.

These new learning-centered practices require different techniques for lesson planning and design; and for the evaluation of performance effectiveness for both the teacher and the learners.

In order to focus on delivering PREDICTABLE success for learners, the key question to be asked and to be answered by teachers is: "What do I need to do to guarantee that my learners will succeed on the completion of my teaching; that is, that learners will deliver ONLY required correct responses on the final test?"

Traditional lesson planning practices are NOT BY DESIGN capable of answering this crucial question. These traditional practices focus on achieving teaching objectives and on teaching activities to be performed by the teacher, NOT on the eliciting of CORRECT learner responses.

REQUIREMENTS FOR ELICITING CORRECT LEARNER RESPONSES

In order to prepare lesson plans which will deliver correct learner responses at every step leading to final predictable learner success we must become architects for the delivery of predictable learning success. This means that teachers must design their lesson plans as seen "through the eyes of the learner" not, as usually done, "through the eyes of the teacher".

*LEARNING-CENTERED PRACTICES: The single focus for the design of lesson plans which will deliver predictable end success for all learners (Mastery Results).

The statement "through the eyes of the learner" means that the teacher must design lesson plans which focus on the learners' response at every step in the instructional process. This design requirement demands that a teacher perform lesson planning steps which are more complex and detailed than those performed in traditional lesson planning practices.

To reach the level of detail in lesson planning required to successfully design "through the eyes of the learner" (elicit only correct responses at every learning level) these design steps must be performed:

Step 1: The lesson planner would first define the desired end results expected to be achieved by the learners. These end results will be expressed as a LEARNING OBJECTIVE which states the expected final outcome to be achieved (CORRECT LEARNER RESPONSES TO BE DELIVERED).

This is different from a TEACHING OBJECTIVE which states what the teacher will achieve at the end of instruction.

In the learning-centered practices the focus is on LEARNING MASTERY RESULTS - or the end itself. Let us define this as the terminal (End) Mastery Learning Objective.

Step 2: The lesson planner's objective is to "get down" to the learner's capability to elicit correct RESPONSES at each successive learning step; therefore, it will be necessary for the teacher to "break down" the terminal (end) Learning Mastery Objective into lead-up (intermediate) sub-learning objectives. This will be required to establish sequential lead-up plateaus to be achieved by learners as prerequisites to the final achievement (a correct response) for the terminal mastery learning objective.

A meaningful analogy would be that as an architect designs a staircase, the teacher designs a learning ladder. The learning architect would first design appropriate intermediate levels, representing major plateaus to be reached as one "walks up" the learning ladder. Once these intermediate plateaus have been established, the learning architect would then design the size and number of steps to be built to connect each major plateau (the learning steps). The size and number of steps to be built would, by necessity, depend on the characteristics and capabilities of those people who will be climbing the learning ladder.

This learning ladder analogy can be applied directly to the lesson planner who is designing "through the eyes of the learner"; that is, to assure the learners' predictable capability to "climb up" the learning ladder (responding correctly at each step.)

The lesson planner must define the exact correct responses desired from the learner at each learning step. Once this is accomplished, the lesson planner would then select those media or methods which have only one purpose - to elicit only the correct response(s) desired from the learner at successive learning steps.

The selection of methods and media is based on the answer to the question, "What must be presented to the learner so that he/she will deliver the desired CORRECT RESPONSE?"

In answering this question, the teacher or lesson planner determines:

1. The content, or concepts the materials must present to elicit the correct response(s) by the learner;
2. The amount of practice required to acquire the knowledge or skill inherent in delivering the correct response(s) desired;

3. The way it must be presented (visual, auditory and/or manipulative) so that the learner will acquire the knowledge or skills required at the learning step to elicit the correct learner response.

The selection of those methods, media and materials to deliver only the desired correct learner responses determines what the teacher will use and how the learning sequence will be taught. You are directed to Table 4, pages 34 and 35, which define the required phases (I, II & III) and all steps which if applied correctly can guarantee the predictable success of all learners.

WHY THE EXTRA WORK?

When comparing the level of complexity and the amount of work and effort required by learning-centered lesson planning in contrast to work requirements with traditional teaching-centered lesson planning, an individual teacher might state that this learning-centered lesson planning commitment involves TOO, TOO, TOO much work.

If the priority focus of the teacher/lesson planner is the traditional coverage of materials as seen through the teacher's eyes, then this evaluation of the "TOO, TOO much work" commitment is valid!

If, however, the priority focus of the teacher/lesson planner is the delivery of PREDICTABLE success for all learners, then all the steps above must be performed to plan for and to design for the predictable success of learners.

It is true that this type of lesson planning will require more work initially. However, once the learning ladders have been field-tested and shown to produce desired learning results, lesson planning time is greatly reduced or almost eliminated.

The only requirement for additional work would be to revise the learning steps to include current or changed content.

Traditional teacher-oriented lesson planning and instructional practices have not delivered success for our learners either in the past nor in the present. Nor do these traditional methods have the capability of delivering success for our learners in the future.

A shift to the more effective learning-centered instructional practices is an ABSOLUTE REQUIREMENT by all educational professionals in order to perform their accountable role of delivering predictable success for all learners.

ESTABLISHING THE FEASIBLE DELIVERY
OF PREDICTABLE LEARNING SUCCESS

The use of the work PREDICTABLE as applied to the promise for the delivery of Mastery Learning Results may be questioned by educational professionals and lay persons.

The critical question to be answered is, "Is it feasible to deliver PREDICTABLE learning results?"

The answer is YES!

The Learner-Centered lesson planning steps to be performed as discussed in order to elicit only correct learner's responses at successive learning steps will provide the teacher a measure of a learner's performance at each learning step. The teacher, when planning and teaching successive learning steps will measure the learner's success and/or failure at significant points along this carefully designed learning path (step-by-step).

Given correct responses by learners, the teacher will

proceed to the next series of learning steps. Given the situation where learners are not responding correctly at a particular point, the teacher will RETEACH until the desired correct Learner response(s) are delivered. After the completion of the instructional program, the teacher will go back to revise that lesson plan where learners were not responding correctly, perhaps to include smaller steps where learners failed to be correct, or to include more reinforcement and practice.

This process of revising, try-out, and field-testing will continue UNTIL all instructional programs in a school district are developed and installed with the guarantee of the delivery of predictable success for all learners.

Just as an engineer designs a car or machine to meet concise performance standards following successive tryout tests and revisions so the mastery learning architect continues tryouts and revisions until learners can demonstrate PREDICTABLE SUCCESS for all stated Learning Objectives by achieving performance standards (the desired correct responses by learners in the final test).

You are presented in Chapter 6 the report by a teacher trained to design lessons which will deliver predictable mastery learning results. Her story can be the story of every teacher who is qualified to use the discussed mastery learning practices.

**THE PRIMARY COMMITMENT OF EDUCATION MUST BE THE DELIVERY OF
PREDICTABLE LEARNING SUCCESS FOR ALL LEARNERS**

MAJOR CONCERN:

Given that traditional instructional practices have NOT delivered success for our learners, What are those PROVEN instructional practices which can be applied so that learners will learn with predictable success?

The following phases and steps offer those proven design, implementation, and evaluation/revision processes which, if applied correctly, can GUARANTEE the delivery of predictable success for ALL learners.

PHASE I: DESIGN INSTRUCTIONAL/LEARNING PROGRAMS WHICH ASSURE PREDICTABLE SUCCESS FOR LEARNERS WHEN THEY ARE IMPLEMENTED.

STEPS:

1. Define precisely what is expected of the learner in terms of his/her **end** achievements; and, state measurement standards to evaluate end success. (Learning Objectives and Criterion Test Items)
2. Derive that sequence of progressive learning steps to be mastered by the learner in order to achieve the desired **end** objective (designed through the eyes of the learner* **not** the teacher)

You would perform these steps to guarantee the delivery of learner success:

- (a) Establish the **entry characteristics** of the target learner(s) and the required **entry prerequisites** to successfully achieve the defined final (end) learning targets (learning objectives and criteria);
- (b) Define the desired **RESPONSES** to be made by learners for **progressive learner activities** — and — define the measurement standards to evaluate the **correctness of learner responses** at successive learning steps;
- (c) Select **only those media** which will elicit the desired learner **RESPONSES** for defined learner activities at successive learning steps;
- (d) Combine the above information into an engineered **LEARNING PATH** (sequential learning steps) leading **from entry to final success** by the learner.

PHASE II: INSTALL A TUTORIAL* INSTRUCTIONAL PROCESS to implement Learning Program plans (Phase I). This process will offer continuous and controlled tutorial interactions **between the learner and the teacher at defined learning steps**; and the provision for the evaluation of the **correctness of LEARNER RESPONSE(S)** for designated learner activities. This evaluation is to be used for diagnosis by the teacher as to whether to proceed or **not** to proceed to the next learning step or to reteach as required.

IMPLEMENTATION STEPS FOR THE LEARNING PROGRAM WITH THE TUTORIAL INSTRUCTION PROCESS:

STEPS:

3. Implement the Learning Program (Step-by-Step) as designed;
4. Evaluate correctness of learner response(s) for **each learner activity** and at each learning step;
5. Do **not** proceed to next learning step(s) until the learner(s) has been successful at **prior learning steps(s)**;
6. Continue tutorial guided instruction until learning objectives stated for the **Learning Program** (both "along the way" and "at the end") have been successfully achieved by the learner;
7. On completion of instruction, **gather performance data** where Learners did **not achieve** performance standards as predefined for Learning Program. This data will be used for redesign and revision of lesson plan.

*Designed through the eyes of the Learner, establishing the size and sequence of the learning steps (learning path) guaranteeing the capability of the learner to proceed Step-by-Step to predictably achieve the end objective and criteria.

*TUTORIAL — Guided and structured interactions between a teacher and a learner (i.e., the one-to-one relationship between a tutor and a student).

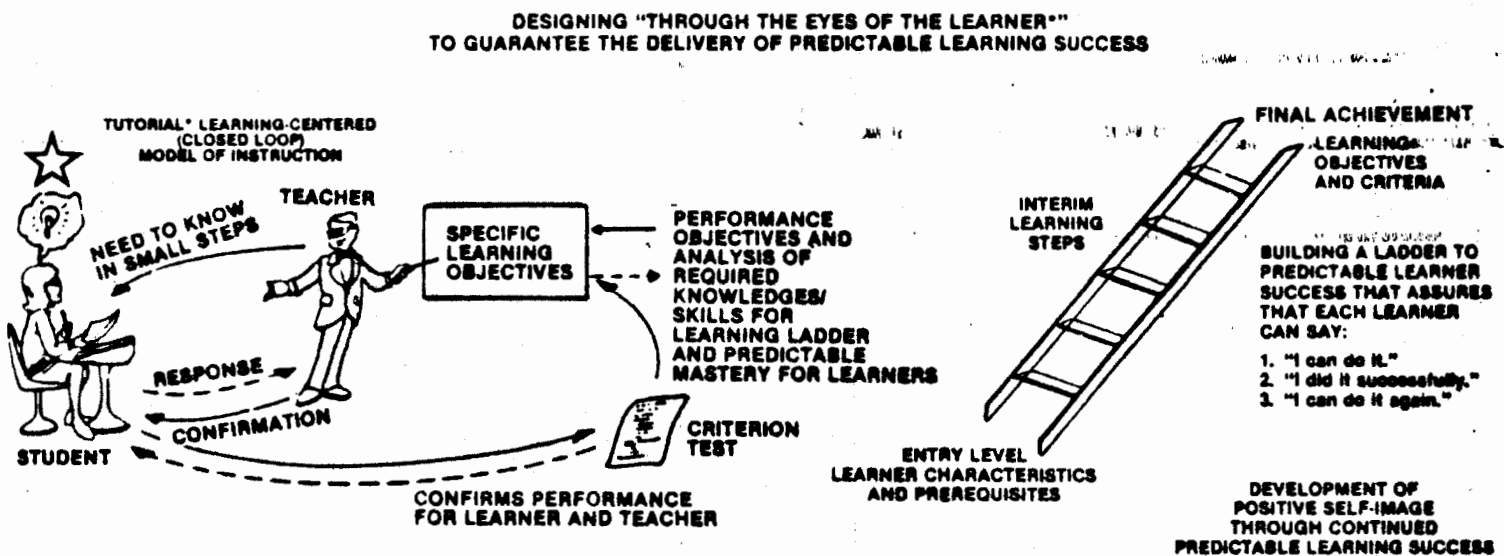
THE PRIMARY COMMITMENT OF EDUCATION MUST BE THE DELIVERY OF PREDICTABLE LEARNING SUCCESS FOR ALL LEARNERS

PHASE III: REVISE LEARNING PROGRAM FOR INCREASED LEARNING EFFECTIVENESS

STEPS:

8. Review learning performance data gathered during the tutorial instruction program. Indicate revisions required to increase learning effectiveness;
9. **Revise Learning Program** for next tutorial instruction session;
10. Implement revisions and **continue to revise until desired learning results are delivered on a predictable basis.**

Depicted below is a **Learning Ladder** which you will learn to construct; and, which you will learn "How-To" implement applying the **Closed-Loop Tutorial Model of Learning-Centered Instruction** shown below.



The Learning-Centered instructional/learning practices discussed above (Phases I, II, III and Models) are based on a **PROVEN TECHNOLOGY** which has developed over a period of 25-30 years (1953-1982).

The basis of this most effective instructional/learning technology (for delivery of **guaranteed success** for learners) is called **PROGRAMMED INSTRUCTION**.

The field of **Programmed Instruction** has evolved through the works of Dr. Fred Skinner (1953-1970), Dr. Norman Crowder (1960-1976) and Dr. and Mrs. Robert E. Corrigan (1960-1982). The Corrigan's extended the concepts of **Programmed Instruction** to include **GROUP INSTRUCTION** applications as well as individualized instructional applications developed by Skinner and Crowder. Further systematic methods for managing-for-results were developed by the Corrigan's to be used with Learning-Centered Instruction.

The **National Society for Programmed Instruction** was formed in the early 1960s to focus on the installation of these proven Learning-Centered practices. The concept of **MASTERY LEARNING** grew out of this movement and is currently postulated by Dr. Benjamin Bloom (et al) as the theory model for assuring success for learners.

TABLE 4

Chapter 4
Proven Learning-Centered Practices for Educational Professionals:
The Alamitos Group Tutorial Program

TEACHING WITH TUTORIALS

"I got it right!" was the delighted exclamation frequently voiced by the 30 seventh graders, all remedial readers, in one of my science classes. "Getting it right" was a unique experience for this group who usually were underachievers. It was exciting also for the teacher. Under normal conditions, when 3 or 4 such learners are in a class, a teacher has difficulty keeping them active and learning. To be assigned an entire class who could read only at the 3rd to 5th grade level and who were to learn science concepts at levels of achievement comparable to other normal seventh graders would have been a teacher's nightmare had we not been in the third phase of validating the Group Tutorials in General Science.

This group of students was involved as part of the research program in order to determine what effect the Group Tutorials (designed for the "average" student) would have on the achievement of slow learners. At the beginning, these remedial readers were reluctant to attempt any reading. We made an agreement with them to read aloud the pre-test and those portions of the unit requiring reading if each student would perform all activities and exercises and answer all criterion questions. At the end of the second Tutorial post-test they said, "Please stop reading to us, you're slowing us down". In the third unit "The Classification of Matter," they were reading, defining, explaining and using correctly such concepts as "viscosity, diffusion, elasticity" as well as others associated with the states and properties of matter. The class mean on the post-test rose to between 80 and 84%. They continued to achieve at this level for all future Tutorials used in this year. The mean on a

Test Scores	CONVENTIONAL METHOD TOPIC *	TUTORIAL TOPICS		
	Scientific Methods	Man's Need to Explain	Rise of Scientific Knowledge	Classification of Matter
95-100				(MEAN)
90-94				
85-89		(MEAN)	(MEAN)	
80-84				
76-79				
70-75				
65-69	(MEAN)			
60-64				
55-59				
50-54				
45-49				
40-44				
35-39				
30-34				
25-29				

Test Scores	CONVENTIONAL METHOD TOPIC *	TUTORIAL TOPICS		
	Scientific Methods	Man's Need to Explain	Rise of Scientific Knowledge	Classification of Matter
95-100				
90-94				
85-89				
80-84				(MEAN)
76-79				
70-75			(MEAN)	
65-69		(MEAN)		
60-64				
55-59				
50-54				
45-49				
40-44	(MEAN)			
35-39				
30-34				
25-29				

TEST SCORE DISTRIBUTIONS IN A
COMPARATIVE STUDY OF INSTRUCTIONAL METHODS
CONVENTIONAL — TUTORIAL
7TH GRADE STUDENTS/7TH GRADE READING LEVEL

TEST SCORE DISTRIBUTIONS IN A
COMPARATIVE STUDY OF INSTRUCTIONAL METHODS
CONVENTIONAL — TUTORIAL
7TH GRADE STUDENTS/REMEDIAL READERS (3. 4. 5TH)

FIGURE 3 COMPARING EFFECTIVENESS OF INSTRUCTION BETWEEN CONVENTIONAL* AND MASTERY LEARNING METHODS USING THE GROUP TUTORIALS

conventional teaching unit had been between 40 and 44% for these remedial learners. (See Figure 3 showing the comparison between "average" and remedial students following 3 Tutorials)

All seventh graders in science classes in the district's three intermediate schools were "getting it right" during the years when we were validating the Group Tutorials (1961-1964). The results of two prior field test phases of selected Group Tutorial units applying the learning-centered methods had led us to expect high achievement by the "normal" students who had prerequisites. (See reports which follow) However, the unexpected progress and achievement by the experimental group of underachievers provided additional validity of the extraordinary effectiveness of the Learning-Centered System to deliver mastery learning results.

In designing and validating the Group Tutorials (1961-1965), we were simultaneously validating the pedagogical learning-centered principles and practices for instructional system design (ISD) to be applied by professional teachers and administrators to increase the effective delivery of quality learning results; and the first model of a group programmed instructional application.

THE INSTRUCTIONAL SYSTEM APPROACH (ISD) APPLIED
IN THE GROUP TUTORIAL SYSTEM IN GENERAL SCIENCE

In cooperation with Dr. Louis Zeyen, Superintendent*, Alamos School District, Garden Grove, California, the Group Tutorial System in general science was designed, materials and methods were developed, field tested and validated. The project extended over a five year development period (1961-1965), and was divided into four phases of research and development.

*Dr. Zeyen is the prior Deputy Executive Director of American Association of School Administrators and Director of N.A.S.E, Alexandria, Virginia (retired 1983).

The Superintendent established the requirements for an instructional system** which would deliver predictable learner mastery results; and a standardized curriculum which would be implemented effectively despite individual differences in teacher expertise in the field of science.

The challenge was to provide the following results/outcomes in the group instructional setting:

1. Mastery learning experiences and achievements for students realized through application of Learning-Centered principles in the group instructional environment.
2. Aids and materials by which the teacher might assure predictable student achievement to exceed that normally accomplished through the conventional teaching-centered instructional methods.
3. Significant reduction in lesson planning time and clerical chores for teachers.
4. A standardized curriculum which would assure predictable and quality assured learning achievement for students despite variations in subject matter or expertise of teachers.

DESIGN REQUIREMENTS FOR GROUP TUTORIAL SYSTEM

The operating characteristics imposed on the system design were the following:

1. Implementation of the group instructional system in traditional classroom setting with minimum equipment requirements.
2. Group-paced instruction and individual self-paced exercises combined into a single instructional system design delivering predictable learner mastery results.
3. Be teacher controlled but totally learning-centered (deliver predictable mastery learning results).

**Instructional System: An integrated group instructional program including appropriate methods and means for use in both group and self instructional applications which will deliver predictable mastery learning results defined by predefined interim and terminal learning objectives and measurement criteria.

4. Offer a standardized curriculum content for a district while delivering predictable learner success.
5. Instructional system which can be taught as successfully by teachers who are not subject matter experts as those who are subject matter experts.

The project was divided into four phases.

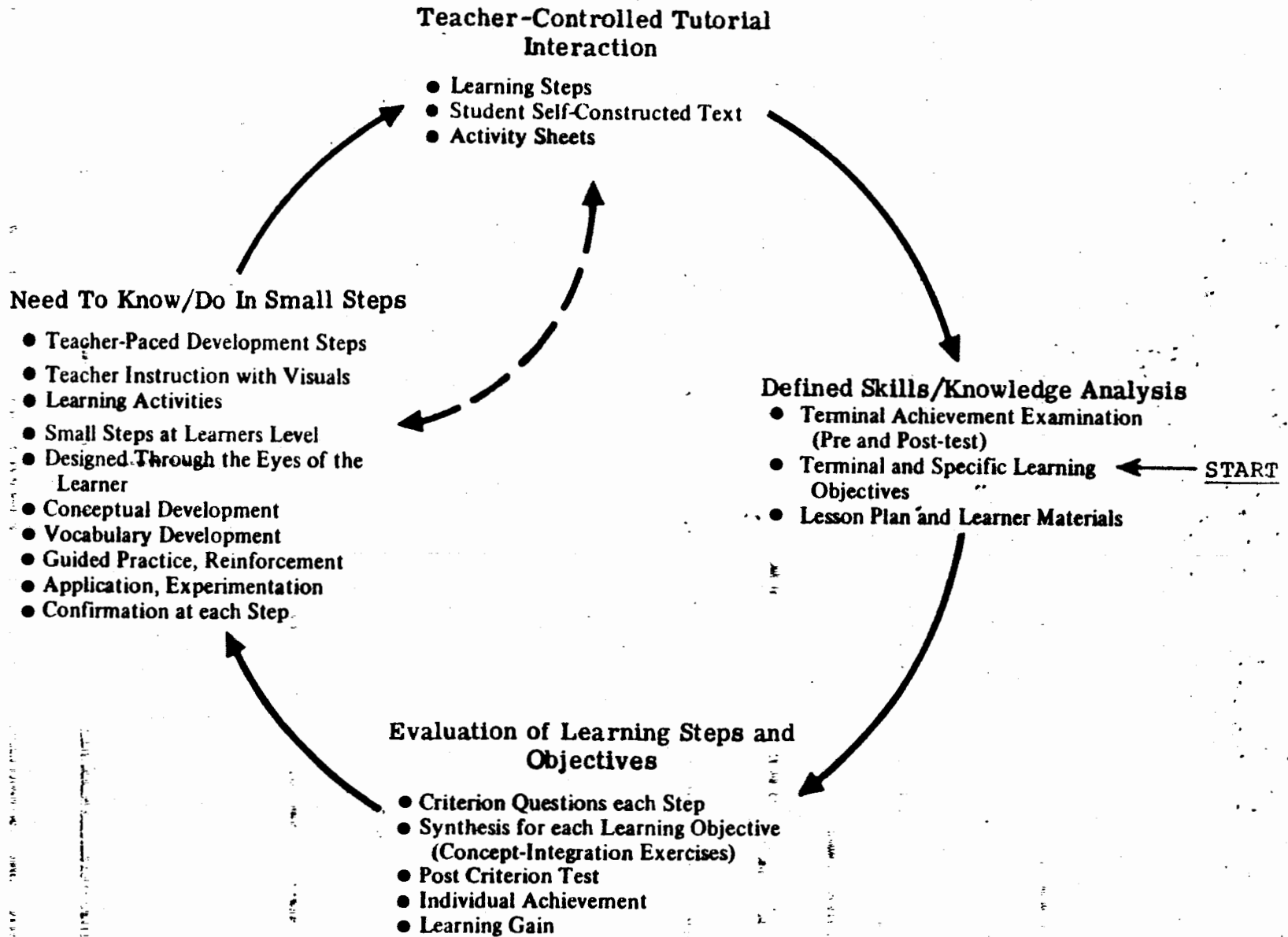
PHASE 1 - 1961-1963 (Alamitos School District)

During this phase the learners' and teachers' needs were assessed, feasibility was analyzed, a system analysis was performed and the system strategy and the format of the Group Tutorial system were designed (the group instructional system design to deliver predictable mastery learning results).

The design format provided coordinated Learning-Centered components both for the teacher as a tutor and for each individual student. The learning-centered design offered maximum student focus on logically sequenced steps for instruction; questions answered by each student at each learning step to confirm student understanding as the criterion to proceed in the instructional program; continuous activity for students at each step and continuous feedback and confirmation of results for both student and teacher (see Figure 4 for application model). Pacing was based on confirmed student understanding as the means for assuring progressive success for learners (step-by-step).

Table 5 presents the actual design steps performed to produce the Group Tutorials and to deliver the predictable mastery results for learners. These are the steps which were applied later to establish the generic design for Learning-Centered pedagogical practices for professional educators.

**HOW THE TUTORIAL COMPONENTS SATISFY THE REQUIREMENTS
OF A CLOSED-LOOP INSTRUCTIONAL MODEL**



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**FIGURE 4 DESIGN AND IMPLEMENTATION STEPS TO
CONTROL FOR THE DELIVERY OF DESIRABLE MASTERY LEARNING RESULTS**

TABLE 5

DESIGN STEPS PERFORMED TO PRODUCE GROUP TUTORIAL MASTERY-LEARNING

SEQUENCES ASSURING PREDICTABLE LEARNER SUCCESS

- 1.0 Establish Curriculum Commitment
 - 1.1 Assess Learner's Needs and state Goals
 - 1.2 State Curriculum Objective
 - 1.3 State Measurement Criteria and Limitations (Constraints)
 - 1.4 Establish Learner Characteristics and Prerequisites
 - 1.5 Analyze the Major Cognitive and Affective Learning Requirements
- 2.0 Derive Mastery Level Requirements
 - 2.1 Define/Select Content Skills and Critical Knowledge for Learners "Need-to-Know/Do"
 - 2.2 State Specific Learning Objectives
 - 2.3 Arrange Logical Sequence of SLO's
 - 2.4 Drive Performance Specifications and Criteria for each SLO
- 3.0 Derive Intermediate Learning Requirements
 - 3.1 Analyze Content/Skills Necessary to Achieve Each SLO and its Criterion Measures
 - 3.2 Identify Learning Steps for Each SLO
 - 3.3 Arrange Logical Sequence of Learning Steps
 - 3.4 Derive Performance Specifications and Criterion Measures for Each Learning Step
- 4.0 Derive Development Steps and Method Media Alternatives
 - 4.1 Analyze Content/Skills Necessary to Achieve Each Learning Step to Lowest Level "Need-to-Know/Do"
 - 4.2 Derive Development Steps for Each Learning Step (Critical Need-to-Know/Do to Lowest Level and Sequence)
 - 4.3 Define Response/Performance Evaluation for Each Step
 - 4.4 Analyze Alternate Appropriate Methods/Media Combinations
- 5.0 Design and Install the Functional Learning Path for Classroom Implementation of Mastery Learning Design
 - 5.1 Identify Alternate Strategies for Implementation
 - 5.2 Design Functional Learning Paths (Courses, Books, Units)
 - 5.3 Select Methods/Mean and Methods/Media for Implementation
 - 5.4 Design Final Implementation Plan
- 6.0 Evaluate and Revise Mastery Learning Programs
 - 6.1 Identify areas where students lack understanding
 - 6.2 Revise for New Learning and Feedback Requirements
 - 6.3 Establish New Schedules for Pacing of Instruction and Learning Based on Prior Performance Deficiencies by Learners
 - 6.4 Prepare Management Plans for Recycling Instruction

The teacher uses a tutorial programmed lesson plan including correlated visual transparencies, suggestions for in-depth enrichment and all information necessary to teach the units. Self-paced activities are provided in a STUDENT text wherein the student constructs required answers step-by-step during the learning sequence. The overhead projector was selected as a means of presenting stimuli as pictorial visuals, questions and exercises. Pre and post criterion tests provide a measure of learning gains (summative, terminal results) as well as criterion questions and exercises at progressive learning steps along the way (formative diagnostic and prescriptive evaluation and quality control checks).

Each Group Tutorial includes the following Learning-Centered instructional/learning components for use by both teacher and individual students.

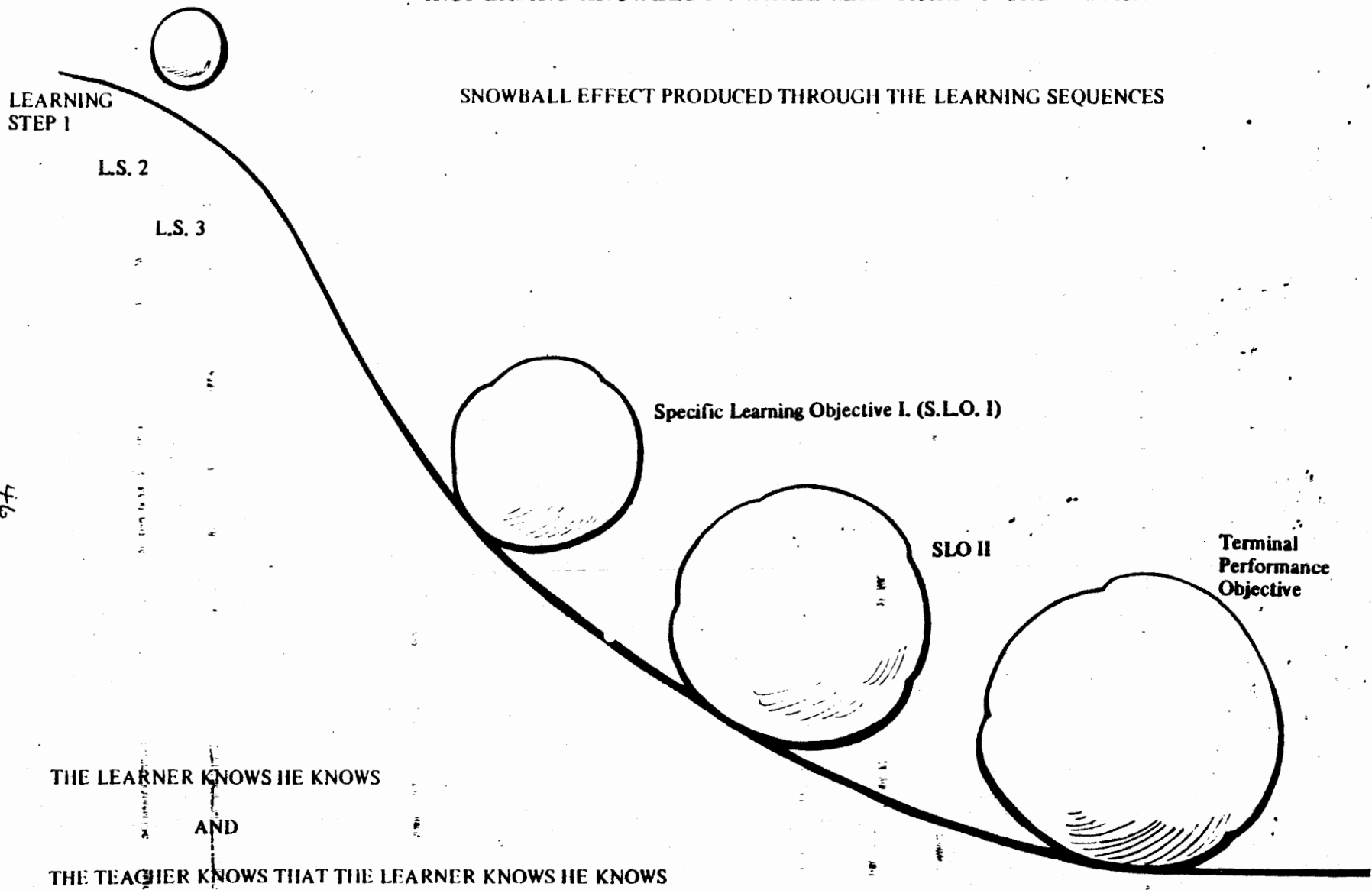
1. Discovery-Inquiry: Inquiry Questions, Experiments, Enrichment Activities and Research stimulate identification, interpretation, comparison, deduction, hypothesizing, application, problem-solving and synthesis.
2. Tutorial Dialogue and Visuals: Guided by the Development Steps in the Lesson Plan, the teacher presents information and directs all learning activities designed in the Functional Learning Path to provide learners knowledge and skills to achieve mastery of the objectives.
3. Question-Answer: Criterion Questions for Learning Steps and Exercises in the Student Self-Constructed Text provide feedback to the teacher and the learner to measure correctness of understanding at each step and provide data for progressing in the learning sequence or for remediation.

4. Self Instruction: Construction of the Student Self-Constructed Text and Enrichment indepth activities cued to the Learning Steps provide for active response by each learner, self-paced learning activities, and development of the hierarchy of cognitive skills from identification and recall through synthesis.
5. Concept Integration: Group-paced and self-paced Concept Integration Exercises provide synthesis of the learning steps on completion of a Specific Learning Objective and for a sequence of learning objectives as well as promoting transfer of learning. These provide reinforcement to tie concepts together throughout the unit.
6. Group Discussion: Inquiry Questions and Synthesis Visuals provide the stimuli for group discussion with its benefits for reinforcement and exchange of ideas.
7. Glossary of Terminology: Structured reinforcement of vocabulary as each student develops definitions in the self-constructed text.
8. Laboratory: Demonstration and Student Experiements are structured or suggested to be used at the teacher's option.
9. A Parent Report: To allow the student to demonstrate his/her achievement of mastery objectives.

Each of the above was designed as an important element to build predictable mastery through providing required practice and reinforcement. (See Figure 5 showing snowball buildup)

The importance of using all components was demonstrated when one teacher decided to eliminate "feedback" Concept Integrated Exercises because he thought them to be redundant. The scores for his learners dropped 10 points compared with other teachers teaching the identical Group Tutorials.

INCREASING KNOWLEDGE WHILE MAINTAINING UNDERSTANDING



LEARNING
STEP 1

L.S. 2

L.S. 3

SNOWBALL EFFECT PRODUCED THROUGH THE LEARNING SEQUENCES

Specific Learning Objective I. (S.L.O. I)

SLO II

Terminal
Performance
Objective

THE LEARNER KNOWS HE KNOWS

AND

THE TEACHER KNOWS THAT THE LEARNER KNOWS HE KNOWS

FIGURE 5 CUMULATIVE GROWTH (SNOWBALL BUILDUP) TO ACHIEVE MASTERY LEARNING RESULTS THROUGH THE USE OF MULTIPLE TUTORIAL COMPONENTS.

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In Phase I two Tutorials were developed for an initial field test of materials; and were tried out using two teachers, 500 seventh grade students, small groups (thirty-five to forty) and large groups (seventy-five to eighty).

As compared with student performance for a conventional instructional unit which had been taught and standardized over a prior three-year period, teachers estimated that the students with prerequisites learned five times more (complexity of content) in one-half the time. Mean achievement level for the prerequisite population was 85 percent with a retention drop of only 4 to 10 percent over a three week period. Striking gains were evidenced also for the non-prerequisite group. Group size made no difference. Large groups performed as effectively as small groups.

PHASE II - 1963-1964 (Alamitos School District)

The format was revised and modified to develop a more detailed lesson plan for the teacher assuring easier management.

Terminal performance objectives (TPO's) for the curriculum were derived*. Test items were analyzed for knowledge, concepts and principles which the student must understand and apply to master test items correctly. Terminal performance and interim learning objectives were derived; learning steps and appropriate media were selected and the functional learning paths completed (blueprint for predictable learner mastery). Subject matter content was evaluated and accepted by technical experts. Four more units were written and field tested using two teachers and 500 students.

*TPO's for the curriculum were derived through an analysis of the California Test of Social and Related Sciences ninth through twelfth grades (Physical and Biological Science Sections), a standardized national achievement test used in the Garden Grove High Schools.

Results for learners were consistent with Phase I for more abstract content concepts. As a result of this phase, approval was given by the superintendent to develop a complete curriculum in physical science to be used as the general science program for the following year.

PHASE III - 1964-1965 (Alamitos School District)

Thirty-three group tutorials were used during a nine month school year for validation by six teachers at three schools with approximately 1,000 students for daily science classes, (approximately forty-five minute periods). Class size ranged from thirty to forty-eight. Three concurrent curricula were presented - Earth Science Series, Physics Series, and Applications of Physics.

Project Results of the Group Tutorial System

A summary of results of Phase III indicated:

1. Students with seventh grade reading ability and 90 I.Q. or above, being presented subject matter normally taught at ninth to tenth grade level, achieved for twelve to fourteen Group Tutorials over a nine month period mean composite post-test scores of 84.60 percent on unit tests with approximately .65 mean percentage learning gains (G Score)*.

*G Score (Learning Gain): Computation of the student's degree of achievement of his learning potential based on difference of pre and post test scores (a standard statistic).

<u>Computation</u>					
1.	Possible test score	100	2.	Post-Test Score	100
	<u>Subtract Pre-test score</u>	<u>20</u>		<u>Subtract Pre-Test Score</u>	<u>20</u>
	Potential Gain	80		Actual Gain	80
3.	<u>Actual Gain</u>				
	Potential Gain = % of Potential Gain Actually Achieved			$\frac{80}{80} = 100\%$	

2. A t-test testing the significance of differences between mean pre and post test scores for composite groups with 90 I.Q. and above and fifth grade reading ability and above provided a t of 23.74. This result is highly significant as compared with a required t of 2.97 for fourteen degrees of freedom at the .01 level of confidence.
3. A correlation coefficient (r) of +.84 between pre and post test scores indicates a high degree of predictability for individual learning gain with the group tutorial Learning-Centered Instructional System Design (ISD) process.
4. A retention test on the complete nine month curriculum objectives at each school (without review or warning) indicated approximately 85 percent retention by learners of learning objectives and criteria specific to all concepts and principles learned.
5. Although post-test mean scores were lower, non-prerequisite groups demonstrated learning gains ranging from 40 percent to 80 percent for selected Tutorials - average being above .60+ percent.
6. Concomitant learning which was evidenced but not measured was a transfer of learning process to other subject areas, with particular strength in increased reading efficiency for remedial reading groups reported.
7. Teacher evaluation of the system indicated positive acceptance. Many strengths were reported for both teacher and students and some weaknesses (these were used as a basis for revision in Phase IV).
8. Student acceptance of the method based on a rating questionnaire showed positive preference for this method

over the conventional method, increased interest in science, and the estimate that the students judged they had learned more and that learning by this method was easier than by conventional methods.

9. Tutorials field tested at the fifth and sixth grade* level indicated similar positive results achieved through slower pacing at the students' level. One application in team teaching used large group instruction for activities for specific learning objectives interspersed with independent or small group study in special interest areas.

Additional Field Testing and Validation

PHASE IV - 1965-1967

Before publication of the Group Tutorials (see Attachment B for Group Tutorials Titles), revisions and additions were made as a result of the empirical evidence gathered in Phase III. Revisions were made to strengthen the learning experiences where indicated and to include teacher and subject matter expert recommendations. Each Group Tutorial was again given a technical review by subject matter experts.

Another field test of the Group Tutorials published materials was conducted in May and June of 1966, in various geographical areas of the United States; California, Louisiana, Georgia, Illinois, New York, New Jersey, Oklahoma, Colorado, to test teacher acceptance and effectiveness of the Tutorials to deliver predictable learner mastery results. They were used on a variety of student populations - sixth to ninth grade levels in public schools, Continuation School and Adult Education, and Job Corps Camp students.

*Tested by Dr. George Gustafson, currently Superintendent of Schools, Ukiah, California

Reports indicate that student mastery results were comparable to or better than that of the Alamitos Study; and also reported positive teacher and student acceptance regardless of population sample or teacher qualifications and without inservice training for teachers.

Independent Field Validation of Group Tutorials

Teaching Research, A Division of State Department of Higher Education, Monmouth, Oregon, conducted a "Field Evaluation of the Group Tutorial System," December, 1967 - March, 1968. This evaluation was conducted with eighteen teachers, 1,300 students for twenty-seven group tutorial units, each teacher using two units. The conditions of this research included teachers with and without science degrees, with and without orientation; rural, urban, inner-city, seventh and eighth grade student populations with heterogeneous characteristics related to I.Q., reading ability, and socio-economic backgrounds. This study utilized only the published materials with no addition of demonstrations, experimentation or audio-visual enrichment.

Teaching Research reported the following results and conclusions:

"The following are a series of generalizations and related summary statements that can be made from the data gathered (for the Group Tutorials). The data reflects the Group Tutorial System as a System rather than any single unit, as the scores were summed over different units.

1. Generalizations Relating to Effectiveness (Mastery Learning Results)

Data: Student Scores:

Specific behavioral objectives are stated and to a large extent achieved by most all types of students under all kinds of classroom settings. The G.T.S. is: strong with respect to changing the behavior of students in

a specific, predetermined way, especially with the 'better' students; dependable in that it consistently brings students to a predictable level of performance; and robust in that it is resistant to the influence of certain teacher and socio-geographic variables.

- (a) Students achieved, on the average, approximately 60% of the possible increase in achievement from pretest to post test. Anything above 50% gain is generally considered to indicate a strong system.
- (b) The range of group gain percentage was from 27 to 79 with the large majority falling around 60.

Neither lack of teacher orientation, absence of formal science training on the part of the teacher, nor socio-geographic locations of the school had an appreciable effect on the resulting data. In fact, students of teachers who did not have formal training gained, on the average, 4.4 items more than students of teachers who had formal training. (Formal training in science)

Overview of Evaluation

1. The Group Tutorial System is a strong, reliable and robust set of materials for teaching basic science concepts to junior high school students who are reasonably intelligent and have minimal reading skills.
2. Teachers readily adapt to their role in the G.T.S. and praise the organization, sequence, and visuals. They tire of it, however, when not varying it with other types of activities. They unanimously desire at least suggestions as to how, when, and what activities could readily be used to supplement the conceptual portion and also resolve the tedium."(Close of Report.)

(NOTE: These suggestions are included in the latest edition of the Group Tutorials available for immediate use) *

Summary and Conclusion

The Group Tutorial process provides a validated generic process to design and to deliver predictable learner mastery results. ** The systematic processes focus on "designing through the eyes of the learner" for the delivery of mastery outcomes rather than on the teacher; and, combines the precision tools and concepts of a systematic learning-centered analysis for assuring the effective management of the delivery of predictable mastery learning results. Applying these generic methods professionals can assure PREDICTABLE mastery results for learners. This proven teacher controlled but learning-centered process presents a formal learning-centered engineering process for the design and the delivery of predictable mastery learning results as demonstrated in 1961-1967. Educators, subsequently trained in the process, have achieved similar results (see Sections II and III).

The process and steps provide the teacher or curriculum designer the means:

- (1) to analyze in detail everything a learner must know and do, in the cognitive, psychomotor, and affective domains to achieve mastery of performance objectives;
- (2) to sequence learning steps at the level appropriate for the target learners;
- (3) to select and use learning principles and psychological learning theory appropriate to the learning requirements;
- (4) to select methods, media, and teaching strategies appropriate for the type of learning required; and
- (5) to try-out the design and revise based on performance data until learning for the target population becomes predictable.

*Titles and digests of objectives for 56 Tutorials are presented in Appendix B. Also included is a discussion of reading improvement for below grade level readers through use of the Tutorials.

**A discussion of the rationale for the design of the process is presented in Volume I, Chapter 16.

Chapter 5
Accountability for Instructional Management (AIM):
Focusing on Professional Practices for the Delivery of Quality Learning Results

Introduction

In the past several years over 38 states have established legislation defining accountability requirements for the schooling process, teachers' performance and administrative management effectiveness. The majority of these legislative commitments have focused on graduate requirements for learners, on standards for managing instruction and/or on requirements and standards for evaluating the performance of teachers -- and, in selected cases, administrators. These commitments have not produced the required changes to resolve the current crisis in learning effectiveness.

The June 1980 issue of Time Magazine (Front Cover - "Help, Our Teachers Can't Teach") explicitly states the national crisis we are experiencing in delivering learner success in our class rooms. Immediate and effective actions must be instituted to resolve this ever increasing crisis.

This paper offers an effective course of action to resolve this crisis in delivery of successful learners.

The topic of professional practices is sensitive by nature in that we propose a dramatic shift by teachers and curriculum designers from practices presently being applied. In turn, the major reason for the continuing failure of our learners focuses on the resistance by teaching professionals (teachers and/or

curriculum designers to accept and to apply this new and proven technology which can deliver predictable learner mastery results.

In this paper professional practices relate ONLY to the management of and delivery of predictable results for learners. Any other teacher practices, we propose, are not legitimate for discussion and/or application in our schools. You are presented new external and internal performance evaluation standards and evaluation practices to measure the 1:1 correlation between predictable learner success and the defined learner-centered teacher/curriculum designer practices. These would replace existing evaluation performance standards defining effective teacher practices.

Unless the practices discussed and the commitments proposed in this chapter are seriously reviewed and adopted we can project only one obvious outcome for the future; namely, the predictable failure of generations of learners to come and the public school system as we know it today.

Learning How To Learn Effectively, Applying The Closed-Loop Model

As previously stated, the focus on effective learner-centered instruction by a teacher applying the Closed-Loop model is designed to deliver predictable learner success. However, the dynamic, continuous and structured two-way "tutor-student" interaction found within the Closed-Loop instruction-learning process has an additional and very significant contribution for

the individual learner; namely, the generic steps to be performed and practices to be applied by each learner to develop the skills to learn "how to learn". The generic learning process requires progressive initial steps of analysis - then synthesis and then reanalysis. One must first identify; then relate between objects, things, ideas to understand what is being communicated; and then draw conclusions based on established understanding of stated relationships between the focused things, ideas or concepts being presented; then apply and test one's understanding of the concept, idea or relationship being presented; and, finally, tie everything previously learned to newly organized ideas/ concepts (higher order learning). The Closed-Loop process applies this effective learning process over and over and over. The results can be the development of an effective problem solver skilled in applying analysis and synthesis steps for effective decision making. Thus, the individual student is continuously Learning How to Learn as he/she is taught.

Designing Through the Eyes of The Learner to Deliver Predictable Learner Success

The shift to the individual learner and his/her success as the single focus of instruction introduces new and critically different approaches to curriculum design, instruction and performance evaluation standards.

The proposed shift to new self-regulated and accountable teaching practices for delivering predictable learner outcomes focus on the Learner as the sole target for instructional planning. The focus shifts from design "through the eyes of the teacher" to design "through the eyes of the learner". This shift in curriculum design focus for the teacher requires that the teacher subordinate his/her role to

the progressive success for learner.

The proposed new practices to be learned by teachers are more demanding and more complex than the current teacher centered planning/instructional methods. If the statement is made by teachers and administrators that the proposed steps to be presented are too complex and time consuming, then they must also ask the additional question "To accomplish what?" The concern for levels of complexity as related to professional practices cannot be the criterion to be applied by evaluators concerning the use of proposed professional practices. This has in the past been the unfortunate practice of teachers and administrators. The only meaningful criteria for assessing the relevance of proposed teacher and curriculum design practices must be their appropriateness for the delivery of predictable learner success.

Delivering Predictable Learner Results: Proposed Professional Practice Requirements

Implementation of a LEARNER-CENTERED model will require a dramatic shift in professional practices. In order to better understand the changes in professional practices, we must first focus on those general requirements to be met in order to successfully design instruction "through the eyes of the learner".

Presented below in outline form are requirements to be met in designing, implementing and evaluating a Closed-Loop Learner-Centered Model.

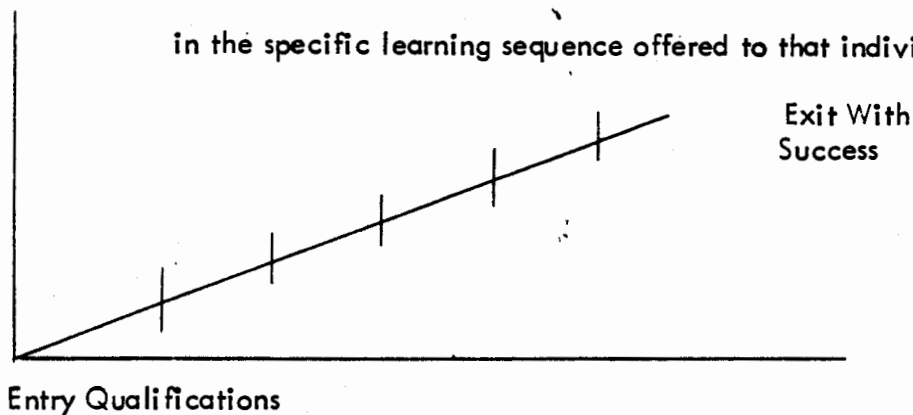
1. Designing "Through the Eyes of the Learner" Model

Assumptions:

- A. The focus of all learning is the individual learner, i.e., his/her success in achieving predefined, relevant outcomes.
- B. The process of designing for learning success requires the building of a learning ladder which an individual can successfully climb to

achieve a predefined learning target as follows:

1. The learning ladder starts at the point where you find a learner, i.e., you must begin at that point of entry consistent with a learner's:
 - a. characteristics for being an involved learner (language development, I.Q., others)
 - b. prerequisite knowledge and skills to enter and in turn to succeed in the specific learning sequence offered to that individual learner.



LEARNING LADDER LEADING TO PREDICTABLE LEARNER SUCCESS

2. The learning ladder must be so constructed that the size of each step is consistent with the capabilities of the individual to advance successfully. These steps will depend on the learner's capabilities and prerequisite entry skills.
3. Achievement by the individual learner (step by step) along the sequential steps of this learning ladder must be consistent only with the demonstrated and controlled successful performance at each step. (A No Failure Model). Elicit ONLY CORRECT responses.
4. The teaching/learning means (books, A-V sequences, etc.) used by learners in achieving success at each step must be "personalized" to be responsive to the preferred learning styles of individuals. This may require alternate media choices for different learning styles, or

a combination of methods/media in each sequence to accommodate and reinforce individual differences in learning styles.

5. The tools and strategies of instruction and learning applied at each learning step, or for a group of learning steps, must be selected based on a) an analysis of the nature of the learning required and b) the appropriateness of the methods/media to produce the type of learning designated by the learning step or sequence of steps. (A book, or a single medium will not suffice for all learning requirements.)
6. The "learning ladder" must be constructed applying the model of designing "through the eyes of the learner", not through the eyes of the teacher. This means that the building of the learning ladder is based ONLY on successful progress by a learner commencing from point of entry through learning steps to the achievement of Intermediate Objectives and through intermediate levels to the achievement of final and predictable success (Terminal Objectives).
The learning ladder must provide for everything the learner must know and do to achieve predictable success.
7. Using the "learning ladder"(as designed to include elements 1-6 above) the teacher becomes a manager for delivering predictable and controlled learning success. The introduction of cues, organizers and/or reinforcers is engineered by design, not introduced based on the hunches or the feelings of the teacher. Teacher interventions are predicted only on "need-to-do" cueing at THAT point where support of the learner is required along the predefined "learning ladder".

II. Implementation of the Functional Learning Path or Learning Ladder

A. The means for delivering successful learner achievement (mastery outcomes) should be based on the generic requirements of structured "learning how to learn" events. This commitment involves the tutorial steps to produce successful learning including the following:

1. Present data, ideas, concepts (teacher action)
2. Provide learners the means to process or work with data to internalize (learner action)
3. Present questions to test understanding (teacher action)
4. Require response from learner (learner action)
5. Confirm correctness of learner's response -- feedback to the learner
6. If learner is correct, proceed to next step in the Functional Learning Path (teacher action)
7. If learner is incorrect:
 - state type of error to learner
 - state possible reason for error
 - re-teach to establish correct response for designated step (s)
 - evaluate learner for correct response
 - when (and only when) learner is correct, proceed to next step (again proceeding only through the eyes of the learner).
8. Tie concepts, or ideas together for the learner (structured synthesis of prior learning steps)
9. Require that the learner apply the cumulative concept or principles learned
 - if correct, proceed to next sequence
 - if incorrect, recycle in order to correct misconception or errors.

in cumulative concept or principles application.

PROCEED NO FASTER THAN THE DEMONSTRATED UNDERSTANDING
by THE LEARNER of PREDEFINED TARGETS for LEARNING ACCOMPLISHMENT
(learning mastery) along this instruction (learning) continuum:

Learning Step (s) to Intermediate Objective (s) and finally to Terminal

Learning Objective (s) for learners.

B. In applying the "learning how to learn" process for learners the teacher applies a continuous processes of learner-centered analysis and synthesis steps as follows:

- Diagnosis: test learner performance each step, each objective as required
- Prescription: prescribe action to establish successful learning outcomes, each step
- Confirmation: feedback to learner of success
- Evaluation: Go/No Go
- Revision: redo learning blueprint strategy as required
- Build cumulative synthesis along learning path

C. In evaluating the effectiveness of the instruction/learning Functional Learning Path or "learning ladder", the primary criteria to be applied in evaluating instructional effectiveness is "Did the learners succeed?" Learner performance is matched against the preset standards or criteria for achievement of steps and objectives in the Functional Learning Path. If learners are succeeding as predicted, no action is required since the design of the learning ladder is adequate in delivering learner success. If learners are not succeeding, the teacher:

- must determine where learner (s) failed to advance

successfully (diagnose)

- must propose revisions to correct or strengthen steps (smaller steps, added reinforcement and practices, etc.)
- must make required revisions for next tryout with learners.

This built-in capability for a teacher to determine areas of weakness in a learning path through diagnostic procedures is, perhaps, the greatest strength of these learner-centered teacher practices. In current methods, if a learner is failing to achieve, the teacher does not have the required data to isolate the performance discrepancy - and to redesign learning sequences in order to resolve that specific change. Thus, the basis for identifying a specific learner's failure is not available. Given the pre-defined learning path design, the teacher can isolate specific weakness in instructional/learning procedures; can diagnose the reasons for the isolated problem, can prescribe appropriate revisions, can test out the proposed revisions in actual classroom application and can, finally, standardize practices which ever-increase the predictability of delivering learner mastery outcomes.

Evaluation Reporting to Parents, Learners, Principal

In the real world of accountability for the delivery of predictable learner mastery outcomes it is only fair to establish those areas for which the teacher, the learner and the parent will be held accountable. It is not realistic to hold the individual teacher totally accountable for the success of each learner since variables affecting learner success, such as the learner's motivation and/or parent support, are not controllable by the teacher. A reasonable model of accountability for the individual teacher must be limited only to those professional practices applied to deliver mastery learning. These proposed teacher practices are set forth in this paper.

The student and the parent must be equally accountable to perform their required roles if learner success is to be achieved. The student must try - and apply him/herself as directed by the teacher. The parent must be accountable to support the teacher by supporting the learner.

D. In reporting actual learner performance to parents and learners, the teacher will:

- Explain potential sources of learner failure accountable to teacher controlled sources impacting on learner success (teacher practices)
- Report potential sources of student failure (when and where applicable) related to lack of student cooperation, effort, etc., and potential parent support
- Explain revision strategies to increase predictability for learner success in subsequent instruction.

E. In reporting actual learner performances (for each class) to the Principal, the teacher will:

- Specify the preset targets for learner mastery outcomes and criteria standards
- Present actual class achievements against standards of learner mastery
- Define diagnosed performance discrepancies for the class as a whole using a standard score (learning gain)
- Report revision strategies to resolve the performance gaps between preset targets for learner mastery (objectives and criterion tests/ measures) and the actual learner achievements (above, on-target, or less than the precommitted performance expectancies)
- Request additional resources required to deliver increased learner performance where necessary.

Summary of Professional Practice Requirements

In the final analysis, for a teacher to be able to diagnose teaching/learning effectiveness, he/she would have developed a Functional Learning Path which would be followed and monitored in each program for which the teacher is responsible. This blueprint for predictable learning must be designed "through the eyes of the learner". This means the single focus for design would be the ultimate, predictable mastery of stated learning targets (learning objectives and criterion test items.)

Some school districts are developing, or have developed, skills learning or performance objectives and criterion tests in basic skills and other subject matter areas. Some have listed, also, alternate materials, available in the district, which contain subject content related to an objective.

In general practice the teacher is given the objectives and criterion tests. It is assumed that teachers have the skills required to provide students "what they need" to achieve the objectives and to meet the criteria. This is not always the case. Objectives and criterion tests are the targets or end points which will be reached to measure learning achievement. If Predictable Mastery of an objective is the focus, what the student must know and do to achieve an objective and meet criteria must be analyzed, specified in detail and carefully planned to fill in all details between the stating of an objective and the evaluation of achievement of an object. The gap between these two events must be filled with a carefully designed plan which provides all learning details and learning/teaching activities (the Functional Learning Path.)

For a teacher to be able to design the Functional Learning Path, he/she must first learn the skills required to "design through the eyes of the learner" and to commit to their application, as follows:

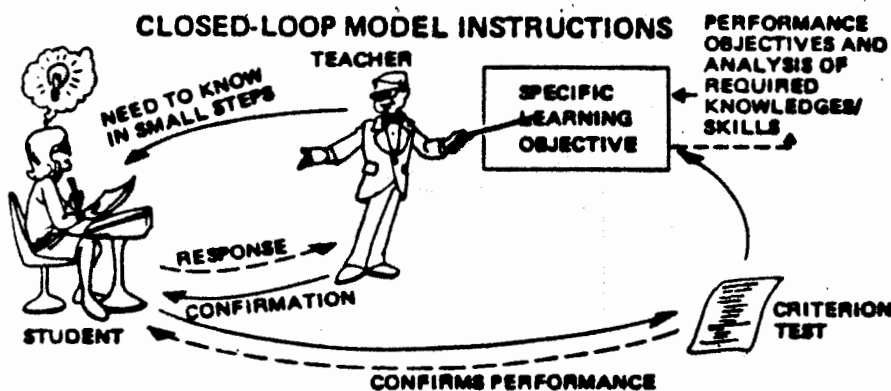
- Step 1: Derive the exact learning targets to be accomplished by learners (Learning Mastery Objectives and Criteria) (Course or Program Objective)
- Step 2: As the focus for designing the learning path, derive the characteristics of the learners or target population (different learners will require learning steps of different size consistent with their capability to perform effectively)
- Step 3: Define prerequisite skills and knowledge the learners have or require for entry
- Step 4: Design the learning path as seen "through the eyes of the learner". This requires that a series of progressive analyses be performed to derive all "need to know and do" steps the learner must accomplish to achieve the mastery objective, course or program objective and to meet criteria. (Later instructional steps will be matched to learning steps for teacher control and monitoring.) Steps are derived from the largest to the smallest in the following manner:
- a. Derive mastery skills and knowledge (cognitive/affective/psychomotor) required to achieve course or program objective and to meet criteria.
 - b. State Terminal Performance Objectives and Criterion Measures for mastery skills/knowledge.
 - c. Derive lead-up skills/knowledge required to achieve each Terminal Performance Objective and Criterion Test Measures
 - d. State Intermediate Performance Objective and Criterion Measures for each lead-up (intermediate) skill/knowledge.

- e. Derive lowest level skills/knowledge required to achieve each Intermediate objective and state these as Learning Steps.
- f. Arrange all analyses data into the Functional Learning Path from smallest unit - the Learning Steps - through the required sequence to achieve Intermediate Objectives; and put into sequence the Intermediate Objectives to achieve the Terminal Performance Objectives and Criterion Measures

Step 5: Select the most appropriate methods, materials, media for delivering mastery of learning step sequences and/or alternate methods/media consistent with personalized learning styles.

Step 6: Develop the management plan for implementing and evaluating the Functional Learning Path to deliver controlled success in the classroom or learning site.

Step 7: Employ the critically important Closed-Loop Instructional/Learner-Centered Model in the learning situation in order to deliver predictable learner mastery outcomes.



This model assures that learners will proceed no faster than their demonstrated and measured ability to master the defined learning targets.

The Teacher as the Classroom Manager

The teacher, in the final analysis, becomes the classroom manager for delivering successful results for each learner. The teacher will be accountable for all facets of managing for learner success, including (1) pre-instructional planning and (2) coordination with all outside elements to assure they provide required resources in the correct number and type and on time to meet the teacher's management and support plans. Each teacher will be required to plan for and to monitor the performance of the learners, support personnel and self.

As a manager the teacher must learn and apply new skills to effectively plan, manage and evaluate all areas of performance appropriate to the delivery of predictable learner mastery.

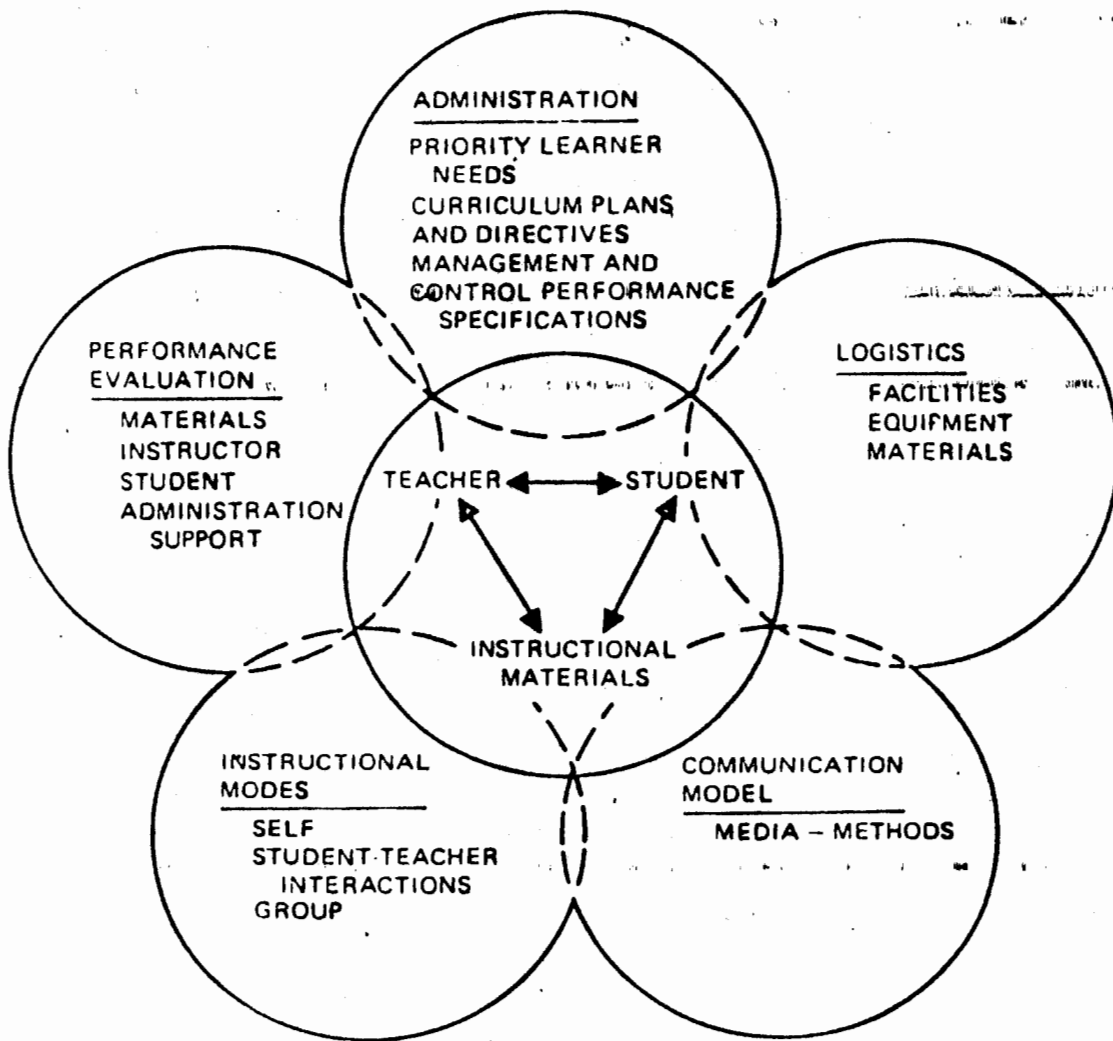
These new planning, management and evaluation skills must be only as sophisticated as required to plan for and to deliver most effective and efficient learner-centered instructional management outcomes. However, the process applied must be in common with the planning, management and evaluation processes applied by administrators, principals and others accountable to support the teacher.

Figure 6 presents a diagram showing the interdependency between the classroom component "where the action is" and the other support functions and groups. All accountability standards of the instructional/management processes are specific to the learner outcomes (see center circle).

(Please see Figure 6, Page 69)

Figure 6. Components of The Instructional System

Planning must be applied
to be certain that ALL THE PARTS are
working alone and together assuring
predictable and effective results for LEARNERS



Planning must take place between the individual teachers and all support personnel. This is crucial to the installation of an effective and efficient management process which is required by all concerned in order to support and to deliver predictable mastery for each learner (in each classroom, in each grade level, and in each subject matter area.)

Without the proposed common and results-oriented Planning, Management and Evaluation (PME)^{/R} skills applied by each manager (teachers, administrators, principals and support personnel) in the schools and in the district as a whole, the feasible and predictable delivery of highest quality learning outcomes is jeopardized.

The general characteristics of a proven PME^{/R} Process Model are presented in Volume I. The only difference between the teacher as a "manager-for-results", the principal as a "manager-for-results" and the superintendent as a "manager-for-results" is the specific focus of those functions for which each is to be accountable as they impact on delivering predictable success for learners.

Defining Areas of Professional Practices

1. Need-To-Do Areas
2. Need-To-Know Areas

Before we can evaluate teacher performance, certain areas of professional practices must be defined, delineated and established for the profession. The following are areas within which practices must be established.

Area 1: Need-To-Do Practices: Designing Through the Eyes of the Learner

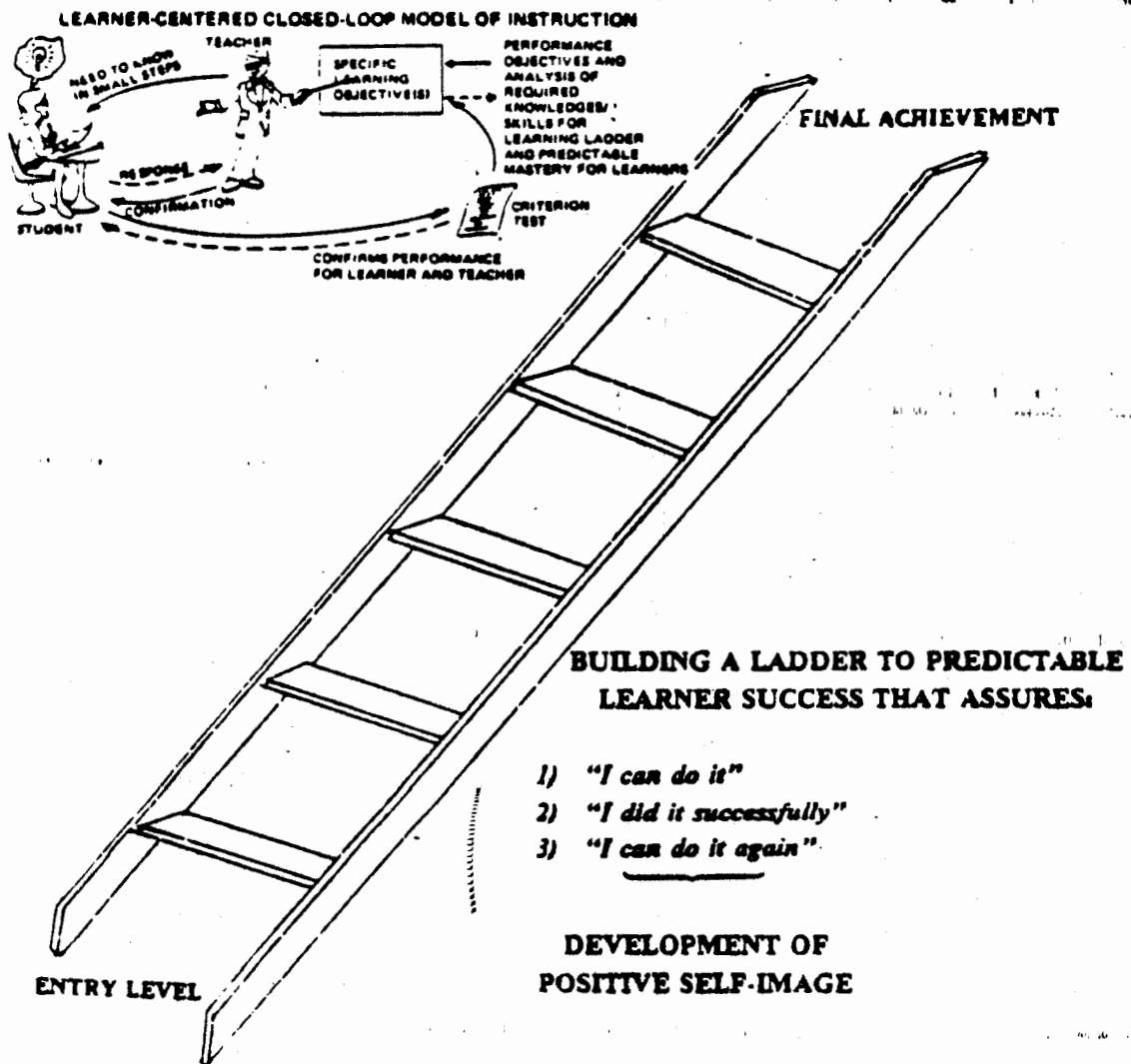
practices for delivery of predictable learner mastery outcomes - The Functional Learning Path, blueprint for guided instruction.

These practices have been specified in detail on pages 58, 59, and 60.

WHAT MUST BE PROVIDED THE LEARNERS SO THAT THEY CAN ACHIEVE WHAT THEY NEED TO KNOW AND DO TO MEET OBJECTIVES AND CRITERION TESTS WITH PREDICTABLE SUCCESS?

FIGURE 7.

DESIGNING "THROUGH THE EYES OF THE LEARNER"

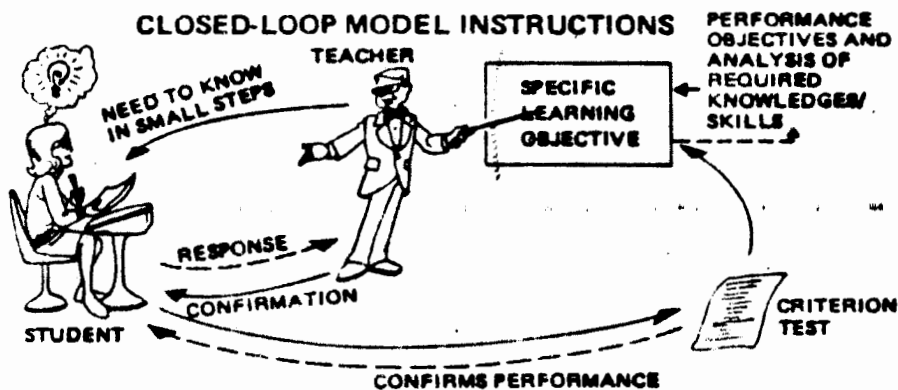


Planning For Predictable Learner Mastery

Area 2: Need-To-Do Practices:

Directed Teaching/Instruction Practices for implementation of the Functional Learning Path to produce predictable learner mastery in the classroom (combined group and individual instruction). These have been discussed on pages 61-63 . Basic postulates defining effective instructional practices are specific to:

- A. . Diagnosing status of a learner and individual prescription relating to that learner for teaching/learning outcomes (entry point into Functional Learning Path for core curriculum (lesson plans)
- B. Practices implementing Learning Blueprint for achieving predictable learner success:
 - Pacing of group and/or individual instruction
 - Inquiry: (questions) testing measured understandings by a learner of a pre-established learning step (s), a cluster of learning steps or on intermediate objective
 - Recycling: offering cues, reinforcement, practice for assured understanding
 - Revising blueprint (after instruction to improve predictable success.



Area 3: **Need-To-Do Practices:**

Interpersonal Practices to support delivery of predictable learning mastery outcomes can be identified in the following areas:

- Teacher - Learner: tutor-learner interactions
- Teacher - Parent: manager-client interactions
- Teacher - Principal: manager-manager interactions
- Teacher - Teacher: peer interactions

Area 4: **Need-To-Do Practices:**

Managing for Effective Delivery of Learner Outcomes

The teacher as a manager must possess the skills required to develop management plans for implementing the Functional Learning Path. These plans must specify what must be done by learners and teachers, what resources and support are required, schedules for all events, what information and reporting data is required (Management Information System) and how all evaluation is to be performed.

Evaluation Criteria for Teacher Management Practices: - Plans to deliver successful learner outcomes.

The following generic questions are asked by a manager in any planning event. Applying these questions to a teacher's classroom management plan allows implementation of planning practices.

Managed Planning, Implementation and Evaluation

Questions to be asked, Actions to be performed to

Answer stated Questions

1. Why are we proposing to do this? What is the need?
 - Assess needs
 - Define problems

- Set priorities for action
2. Exactly what is it you want to accomplish and how can we evaluate our success:
 - Goals related to priority needs/problems
 - Management (performance) objectives
 - Management (performance) requirements
 - Measure standards to be achieved (end results)
 3. What can cause our failure to achieve our objectives and how are we going to neutralize this possibility :
 - Constraints and/or new performance requirements to be met
 4. What specific activities are we going to take to implement our objectives?
 - Major activities to be performed (milestones)
 - Sub activities to be performed for each "milestone"
 5. What do we require to perform each activity?
 - People, things, other means available
 6. Exactly how much is this going to take (time, people, things, money)?

How do you know it's enough?

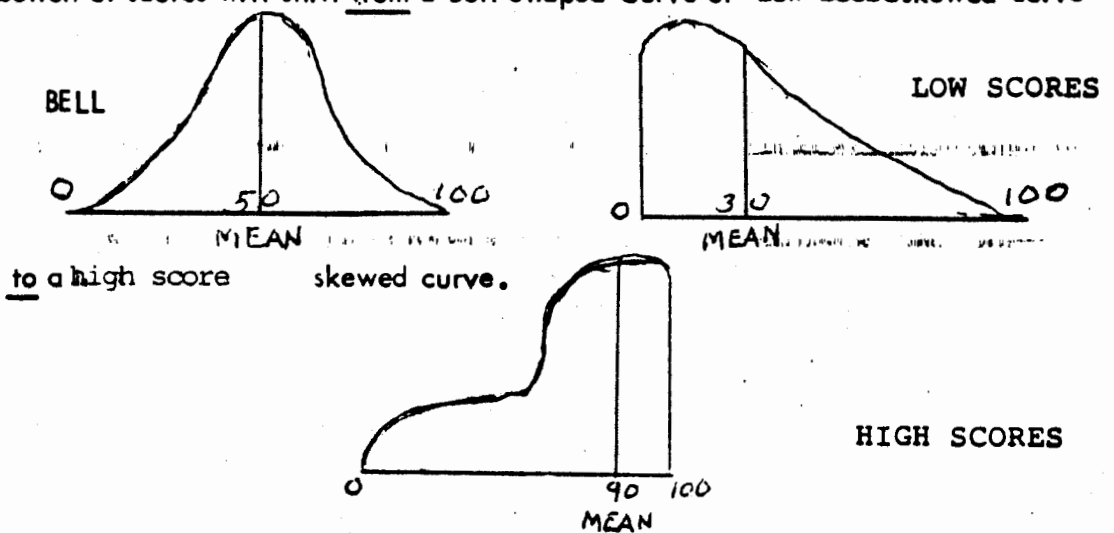
 - Time line schedules of all activities
 - Personnel requirements
 - Support requirements (people, things, others to make things work)
 - Program budget (dollars to get all activities done in required time schedule)
 7. How are we going to monitor our implementations and report final results?
 - Evaluation steps and revisions along the way to keep on track (quality controls)
 - Evaluation and reporting "at the end" (final achievements)
 8. How should we revise our plan to do better the next time around?

Area 5: Need-To-Know Practices:

Subject Matter Expertise: Teacher's current knowledge in designated subject-matter areas by level of instruction: (Reading, Math, Language Arts, Science, etc.)

Evaluating The Effectiveness of Professional Practices

Implementation of Professional Practices for delivering learner mastery correlates 1:1 with achievement of learner success in the classroom setting within which the practices are employed. All practices focus on achieving pre-stated learning objectives and criteria. The Functional Learning Path programmed for learning management, when designed correctly (Area 1) and implemented correctly (Area 2) against the Closed-Loop Instructional/Learning Model will predictably produce highly positive skewed distribution scores indicating success for target learners. Group mean scores and distribution of scores will shift from a Bell Shaped Curve or low scores skewed curve



This redistribution will occur based on programmed learning design-implementation practices. -(Skinner/Crowder programming applications; Corrigan - System wide mastery applications.)

If professional practices (Areas 1, 2, 3, 4) are correctly applied, evaluators will see a progressive shift in group mean scores and distribution of scores from the Bell Curve to a high score skewed curve. They will see 90% or better of learners achieving learning outcomes as measured by specific learning objectives and criterion test items over time.

Evaluation Standards: (Peer to Peer). To be applied in Assessing Professional Performance in Areas 1, 2, 4 as follows:

Area 1 - Examine the teacher-produced Blueprint for Learning (actual Functional Learning Path) design against appropriate design standards

Area 2 - Inspect records of diagnostic/prescriptive procedures followed for the learner in the actual teaching situation

Area 3 - Record actual instructional acts performed by a teacher as required in implementing the learning ladder: Pacing; Feedback; Cuing; Questioning.

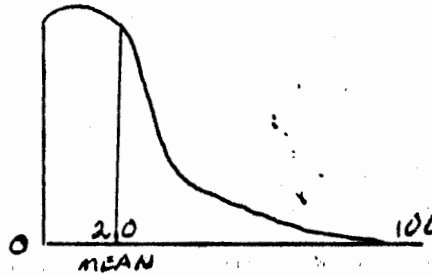
All evaluation for Areas 1, 2, 3, 4, 5 should be standardized and agreed upon as external criteria established by the profession and the school management as the basis for evaluation.

Correlating Learner-Centered Teacher Practices and Standards with Student Success Indicators

1. EXTERNAL TEACHER PEER EVALUATION: If peer evaluation is honest and correct, the teacher evaluation scores can be verified by a cross check with learner performance scores as represented by Group Mean Scores and Distribution Scores, from a Bell Curve or negatively skewed distribution to a curve highly skewed to the right indicating high learner performance.

High Teacher Evaluation Scores given by evaluators in peer evaluation for areas 1, 2, 3 and 4 would be verified by a consistent shift in learner performance, as represented by group mean scores and distribution scores, from a Bell Shaped Curve or negatively skewed distribution to a curve highly skewed to the right indicating high learner performance. This can occur only through correct application of professional practices as implied in "designing through the eyes of the learner". Low scores given by peer evaluators can also be verified by comparing them with

performance scores. If learner scores are reflected in a curve skewed to the left indicating low performance by learners, it can be implied that teachers are not applying correct practices. Inconsistencies can be checked. The above would apply, also, for evaluation by principals applying the external performance standards.

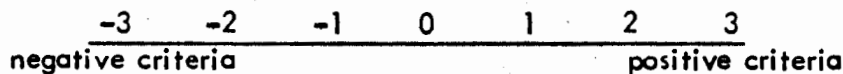


Evaluating Teacher Effectiveness in Relation to Non-Achieving Student

If peer and principal evaluation indicate that the teacher is applying correct practices but there are some students who are not achieving criteria and objectives within the acceptable range, further steps can be taken to identify the problem. Source as follows:

Step 1: Identify a specific student score outside the acceptable range:

Step 2: Obtain data indicating student attendance, physical condition, commitment, work attitudes, parent support. (Use rating scale presented)



IF data indicates positive scores defining student commitment to learn with positive attitudes and actions by student and parent, then the cause of low performance lies elsewhere.

IF data indicates negative attitude, etc., then low performance can be related to student/parent - not to teacher non-performance.

Step 3: If student participation is in acceptable range (positive commitment,

attitudes, etc.) but the student has low achievement scores, the reason might be found in two other possible areas:

1. The child is not correctly placed and requires counselling/guidance testing for proper placement
2. Teacher practices are not correctly applied in one of the Areas 1, 2, 3, 4.

IF counselling/guidance testing shows no significant sources to contribute to low student performance, then any corrective focus must be on teacher performance deficiencies as the cause for non-performance by an individual student. Internal evaluation thus focuses on teacher effectiveness and measures in applying standardized practices to deliver predictable learner mastery outcomes.

Synthesis of Stated Practices for Delivering Predictable Learner Success

The stated professional practices for delivering predictable learner success are based on proven results through multiple applications by professional peers. The designing of a blueprint for learning and the application of the Closed-Loop Model (see pg. 67) is a direct derivation from the principles of Programmed Instruction (P.I.) but as applied to the classroom instructional model.

P.I. as a Performance System provides the following:

Organization

1. Measurable performance objectives
2. Specific, relevant content
3. Sequence and step size at learner's level
4. Measurable performance required at each step

Communication and Control

5. Active student participation—each step
6. Immediate feedback—reinforcement
7. Pacing controlled by demonstrated understanding, two-way communication

Performance Measurement for Learner and Administrators

8. Ability to correct errors immediately
9. Continuous recording for strategy diagnosis
10. Continuous recording to process achievement records

Programmed instruction methods allow the use of the term PREDICTABLE LEARNER MASTERY. When these principles are properly applied to derive a functional learning path as "designed through the eyes of the learner" and when this path is then implemented using the tutorial steps of diagnosing, prescribing, confirming and revising by the teacher, then, the result will be predictable learner mastery.

SECTION II: (CASE HISTORIES)

THE PROOF OF THE PUDDING: DELIVERING PREDICTABLE MASTERY LEARNING RESULTS FOR OUR SCHOOLS

FOREWORD

Mastery Learning: A Proven Technology for Delivering Success for Our Learners

Chapter 6

A Teacher's Experience: Fun and Success for My Children (Charlayne Lamb)

Chapter 7

The Newton Public School Story (Mel Buckley)

Chapter 8

**Removing the Negative Differences Between RACE
and Levels of Learning Effectiveness (Jim C. Moore)**

Chapter 9

**The Moss Point Story: Climbing the Learning Ladder to Predictable Success
(C. Hines Cronin, Jim C. Moore)**

Chapter 10

**Orange Unified School District: History of the System Approach
to Curriculum Development and Learner Mastery Outcomes
(Mary Ellen Blanton, Gale Pattison)**

Chapter 11

Duval County, Florida — A Success Story for Learners (Donald W. Johnson)

Chapter 12

**Student Centered Education: Predictable
Learner Mastery in Operation (George W. Bailey, Harvie L. Guest)**

Chapter 13

Instructional Systems Development in Korean Educational Reform (Robert M. Morgan)

FOREWORD

Mastery Learning: A Proven Technology for Delivering Success for Our Learners

For educational professionals, for board members and for parents to accept the reality of delivering predictable learning success it is necessary to offer absolute proof. In this Section you are presented success stories by many practitioners. They are representative of Urban and Rural School Districts; of small, medium and large scale application including an entire nation (Korea).

Certain reports discuss the effectiveness of the SAFE* practices applied. Others report success without the use of the SAFE training systems. Thus we should focus on the generic mastery-learning concepts and principles.

You see success stories building from 1970 (Duval County Schools) up to 1983 where a total Learner-Mastery Delivery System is the focus (Moss Point, Newton and Jasper County Schools).

The mastery-learning applications reported have moved from small pilot programs to total district installations.

Chapter 6
A Teacher's Experience: Fun and Success for My Children (Charlayne Lamb)

Editor's Note: Charlayne Lamb's completed text did not arrive in time for this pre-publication edition.

Throughout the year (1982-1983) she has sent letters and data about her student's progress -- assuring us that the SAFE practices can be applied effectively by a single teacher to produce dramatic success for her learners.

Her letters tell the story eloquently. The first and last are included here, just as we received them.

Briefly, to provide some background for the reader, Charlayne returned to her hometown, Batesville, Mississippi, after having spent 15 years as a reading specialist in the Duval County Schools, Jacksonville, Florida.*

In Duval she had SAFE training and used the learning systems in reading developed by Duval County personnel.

On her return to Batesville she was assigned to teach sixth grade math classes. She informed us during SAFE training in Batesville that she would use the process to develop all new lesson plans in Math.

The data is exciting! Incidentally, she said that some of the greatest gains were made by minority overaged boys who had rarely achieved gains before this year.

*The Duval County Success Story is reported by Dr. Donald W. Johnson in Chapter 11 in this volume.

Batesville Elementary School
South Panola School District
Batesville, Mississippi 38606
October 29, 1982

Dear Dr. and Mrs. Corrigan,

I am so excited!! S.A.F.E. and the Corrigans have come to Batesville, Mississippi.

After fifteen years of teaching in Duval County Schools in Jacksonville, Florida, and seeing what the systematic approach to learning can do for students; how can I keep from being excited? I know that South Panola students will have just as good or even better results than Duval County.

Learning success is already beginning to happen for students that have never before mastered skills. Enclosed is a graph of scores for the first six weeks test for my sixth grade math classes. The morning class has eighteen who scored below the fiftieth percentile and one above the eightieth percentile for a class average of 32.2 percent on the Spring 1982, California Achievement Test. The afternoon class has nineteen who scored below the fiftieth percentile and two above the eightieth percentile for a class average of 45.7 percent on the CAT in 1982 (these are math scores). Who but a teacher trained in S.A.F.E. would expect and predict mastery of grade level skills for classes with such a lack of previously mastered skills? As predicted, the students did master the required skills as is shown by the graphs.

Not only am I excited, but also the students are excited. Yesterday we were working on subtraction. One of the students said, "Are my eyes shining? I'm so happy because I can finally subtract with regrouping. I can do any problem you put on the board."

It is this attitude that is developed when children learn and master. Of course there are other side effects: more enthusiasm in the classroom, more self confidence, less discipline problems, happier parents, and more, and more, and more.

Yes, as a teacher, I know the S.A.F.E. processes work.

WELCOME to our schools.

Respectfully
Charlayne S. Lamb

afternoon class

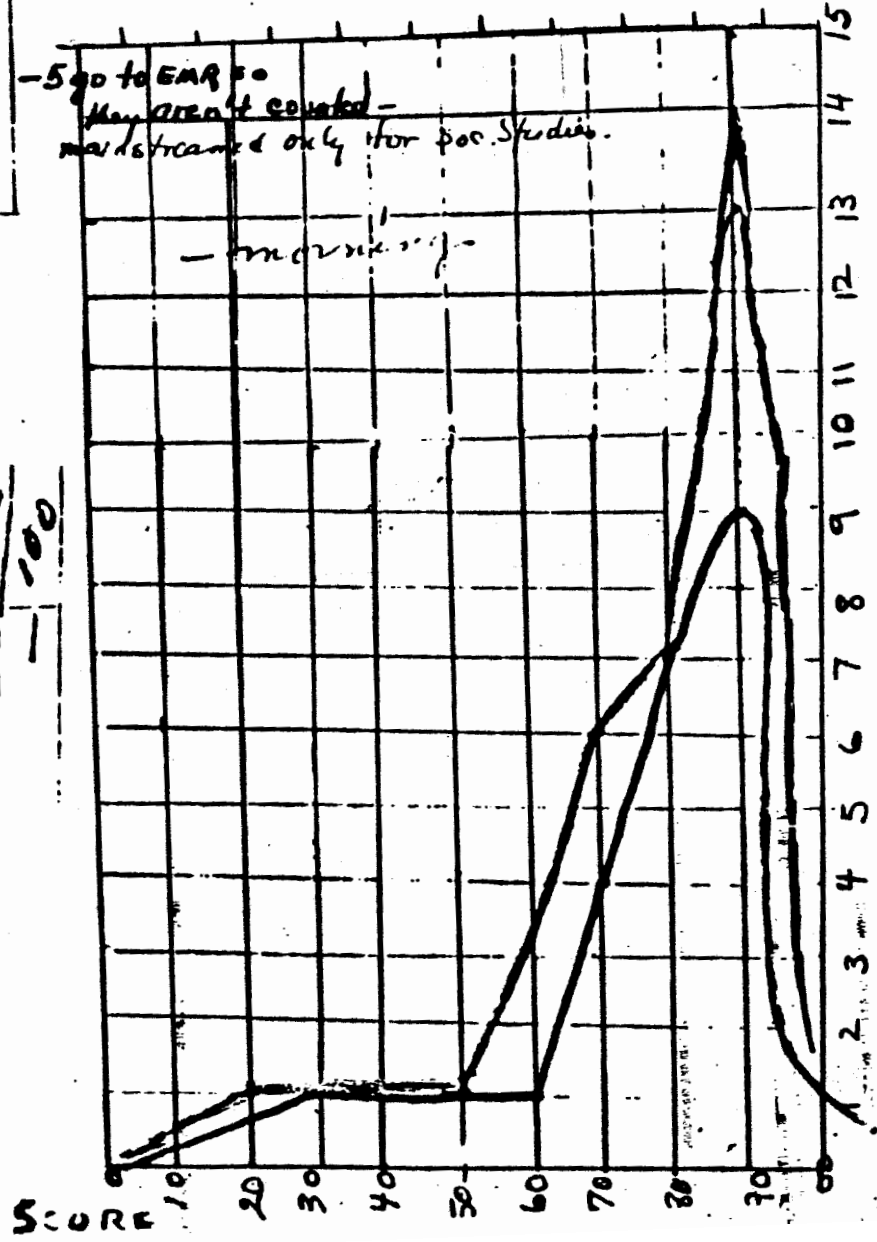
(6 wks. test)

Below 70	71-79	80-89	90-99	100
		 	 	1

Afternoon
-morning

Morning Class 6 wks. test

Below 70	71-79	80-89	90-99	100
				1



Students

Rt. 1, Box 359-D
Batesville, MS 38606
June 1, 1983

Corrigan and Associates
P.O. Box 5089
Anaheim, California 92804

Dear Betty and Bob,

I am sending you the final chapter on my math classes. The class "motto" turned out to be: Smile, I'm a great kid. I know I can. Does this sound familiar?

When they saw their CAT scores, I thought the walls were going to burst from pride and self concept. Everyone had improved, one as much as 73% higher, from 16% in 1982 to 89% in 1983. This was 5 years growth for her.

Here are the class stats.

Morning class -

1982 CAT Average - 32.2%

1983 CAT Average - 55%

+22.8%

64% of class above
grade level in 1983

32% of class above
grade level in 1982

Afternoon class -

1982 CAT Average - 45.7%

1983 CAT Average - 67%

+21.3%

72.4% of class above
grade level in 1983

41% of class above
grade level in 1982

★ 48.3% of class above 75% national percentile

Enclosed are some graphs on the classes. I have also enclosed a chart of the individual success stories.

If you need any other information, let me know.

Respectfully,

Charlayne G. Lamb

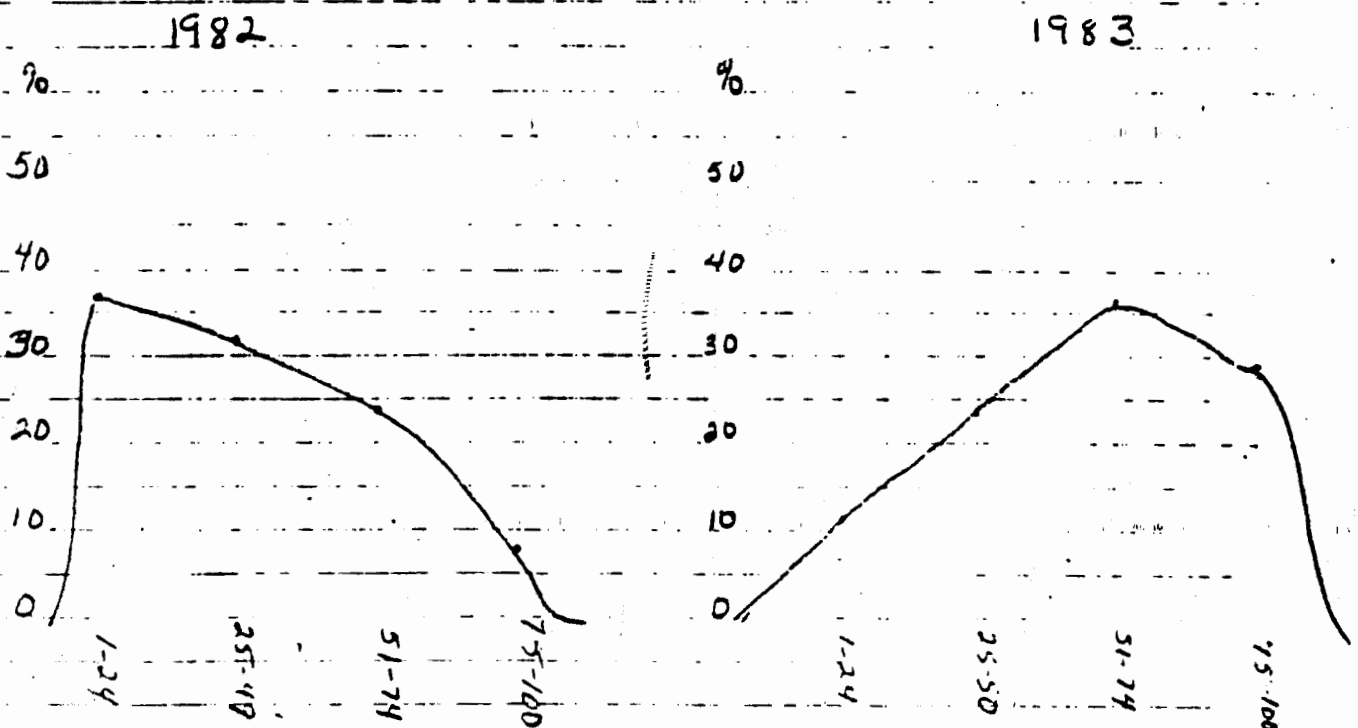
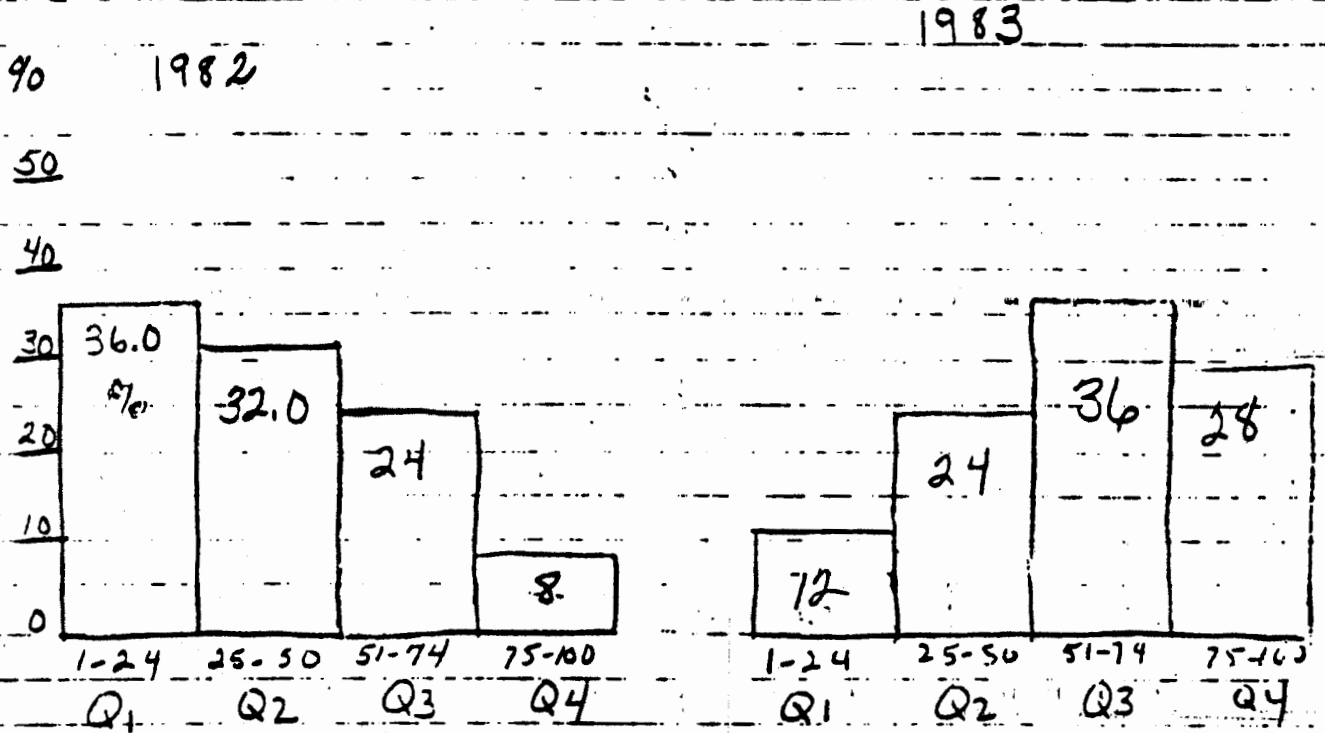
(S.A.F.E)

P.S. - Success is no longer in Anaheim, California, but in Batesville, Mississippi.
People listen more once it comes home.

LAMB

Total Math CAT Scores 6th Grade 1982-83

Morning Class

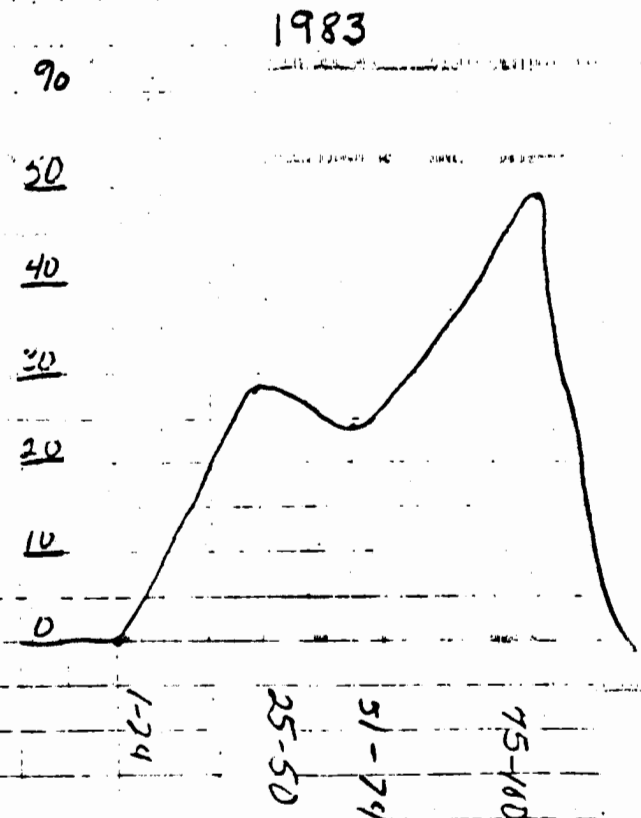
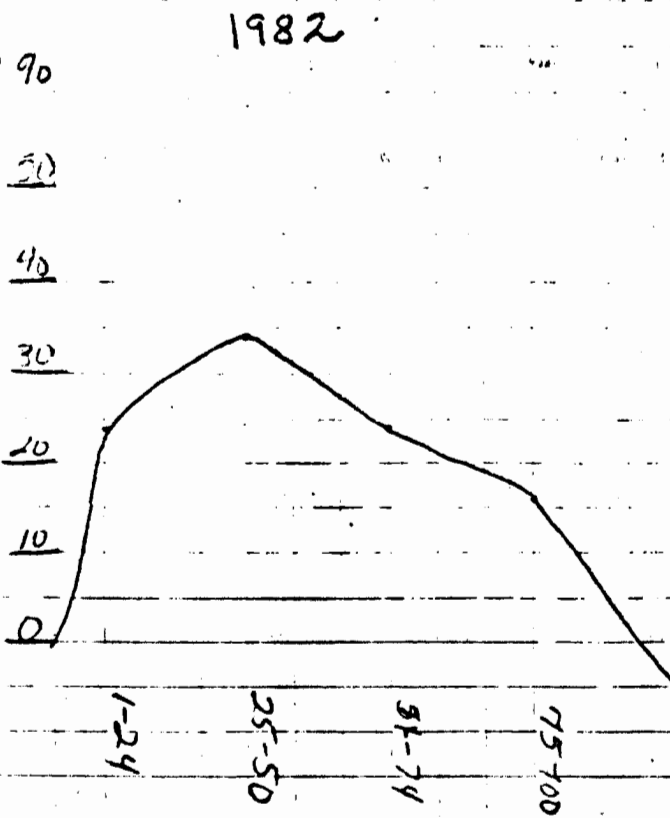
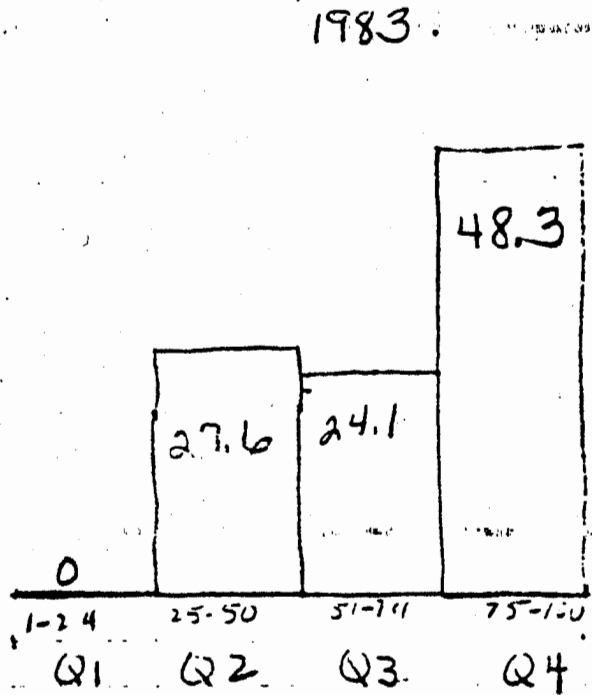
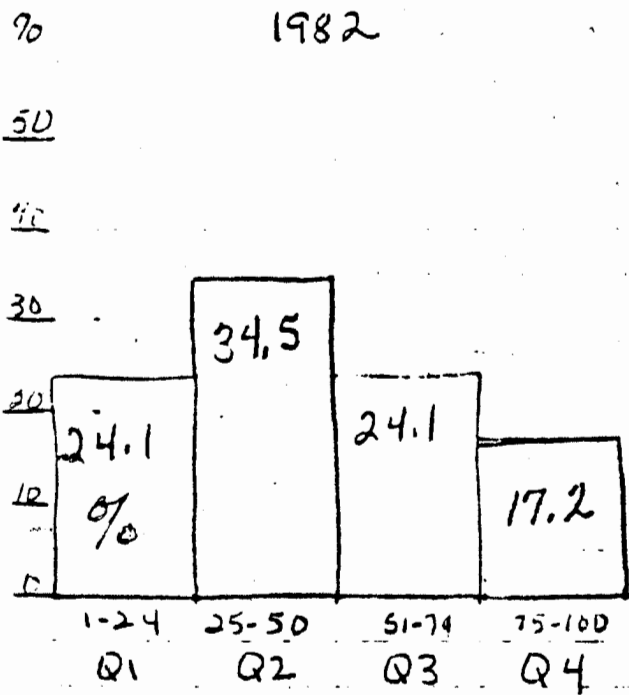


Total MATH

CAT SCORES

LAMB
6th Grade, 1983

Afternoon Class



Morning Class

Math Total Battery *

CAT % Mean		Improvement Mean	NCE Mean		NCE Improvement Mean
1982	1983		1982	1983	
37%	55%	+18%	40.9%	52.8%	+11.9
CAT % Median		Improvement Median	NCE Median		NCE Improvement Median
1982	1983		1982	1983	
35%	57%	+22%	41.9%	53.7%	+12.4%

Afternoon Class

Math Total Battery *

CAT % Mean		Improvement Mean	NCE Mean		NCE Improvement Mean
1982	1983		1982	1983	
46%	67%	+21%	47.9%	61.4%	13.5%
CAT % Median		Improvement Median	NCE Median		NCE Improvement Median
1982	1983		1982	1983	
45%	67%	+19%	47.4%	59.3%	+11.8%

Morning Class

1982 - 32% of class at or above 50% on CAT
 1983 - 64% of class at or above 50% on CAT

Afternoon Class -

1982 - 41.3% of class at or above 50% on CAT
 * 1983 - 72.4% of class at or above 50% on CAT, 48.3% above 75% Almost half

Name	Computation				Concepts/ Application				Total Math				Grade Level	% Improvement	Days of Instruction
	82 %	83 %	82 GE	83 GE	82 %	83 %	82 GE	83 GE	82 %	83 %	82 GE	83 GE			
Brewer, Scott	93	92	8.0	9.1	84	91	8.0	10.0	91	93	8.0	9.8	T	+0.2	19
Sanford, Tyrone	93	93	7.5	8.1	65	43	6.6	6.3	75	64	7.0	7.5	T	-0.09	5
Ellis, Davon	76	51	7.0	6.7	65	54	6.6	6.9	72	53	6.8	6.9	T	-1.9	1
Henry, Full	51	96	5.9	10.5	87	91	8.0	10.0	72	95	6.8	10.0	T	+2.3	32
Robinson, Tabitha	73	89	6.2	9.0	55	65	5.9	7.7	65	79	6.4	8.1	T	+1.6	17
Luttrell, Carol	58	86	6.2	8.7	56	65	6.1	7.7	58	77	6.2	8.0	T	+1.9	18
Morgan, Miller	83	79	7.5	8.0	35	34	5.0	5.7	55	55	6.0	7.0	T	±0	10
Austin, Dennis	58	76	6.2	8.0	40	61	5.2	7.4	46	70	5.6	7.9	T	+2.4	23
Pickens, Isabelle	41	68	5.4	7.7	50	54	5.7	6.9	45	62	5.5	7.4	T	+1.7	19
Henry, Chris	48	89	5.7	9.0	56	84	6.1	8.9	52	89	5.9	9.0	T	+2.6	31
Gardnight, Tracey	58	86	6.2	8.7	30	47	4.7	6.5	39	67	5.4	7.7	T	+2.8	23
Lantern, Reginald	55	72	6.0	7.9	32	47	4.8	6.5	39	59	5.4	7.3	T	+2.0	19
Ford, Minnie	66	98	6.5	10.5	17	65	3.7	7.7	35	85	5.2	8.7	T	+5.0	35
Shannon, Gregory	44	76	5.5	8.0	30	40	4.7	6.1	34	57	5.2	7.2	T	+2.3	20
Mare, Lynette	44	68	5.5	7.7	30	61	4.7	7.4	34	65	5.2	7.6	T	+3.1	24
McKee, Cathy	33	60	5.2	7.3	10	25	3.4	5.2	19	39	4.4	6.2	-	+2.0	18
Franklin, Chris	12	60	4.0	7.3	17	34	3.9	5.7	13	45	4.0	6.5	-	+3.2	25
Penner, Joe	47	76	6.6	8.0	11	27	3.4	5.3	26	49	3.7	6.7	T	+2.3	30
Watts, Larry	13	39	4.3	6.2	08	04	3.2	3.2	09	19	3.7	5.1	-	+1.0	14
Young, Robert	15	51	4.8	6.7	01	22	2.0	4.9	05	34	2.1	5.9	-	+2.9	38
Knox, James	13	51	4.6	6.7	01	08	2.0	2.3	04	26	2.0	5.4	-	+2.2	34
Johnson, Perry	01	26	2.0	5.5	06	63	3.5	2.9	02	12	1.9	4.5	-	+2.10	24
Jones, Willie	02	02	2.2	2.2	16	01	2.5	2.0	06	01	.8	2.0	-	-0.05	12
Kirshal, Audra	21	64	5.2	7.5	17	40	4.7	6.1	18	51	3.6	6.7	T	+3.3	31
Pickett, Phillip	30	64	5.0	7.5	17	19	3.9	4.7	21	37	4.5	6.0	-	+2.6	15
1st Battery	1983				1982										
21 (1-24)									9						
22 (25-48)									9						
23 (51-74)									6						
24 (75-100)									2						

Name	Computation				Concepts/ Applications				Total Battery				Grade	GE %	Total %
	82 %	83 %	82 GE	83 GE	82 %	83 %	82 GE	83 GE	82 %	83 %	82 GE	83 GE			
ts, Sherry	.93	.98	8.0	10.5	.84	.97	8.0	9.0	.91	.94	8.0	10.0	+	2.0	+1.3
aples, Rhonda	.93	.94	8.0	10.5	.67	.94	6.7	10.0	.82	.95	7.5	10.0	+	2.5	+1.3
chcock, Barry	.87	.93	7.7	8.3	.74	.79	7.1	6.4	.92	.92	7.5	8.4	+	.9	+2.0
ard, Michelle	.83	.96	7.5	10.5	.71	.91	6.9	10.0	.79	.95	7.3	10.0	+	2.7	+1.6
atcher, E.J.	.90	.92	7.9	9.1	.61	.79	6.4	8.4	.77	.87	7.2	8.8	+	1.6	+1.10
avis, Conrad	.90	.94	7.9	10.5	.56	.61	6.1	7.4	.73	.80	6.9	8.2	+	1.3	+1.8
artin, Angela	.62	.79	6.3	8.0	.77	.75	7.4	8.1	.72	.79	6.8	8.1	+	1.3	+1.8
abam, Michelle	.69	.96	6.6	10.5	.67	.79	6.7	8.4	.70	.89	6.7	9.0	+	2.3	+1.7
ishop, Jerry	.76	.79	7.0	8.0	.48	.79	5.6	8.1	.61	.80	6.3	8.2	+	1.9	+1.9
illips, LaRoe	.76	.76	7.0	8.0	.45	.58	5.5	7.2	.57	.67	6.2	7.7	+	1.5	+1.8
urthen, Camlyn	.87	.89	7.7	9.0	.35	.34	5.0	5.7	.58	.62	6.2	7.4	+	7.2	+1.4
wers, Michelle	.58	.96	6.2	10.5	.50	.81	5.7	6.6	.54	.91	5.9	9.1	+	3.2	+3.7
rron, Lee	.48	.86	5.7	8.7	.48	.40	5.6	6.1	.46	.64	5.6	7.5	+	1.9	+1.8
ok, Bruce	.51	.72	5.9	7.9	.45	.75	5.5	8.1	.46	.75	5.6	8.0	+	2.4	+2.9
ndrien, Michelle	.58	.86	6.2	8.1	.38	.84	5.1	8.9	.45	.87	5.5	8.8	+	3.3	+3.2
elms, Kim	.51	.86	5.9	8.7	.32	.37	4.8	5.9	.38	.62	5.3	7.4	+	2.1	+2.4
illen, Mike	.30	.47	5.0	6.6	.40	.61	5.2	7.4	.34	.55	5.2	7.0	+	1.8	+2.1
ndrien, Chandra	.58	.64	6.2	7.5	.20	.61	4.1	7.4	.34	.64	5.2	7.5	+	2.3	+3.0
uston, Brent	.26	.89	5.5	9.0	.40	.91	6.1	10.0	.32	.92	5.1	9.4	+	3.7	+1.0
co, Michael	.44	.29	5.5	5.6	.27	.40	4.6	6.1	.32	.34	5.1	5.9	-	.8	+0.2
arr, Sonia	.44	.68	5.5	7.7	.15	.25	3.8	5.2	.25	.43	4.7	6.4	-	1.7	+1.8
ark, Gregory	.33	.51	5.2	6.7	.20	.43	4.1	6.3	.24	.47	4.7	6.6	-	1.9	+2.3
rker, Davlyne	.37	.39	5.3	6.2	.17	.34	3.9	5.7	.24	.36	4.7	6.0	-	1.3	+1.2
xner, Lisa	.66	.72	6.5	7.9	.15	.25	3.8	5.2	.34	.45	5.2	6.5	-	1.3	+1.1
indless, Renea	.18	.36	5.0	6.0	.25	.25	5.2	5.2	.20	.29	4.1	5.6	-	1.5	+1.9
owers, Vernon	.36	.72	6.0	7.9	.68	.40	2.3	6.1	.20	.55	4.1	7.0	+	2.9	+3.5
anning, Terrie	.15	.92	4.8	9.1	.19	.84	4.7	8.9	.16	.89	4.0	9.0	+	5.0	+1.3
utten, Shannon	.30	.51	5.0	6.7	.03	.22	2.4	4.9	.12	.34	3.9	5.9	-	2.0	+2.2
inton, Angela	.10	.43	3.9	6.1	.12	.22	3.6	4.9	.09	.30	3.7	5.6	-	1.9	+2.1
Q1 (1-24)					0	11									
Q2 (25-50)					8	11									
Q3 (51-74)					7	11									
Q4 (75-100)					14	11									
Mean	.55	.74			.59	.59			.46	.67					

72.4% of 50 = 36.2
 above 36.2
 (17)

Chapter 7
The Newton Public School Story (Mel Buckley)

NEWTON PUBLIC SCHOOLS

P. O. Box 150
NEWTON, MISSISSIPPI 39345

M. R. BUCKLEY, Ed. D
Superintendent

This is the story of one short period in the total history of the Newton Public Schools. It perhaps is the era of the most dramatic change in this school district in regard to learning opportunities for children of Newton, Mississippi. I assumed the Superintendency of the Newton School District in 1976.

As with most new superintendents the first twelve to eighteen months were spent trying to get a grasp on the problems of the school district and planning for the change process. I felt a solid data base was necessary before venturing into any modifications of the system and I had discussed with the school board the need to develop a five year plan before we attempted any major changes. The problems that were identified during my studies of the district were about what one might expect in most small rural school districts.

Test scores in the Newton Schools that first year were a disaster and reflected that as a group our students were at about the thirty-second percentile in relation to the national norms. State Department of Education and University personnel drafted plans for further accountability and local school districts began to work to complete the initial stages.

We found the greatest problem in the Newton Schools seemed to arise from the fact that almost every staff member spoke a different dialect of 'educational jargonise' and I saw we could not agree on goals, objectives, standards components or even the mission of the school.

At a rather lengthy school board meeting I set about listing some prime objectives, mine and the school board's and asking them to help place priorities on these objectives.

I managed to get them to allow me to establish a priority that I could work on and they could evaluate and hopefully that would begin the change process. We began with a program of staff training to assure that we as the educational team had the skills necessary to accomplish the priorities they might establish.

As a preface to the phases of training and development it seems appropriate to present some basic demographic data about the Newton School District:

Population	Rural
Area	148 Square Miles
Racial Composition	60% Black, 40% White
Free Lunches	64%
Student Population	1300 (Grades 1 - 12)
Tax levy	25 mils
Assessed Value	9.2 million
Major source of personal income	Transfer payments (welfare, Social Security, etc.)

The administration was composed of a Superintendent, Elementary Principal and High School Principal and a total professional staff of about ninety teachers.

In the Spring of 1978 I began a training program with fourteen teachers and the two principals. The Corrigan provided their SAFE training for this group of sixteen people who were to become the cadre of trainers for the other staff and the leaders in the change process. The skills acquired in the three days of intensive work Dr. Corrigan provided became the basis for the curriculum development in the Newton Public Schools. The school board adopted as policy the systems SAFE (Systematic Approach for Effectiveness) approach as the curriculum development process that would be used in the Newton Schools.

August of 1978, Dr. Corrigan returned to supervise and direct the training for the entire teaching staff of the Newton Schools. The major redirection that was established was that teachers and administrators were now engaged in a partnership to provide children with successful learning experiences.

The most significant change in the Newton Schools was the acceptance of the fact that what was important was "WHAT DID STUDENTS LEARN?" not "WHAT DID TEACHERS TEACH?" This change in perspective seemed to result in a much more positive attitude on the part of everyone - students, teachers and parents. The school district experienced a sharp decline in vandalism, school pride started to grow and staff morale improved. The new staff that came in as replacements received systems training from their peers through in-service sessions and teacher turnover is almost nil.

But what about student achievement? Newton has continued to use the State Assessment Testing as the primary indicator of student achievement (CAT 70). The first grade class of 1979 scored at the 49th percentile and the teachers were PROUD! In 1980 the first grade scored at the 51st percentile and the 2nd grade scored at the 50th. In 1981 the first grade scored at the 53rd percentile, the second grade at the 52nd and the third grade at the 51st. The Short Form Test of Academic Aptitude is administered along with the CAT achievement test and predicted or expected performance scores are reported by the State. Without exception, the students in Newton Schools are scoring above the expectations set by the test of academic aptitude. We are better than we should expect to be and we think we can be even better. Dr. Tom Satterfield, Director of PREPS (Program of Research and Evaluation in Public Schools) reported that the Newton Schools were unusual in Mississippi because you could not predict race or socio-economic status from achievement scores. Most schools tend to present two distinct curves for achievement (bimodal) that reflect race and/or socio-economic factors. It looked as if we were on the move.

Now if this story was about how one school district came up to the national norms this article would be a waste of your time and mine. The quantum leap came in 1982. The first grade, although 65% minority and 64% free lunch eligible, scored at the 62nd percentile on the CAT achievement test. Careful study of the scores and groups revealed that while the high group was only at about the 80th percentile the LOW GROUP was at the 40th percentile. Across the first eight grades there was only one class that was not ABOVE the national norms. The fourth grade group scored at the 49th percentile, above the state norms but below the national.

How has a systems approach impacted on the Newton Schools? The entire story would require a discourse of great length. In a nutshell, the budget on June 30, 1982 was balanced and a cash deposit of \$250,000.00 made the board feel comfortable starting from a deficit position of \$25,000 in 1977. Tax levy is the same 25 mils and the assessed value is only eleven million. A bond issue is due to come up soon as a result of PTA efforts. Other developments have also occurred.

I would like to report to the reader that the Corrigan's SAFE methods have been installed in all aspects of district operation but that is not the case. We have not as yet completed the installation of our systems model in even the curriculum program.

The progress reported here reflects about fifty percent installation. Teacher, student and parent expectations continue to rise and professional staff has begun to develop a criterion referenced testing program to evaluate learning in a mastery referent rather than a norm referent.

The focus for the 1982-83 school term is to design curriculum to extract a maximum growth from the brightest youngsters. Teachers felt that we should have the top group much higher than the 80th percentile on national norms. The overall tenor in instruction is efficient and effective learning procedures to promote maximum student learning with mastery.

MATH

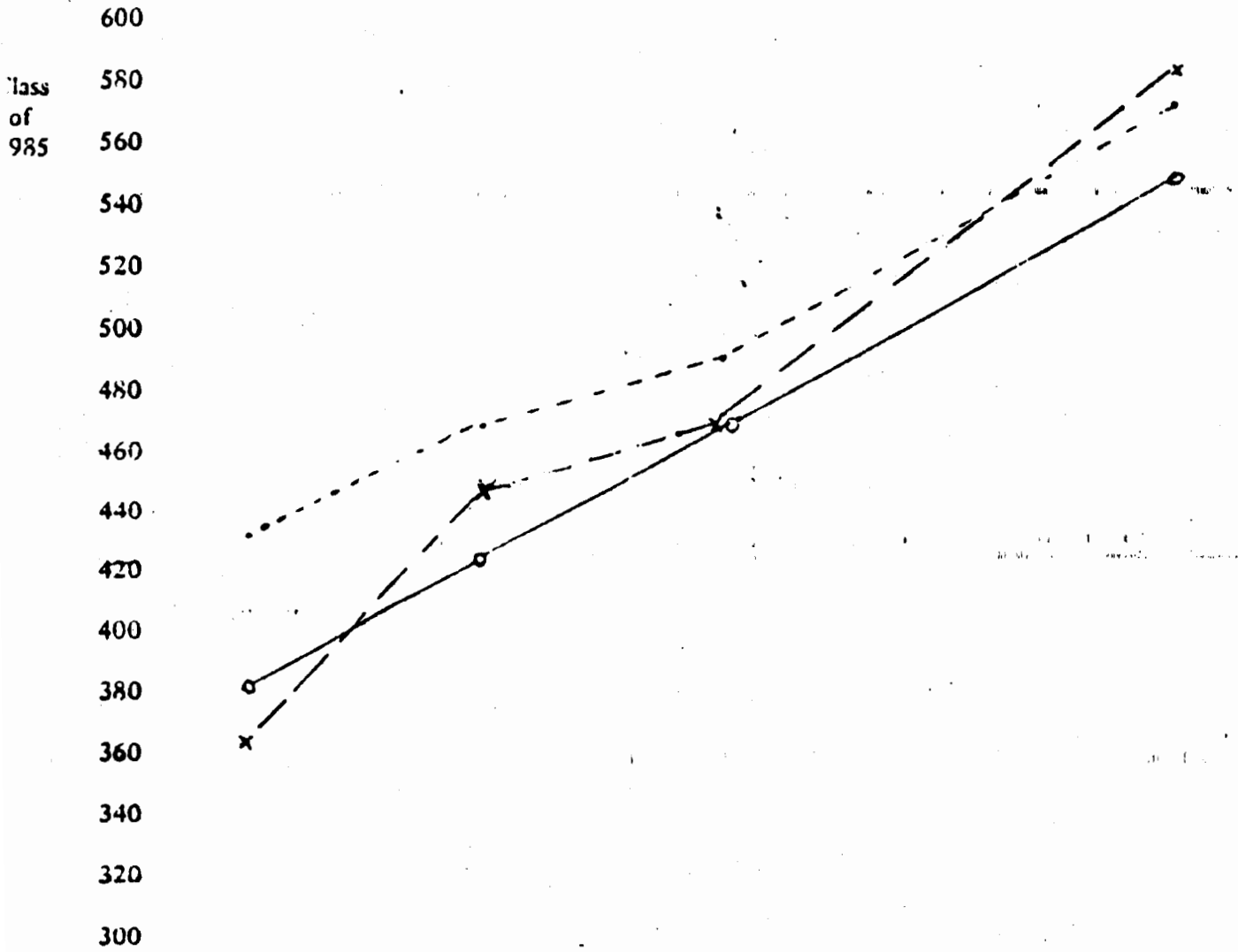
4th Grade
76-77

5th Grade
77-78

6th Grade
78-79

7th Grade
79-80

8th Grade
80-81



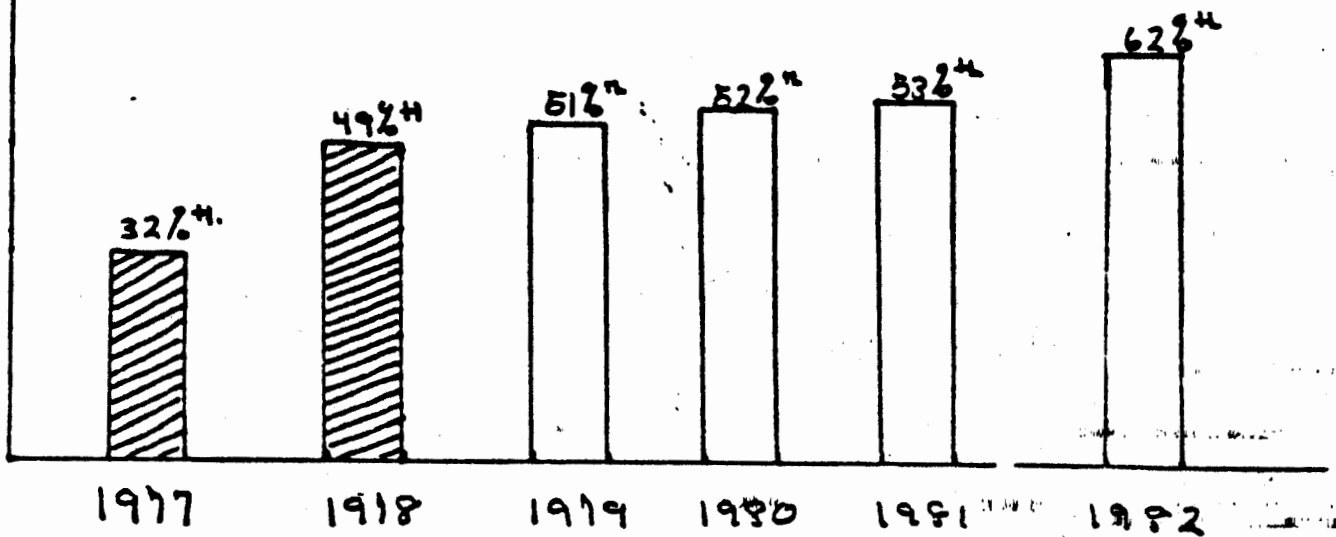
- X = obtained score
- O = expected score
- . = national mean

FIGURE 9.

tional
percentile

100
90
80
70
60
50
40
30
20
10
0

FIGURE 8.

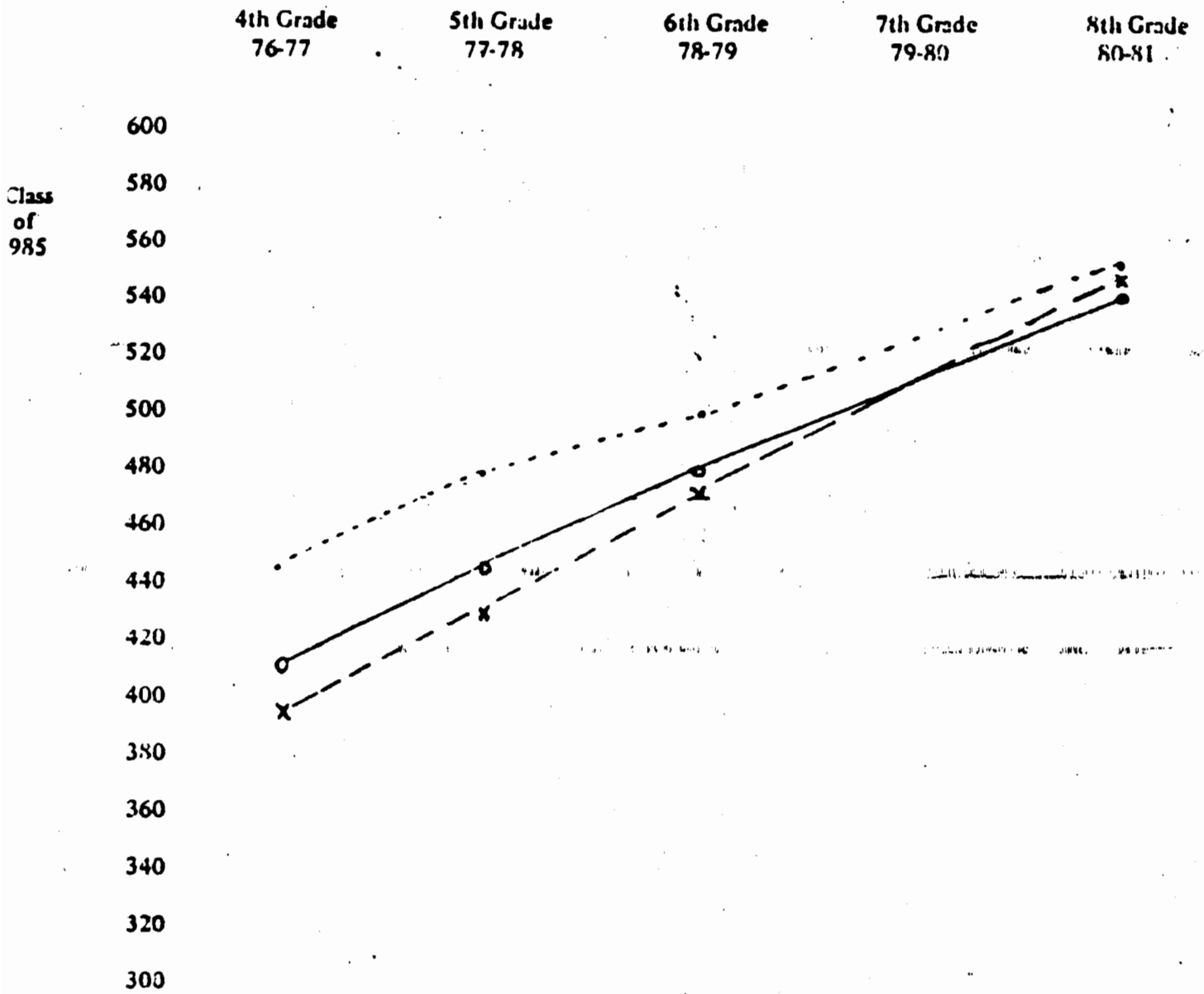


This graph represents the national norm achievement score for the 1st grade class of the year indicated in the Newton Elementary School.

The leap from 32nd to 49th percentile in 1977 - 1978 is attributed to a change in grouping and discontinuance of an open class concept. The steady growth from 1979 to 1981 is attributed to the progressive installation of SAFE and the quantum leap to the 62nd percentile in 1982 represents completion of the Model for 1st grade.

M. A. O'Reilly

READING



X = obtained score

O = expected score

• = national mean

FIGURE 10.

Chapter 8
Removing the Negative Differences Between RACE
and Levels of Learning Effectiveness (Jim C. Moore)

Moss Point Municipal Separate School District

DR. C. H. CRONIN, SUPERINTENDENT
Post Office Box 727
Moss Point, Mississippi 38663
Telephone 601-475-1533

ASSISTANT SUPERINTENDENT
DR. JIM C. MOORE

DIRECTORS
MR. DAVID MEADOWS, ELEMENTARY
DR. VIRGINIA HOLLIMON, SPECIAL EDUCATION

DIRECTORS
MR. MARVIN W. TAYLOR, FINANCE
MR. ROGER D. SARTOR, VOCATIONAL EDUCATION

November 24, 1982

Dr. Bob Corrigan
8701 Afah Street
Garden Grove, CA 92641

Dear Bob,

I apologize for being remiss in getting this off to you when I promised, but, nonetheless, here it is. I hope that it is helpful to you.

During the 1980-1981 school year and again, during the 1981-1982 school year, the district conducted an evaluation study of a locally developed criterion referenced test (CRT) utilizing the resources of PREPS. While I can not state definitively that the conclusions which I will report can be attributed to specific causes, I will state that I have every reason to believe that the utilization of the processes which we have implemented vis-a-vis SAFE account for the nature of the CRT. I base this on the fact that while the locally developed CRT correlates moderately strongly with the CAT-77 (1981: Reading Vocabulary, .55; Reading Comprehension, .58; Reading Total, .60; Language Mechanics, .64, Language Expression, .63; Language Total, .68; 1982: product-moment correlations between 1982 CRT Total and 1981 CAT-77 language variables, Language Mechanics, .71; Language Expression, .68; Language Total, .76), the test itself does not distinguish performance when adjusted for race. In the original study, no significant differences were found between blacks and whites in grades 9-12. In the second year, with a revised CRT, a significant difference was determined at the 11th grade only.

I make this statement because it is my belief that the CRT, developed on the basis of specific references to criterion-referenced models pertinent to instructional and performance outcomes of students in this district, measures the same general concepts measured by the CAT but without some of the drawbacks normally associated with nationally standardized norm-referenced tests. Contrasts of performance scores after adjustment for differences in 1981 scores suggest little difference due to race. As stated, with a significant difference found only at the 11th grade in 1982 (none in four grades in 1981), race does not seem to be a systematic factor in determining how much a

Dr. Bob Corrigan
Page 2

student learns from year to year.

I have attached copies of the tables which report the pertinent statistical information for both studies with regards to performance and race. If I can provide any further assistance to you, please do not hesitate to call on me.

Sincerely yours,



Jim C. Moore
Assistant Superintendent

Attachments: 7 statistical tables

1980-1981

TABLE 9
Summary Statistics for Nonstandard ANCOVA
Contrasts by Race for Grade 9

Variable	Adjusted Group Means ¹		Significance Test ²		
	Black (100)	White (113)	F-ratio	df	Probability
CRT total	49.1	51.3	1.32	1/210	p=.25
Paragraph score	1.6	2.3	22.93	1/210	p<.01
Language expression	518.3	552.5	11.61	1/210	p<.01
Language mechanics	544.7	579.5	9.99	1/210	p<.01
Total language	525.9	562.9	14.54	1/210	p<.01

¹Predicted group means calculated at overall covariate mean.
Covariate for all contrasts was CAT-77 Reading vocabulary scale score.
Figures in parentheses are group size.

²All tests made at overall covariate mean.

TABLE 10
Summary Statistics for Nonstandard ANCOVA
Contrasts by Race for Grade 10

Variable	Adjusted Group Means ¹		Significance Test ²		
	Black (135)	White (95)	F-ratio	df	Probability
CRT total	50.7	50.2	0.05	1/227	p=.83
Paragraph score	2.1	2.3	1.18	1/227	p=.28
Language expression	539.5	554.9	2.29	1/227	p=.13
Language mechanics	546.3	563.2	2.38	1/227	p=.12
Total language	539.4	558.0	3.59	1/227	p=.06

¹Predicted group means calculated at overall covariate mean.
Covariate for all contrasts was CAT-77 Reading vocabulary scale score.
Figures in parentheses are group size.

²All tests made at overall covariate mean.

TABLE 11
 Summary Statistics for Nonstandard ANCOVA
 Contrasts by Race for Grade 11

Variable	Adjusted Group Means ¹		Significance Test ²		
	Black (88)	White (54)	F-ratio	df	Probability
CRT total	53.0	55.5	1.06	1/138	p=.30
Paragraph score	2.4	2.1	1.29	1/138	p=.26
Language expression	546.5	587.6	12.29	1/138	p<.01
Language mechanics	554.8	600.5	13.55	1/138	p<.01
Total language	548.1	593.5	16.44	1/138	p<.01

¹Predicted group means calculated at overall covariate mean.
 Covariate for all contrasts was CAT-77 Reading vocabulary scale score.
 Figures in parentheses are group size.

²All tests made at overall covariate mean.

TABLE 12
 Summary Statistics for Nonstandard ANCOVA
 Contrasts by Race for Grade 12

Variable	Adjusted Group Means ¹		Significance Test ²		
	Black (98)	White (56)	F-ratio	df	Probability
CRT total	51.6	52.4	0.08	1/150	p=.77
Paragraph score	2.0	2.4	4.15	1/150	p=.04
Language expression	555.8	565.6	0.75	1/150	p=.39
Language mechanics	557.1	601.7	12.32	1/150	p<.01
Total language	554.2	580.9	5.69	1/150	p=.02

¹Predicted group means calculated at overall covariate mean.
 Covariate for all contrasts was CAT-77 Reading vocabulary scale score.
 Figures in parentheses are group size.

²All tests made at overall covariate mean.

1981-1982

TABLE 13

Summary Statistics for Nonstandard ANCOVA
Contrasts by Race for Grade 10

Variable	Adjusted Group Means ¹		Significance Test ²		
	Black (48)	White (75)	F-ratio	df	Probability
CRT Total	82.82	85.71	1.88	1/119	p=.17
Paragraph Score	1.70	1.93	1.25	1/118	p=.27

¹Predicted group means calculated at overall covariate mean.
Covariate was corresponding 1981 variable.
Figures in parentheses are group size.

²All tests made at the overall covariate mean.

TABLE 14

Summary Statistics for Nonstandard ANCOVA
Contrasts by Race for Grade 11

Variable	Adjusted Group Means ¹		Significance Test ²		
	Black	White	F-ratio	df	Probability
CRT Total	82.58 (68)	88.75 (58)	7.31	1/122	p<.01
Paragraph Score	2.36 (68)	2.56 (61)	0.73	1/125	p=.34

¹Predicted group means calculated at overall covariate mean.
Covariate was corresponding 1981 variable.
Figures in parentheses are group size.

²All tests made at the overall covariate mean.

1981-1982

TABLE 15

Summary Statistics for Nonstandard ANCOVA
Contrasts by Race for Grade 12

Variable	Adjusted Group Means ¹		Significance Test ²		
	Black (43)	White (39)	F-ratio	df	Probability
CRT Total	90.73	95.13	2.90	1/78	p=.09
Paragraph Score	1.99	2.53	2.88	1/77	p=.09

¹Predicted group means calculated at overall covariate mean.
Covariate was corresponding 1981 variable.
Figures in parentheses are group size.

²All tests made at the overall covariate mean.

Chapter 9
The Moss Point Story: Climbing the Learning Ladder to Predictable Success
(C. Hines Cronin, Jim C. Moore)

Dr. Hines Cronin, Superintendent
Dr. James Moore, Assistant Superintendent

The Moss Point public schools have instituted a SAFE district-wide Learner Mastery instructional system designed for the achievement of student mastery results for criterion skills. These skills have been identified specific to critical content in each of the curriculum objectives within the district.

The identification of the critical skills for each subject area and grade level was made by teachers for those subjects and grades with the objective of building a mastery-learning curriculum which will provide for the learning needs of all students.

Taken as a whole the skills which identify a subject area for all of grades one through twelve define a specific instructional program with content specific to skills being sequenced from the entry readiness level through to secondary level (exit) from the schools (grades K-12). The sequence is stipulated as linear such that any given skill is the prerequisite to the skill or skills which immediately follow.

The skills sequences are written as skills continua. In a subject area such as mathematics, the skills continua for grades one through seven comprise a single continuum that is benchmarked by grade level. The continua is written to the "best mathematics student in the district." Since the continua is linearly sequenced from entry readiness level through to pre-Algebra, any student (on the basis of that student's performance) may be placed at any point along the continua on the basis of that student's level of achievement.

Students are thus grouped for instruction on the basis of acquired mastery.

The same is true for the areas of reading and English. Other areas, such as social studies, are not specifically sequenced as a linear progression for grades one through twelve but on the basis of professional judgment. The sequences are linearly sequenced within units of instruction, while the units are sequenced in order of presentation for most effective learning by students.

In the area of mathematics, once a student has completed the grade seven benchmark (pre-Algebra), the student may elect one of two tracks to complete requirements in mathematics. In the lower track, the student may opt to complete the basic requirements for graduation (two credits at ninth grade and higher) by entering Consumer Math I in the eighth grade and completing Consumer Math III in the tenth grade. This would also be the track into which remedial students would transition upon cycling out of a remedial program in mathematics.

At the upper end, the student would enter Algebra I in the eighth grade and either complete the two credit requirement with Geometry in the tenth grade, the three credit college admission requirement with Methods of Analysis in the eleventh grade, or opt for a fifth year of mathematics with Calculus in the twelfth grade.

All areas are stated in terms of measurable learning objectives and Criteria for evaluation of mastery results.

The remedial program in mathematics (and in English, i.e., Language Arts) is a direct instruction program (Corrective Math) which replaces the district-developed skills profile for mathematics if the student, upon entry into the seventh grade, is at the fifth grade benchmark or lower. In English, the program is a decoding program in reading that progresses

to a comprehensive program (Decoding A, B, and C). In both programs, the student is directed back toward the regular track on the basis of the student's mastery of the skills which identify the remedial track.

A student entering the seventh grade in a remedial program may progress to the regular track by the ninth grade and enter either the pre-Algebra course (seventh grade benchmark) or the Consumer Math I course (eighth grade benchmark). The course content focuses on skills to be learned; and the student receives "credit" on the basis of his or her grade level classification and successful completion of the course as measured by achievement of mastery standards. The program allows for grouping for instruction on this basis in light of the skill nature of the content.

The student is enrolled in a mathematics course on the basis of that student's measured mastery of criterion skills within a logical sequence of skills. This sequence of skills identify a complete mathematics program (grades one through twelve). Mathematics lends itself directly to such a schema, while social studies lends itself poorly to such a construction. Social studies is skill sequenced around sequenced units. Definition and articulation is provided, however, for such considerations as the nature of American history taught at grades five, eight, and eleven.

English is conceptualized along the same lines as mathematics. The basic construction of grades one through nine (since the high school is grouped by grades ten through twelve) is grammar with a skills sequence designed to meet the needs for grammar, spelling, basic composition, and introduction to literature.

At grade ten, the sequence encompasses greater attention to specialized skills (critical analysis, research papers, thesis, precis, World Literature, American Literature, and English Literature, etc.). The high school grades attend to

the writing and reading skills which have been developed over the preceding nine years. The program focuses at the level of the above average student who is established as a grammarian. Students are placed along the skills continuum at any grade level on the basis of acquired mastery, with remedial programs as described above complementing the district continuum for the special need student.

Instructional Monitoring of Mastery Results

The success of any instructional program is dependent upon the quality of the monitoring which takes place to deliver mastery of skills. Monitoring has many facets. Students are individually monitored on the completion of skills in a skills continuum. Such monitoring is achieved on the basis of observation and on testing of mastery objectives. The testing component is directly correlated to the instructional monitoring accomplished by the planning which is requisite to day-to-day instruction. Skills are planned for instruction on the basis of identifying the principle component parts of those skills (subskills) stated as Intermediate Performance Objectives which must be learned by the student in order to master the referent skill (Terminal Performance Objective). The subskills which identify the mastery components of the criterion skill are referred to as the Functional Learning Path, whereas the tasks to be accomplished by the teacher and the student in order to achieve the mastery of those skills are referred to as the Learning Ladder (learning steps and method-means to deliver correct learner responses).

In relation to the aspect of monitoring, the functional learning path identifies criterion test items. Completion of planning forms which replace the traditional daily lesson plan format assure that information is provided by the teacher for that teacher and for the supervisor (principal, assistant principal, department chairperson, district director) to assure delivery of on-task learning and measured achievement through relevant testing. The composite functional learning paths

for all skills within a continuum (which defines a specific instructional program) provide a test item bank which is used for the writing of both teacher-made tests (formative evaluation) and district program evaluation (summative evaluation).

In the first year of the implementation of a mastery-learning skills continuum, an evaluative feedback loop is provided for the review and revision of the skills continuum based on teaching which actually occurs in the classroom. Is the continuum in fact in the proper sequence? Is the continuum representative of criterion skills or have general objectives replaced consideration of mastery performance? Are functional learning paths being identified which in fact specifically direct on-task learning of referent skills which deliver predictable mastery results by learners? These considerations are made by each teacher implementing a mastery learning skills continuum; and the information is fed-back to a district committee of subject area professionals for review, consideration, and - as needed - revision. This committee - one for each basic academic discipline at this point - also has the responsibility for reviewing all functional learning paths and learning ladders written for each skill taught by each teacher; and generating a representative functional learning path which defines the critical component subskills which must be included in the mastery learning program for any given skill. Once generated, the teacher is responsible for daily planning as relates to the implementation of the learning ladder and for the inclusion of other skills which expand upon and both complement and supplement the established skills continuum (as appropriate to need-to-know learning requirements).

Monitoring also occurs at the supervisory level. Monitoring at this level is critical to the success of the district's mastery-learning instructional system. This is true for both the district skills continua and for the direct instruction programs which comprise the developmental and remedial programs in language arts and in mathematics. In fact, the district

continuums, vis-a-vis functional learning paths, learning ladders, and criterion testing, are themselves direct instruction programs. Supervisors are provided extensive training and staff development to insure that each is capable of providing direct, relevant collaboration with the classroom teacher to effect predictable and successful on-task learning and mastery achievement.

The essential descriptor of the relationship between the classroom teacher, the building level principal, and the district administrator is one of precise collaboration. Each performs an essential professional function on the basis of referent expertise. To a substantial degree the collaboration is collegial and involves specialized considerations of planning, implementation, and evaluation and revision. The collaborative model is founded upon precise planning and the development of management priorities referenced solely to delivery of learner success.

Initial staff development was directed toward principals and administrators in the development of a knowledge and application base of performance system theory (SAFE Planning, Managing, and Evaluation for Required Results). This training specifically keyed on five-year plans which identified the learning objectives necessary to the conceptualization of the skills continua and mastery learning success standards. This management training was followed by training in the SAFE instructional design processes for delivery of guaranteed learner success (SAFE: Delivering Predictable Learning Success). All administrators and principals received the SAFE management and SAFE instructional design training, while key teachers comprising approximately ten percent of the instructional workforce received only the SAFE instructional design training (SAFE: Delivering Predictable Learning Success [DPLS]).

With the established corps of "experts" and "consultants", departmental and grade level inservice was accomplished at each building level across the entire district. The school calendar was mediated to include specific days of teacher

preservice at the beginning of each school year and to include three to five days of half-day inservice throughout the school year.

Of special concern during the SAFE instructional design training (which was provided to district teachers by in-district administrative staff) was considerations of accomplishing higher orders of cognitive learning. Concern that direct instruction of district skills continuums may in fact lead to too great an attention to basic references relating only to knowledge and comprehension, specific instructional design models were created to insure appropriate application of Blooms* levels of application, analysis, synthesis, and evaluation skills. These were applied in deriving content and thus criterion skills which define the various instructional programs.

Assuming that all students, regardless of acquired performance level, require development of higher ordered cognitive skills, the instructional models were designed to spread the implementation of the higher ordered cognitive skills across instructional methodologies to insure that more and more attention be given to the higher orders for the upper performing learners. Attention to cognitive performance is monitored through the testing program and, consequently, through the development of the functional learning paths and the learning ladders.

In the beginning, attention was directed primarily to the elementary levels with the learning priorities being directed to language arts (reading and English) and to mathematics. The greatest degree of attention was directed to both scope and sequence and to articulation not only between skills within a continuum to achieve logical sequence but also between benchmarks (grade levels). Focusing on elementary provided assurance of the establishment of requisite repertoire skills necessary to success at the secondary level. At each subsequent benchmark, that benchmark continuum extended in the same logical fashion to that continuum established for the preceding benchmark.

*Benjamin Bloom's Taxonomy of Instructional Objectives, University of Chicago

At the same time, the secondary grades were developing their skills continuum and checklists on the basis of the critical skills (not minimum competencies) necessary for completion of a substantially sound academic program culminating in graduation.

In effect, the one through twelve skills continua were developed from both ends of the continuum toward the middle at the same time. This required specialized management skills to insure that scope, sequence and articulation were not only protected but instructionally enhanced in the sense that the final continuum represented the best of the professional judgment available as to the character and identity of the instructional program

These specialized management skills are most directly related to the establishment of both small and large groups of instructional experts which function effectively within their specific assignment and which attend to the learning needs of the district through explicit collegial collaboration between elementary and junior high; between junior high and high school; and within divisions between grade levels and across common subject areas to related content fields.

These SAFE methods have produced the collapse of the traditional negative statistical relationship between RACE and levels of learner achievement as reported in recent PREPS district evaluations.

About the Authors:

Chapter 10
Orange Unified School District: History of the System Approach
to Curriculum Development and Learner Mastery Outcomes
(Mary Ellen Blanton, Gale Pattison)



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ORANGE UNIFIED SCHOOL DISTRICT
HISTORY OF THE SYSTEM APPROACH TO CURRICULUM DEVELOPMENT
AND LEARNER MASTERY OUTCOMES (1961-1983)
by Mary Ellen Blanton and Gale Pattison

INTRODUCTION

In the Orange Unified School District, the system approach to curriculum development has evolved over the last nineteen years. As of spring, 1980, the Orange Unified School District proudly provides a fully described curriculum from kindergarten through twelfth grade, an Instructional Materials Center housing a Curriculum Lab for teachers, an adequate supply of instructional materials to support classroom instruction, an ambitious staff development program, and a system of criterion measures which include: criterion reference expectancies and secondary course standards.

NEED FOR CHANGE

Nineteen years ago, Orange was a fledgling district with only six years of history as a unified school district. Elementary schools used the State provided textbooks as the major determinant of curriculum. The effectiveness of instruction varied widely from school to school and teacher to teacher. Students entered the junior and senior high schools with varying degrees of preparation. Since no district-wide tests were administered, the measurement of a school's worth was dependent on how teachers impressed parents and principals. Students who did not learn easily were required to repeat the same material a second time, or were socially promoted to attack new subject matter. In-service was conducted in two-hour sessions by publishers' representatives. Two district office curriculum specialists served the teachers by gathering and disseminating student activity sheets. Concerns began to surface about the over-all effectiveness of the instructional program. It became increasingly apparent that a commitment to invest in a systematic approach to curriculum development and implementation would produce a better educational product.

RESULTS OF THE SYSTEM APPROACH

Recent objective data for the Orange Unified School District validate the effectiveness of the system approach to curriculum development. These indicators can be classified as test scores (national, state and local), program reviews by state appointed teams, participation and attitude surveys on the Staff Development Program.

HISTORY OF THE SYSTEM APPROACH TO CURRICULUM DEVELOPMENT

A profile of the student population of Orange Unified in 1980 shows an average middle class community, with characteristics similar to those with whom the Comprehensive Test of Basic Skills (CTBS) was normed. 18% of the K-6 student population are below the poverty level; 16% of the 7-9 students rank below the poverty level. Approximately 4% of the students at any grade level are non-English Speaking or Limited English Speaking, 16% of the student population are of minority ethnic origin.

On the CTBS tests only 11% of Orange Unified students scored below Q_1 on a composite score at 3rd grade; 10% below Q_1 in grade 7; 9% below Q_1 in grade 9. This compares to the 25% of pupils who fell below Q_1 in the similar group against which the test was normed.

When disadvantaged students were analyzed as a separate group, gains of 1.2 months for every month of instruction were recorded. This pattern was based on a comparison of growth in CTBS test scores from 3rd to 5th grade, 5th to 7th grade, and 7th to 9th grade.

With regard to test data, the nationally standardized Comprehensive Test of Basic Skills (CTBS) shows a consistent pattern of growth based on longitudinal data. Following one entire class of 3rd graders over a six-year period, students who are now 9th graders (over 2,000 students) have demonstrated an average gain of 4 months beyond the test publisher's expectancy. These tests are administered each spring in grades three, five, seven, and nine. Test results are shared with the parents of each student.

Using data from the California Assessment Program (CAP), rankings of the 20 largest California School Districts ranked Orange Unified School District 1st in Mathematics, 3rd in Reading, and 3rd in Written Expression at the 12th grade. (See attached.) On the local level, an average of 70% of the students in the District passed the high school proficiency test in Reading, Mathematics, Grammar and Composition at the 9th grade during the years 1976 through 1979.

In the State of California, the School Improvement Program has provided additional funds to selected schools over the last seven years. In this program, schools are monitored by state-appointed program review teams. The program review teams visiting Orange Unified Schools have consistently marked the schools with over-all superior and high ratings. Additional commendations were given the Orange Unified Schools for their subjective and objective data related to achievement in Reading, Mathematics and Language Arts.

The Staff Development Program in Orange Unified School District has provided training in Teaching Learning Processes to 900 of the 1200 teachers in the District. Attitude surveys of teachers toward this level of instruction have produced 95% positive responses. An additional 150 teachers have received training in Classroom Climate and Organization with a 95% positive attitude response. One hundred ten teachers have received Staff Development training in Questioning Techniques as a Teaching Strategy with 100% positive response. Individual teacher transformations due to the Staff Development Program have been documented and verified by principals and the Staff Development team. These notable turnarounds from "poor teacher" to "average teacher" and, in some cases, from "poor teacher" to "exceptional teacher" are measures of the effectiveness of the Staff Development Program. The system approach to instructional improvement has paid substantial dividends to the Orange Unified School District.

RANKINGS OF THE 29 LARGEST CALIFORNIA DISTRICTS ON THE 1979-80 CALIFORNIA ASSESSMENT PROGRAM TESTS

District	Average Daily Attendance	Reading			Written Language			Spelling		Math			Rank on Percent Minority
		Grade 3	Grade 6	Grade 12	Grade 3	Grade 6	Grade 12	Grade 6	Grade 12	Grade 3	Grade 6	Grade 12	
Los Angeles Unified	531,261	25	23	24	25	23	25	23	29	25	22	26	5
San Diego City Unified	109,757	9	12	8	10	13	11	13	11	9	10	6	16
San Francisco Unified	55,532	13	19	28	12.5	16	24	15	18	5.5	15	17.5	3
Long Beach Unified	54,365	18	18	15	19	18	15	18	18	20	20	16	15
Oakland Unified	48,325	22	21	29	22	22	29	19	28	22	21	28	1
Fresno Unified	46,962	10	11	16.5	11	14	18.5	16	22.5	7.5	8	17.5	14
San Juan Unified	45,952	1	1	2	2	3	3	5.5	6.5	2.5	3	3	28.5
Garden Grove Unified	40,136	7.5	7	14	8	6	14	9	5	11.5	4	13	20
Sacramento City Unified	38,698	14	15	18	12.5	12	17	11.5	14	14	13	20	11
Ht. Diablo Unified	36,863	2	3	3.5	1	2	8	3	9	1	2	2	26
San Jose Unified	34,227	11	7	3.5	9	7	1.5	7.5	2	10	8	10.5	17
Richmond Unified	29,059	15	17	19.5	16	17	20	14	3	17	18	21	9
Orange Unified	28,815	3	2	5	3	1	1.5	1	9	2.5	1	1	24
Santa Ana Unified	28,305	21	22	26.5	21	21	27	22	20	21	23	25	4
San Bernardino City Unified	27,666	19	16	23	18	19	23	20	27	15.5	17	24	13
Remont Unified	27,065	4	5	13	4	5	12	4	18	5.5	6	15	22
Montebello Unified	25,374	24	25	25	23.5	24.5	28	24	25	24	25	27	2
Hacienda La-Puente Unified	24,587	16	14	22	15	11	22	10	26	15.5	14	23	8
Riverside Unified	23,955	17	13	9.5	17	15	10	17	15	18	16	12	18
Torrance Unified	23,633	6	4	1	6	4	4	2	12	7.5	8	3	21
ABC Unified	23,343	12	10	16.5	14	10	13	11.5	13	13	11	14	12
Pasadena Unified	22,512	20	20	21	20	20	21	21	24	19	19	22	6
Stockton City Unified	22,476	23	24	26.5	23.5	24.5	26	25	21	23	24	29	7
Anaheim Union High	20,882	--	--	11.5	--	--	6.5	--	9	--	--	4	23
Simi Valley Unified	20,871	5	9	11.5	5	9	16	7.5	16	4	12	10.5	25
Glendale Unified	20,594	7.5	7	7	7	8	5	5.5	6.5	11.5	5	9	19
Grossmont Union High	20,476	--	--	9.5	--	--	9	--	1	--	--	7	27
Huntington Beach Union High	20,332	--	--	6	--	--	6.5	--	4	--	--	5	28.5
Eastside Union High	20,285	--	--	19.5	--	--	18.5	--	22.5	--	--	19	10

*One (1) is high.

District	Average Daily Attendance	Reading			Written Expression		Spelling		Math	
		Grades			Grades		Grades		Grades	
		3	6	12	6	12	6	12	6	12
Los Angeles Unified	539,005	27	23	23.5	25	24	25	29	25.5	24
San Diego City Unified	112,668	11.5	11	8	12	9	12.5	5	12	5.5
San Francisco Unified	59,588	13.5	20	23.5	19	21	18	12	19	12
Long Beach Unified	54,752	20	18.5	13	18	13	19	12	20	14
Oakland Unified	50,415	25	27	29	26	29	22	23	24	26
Fresno Unified	48,821	10	13.5	16.5	16	17	17	22	10	17
San Juan Unified	47,165	1	1	1	2	1	4.5	10	3	4
Garden Grove Unified	41,541	8	9	14	8	15	9	18	7	13
Sacramento City Unified	39,931	15	13.5	19	13	19	14	20	16	20
Ht. Diablo Unified	38,569	2	4	4	3.5	8	2	8.5	2	2
San Jose Unified	35,466	9	8	5.5	7	4	10	2	6	10
Richmond Unified	30,965	17	17	15	17	16	15.5	5	14	18
Compton Unified	29,435	28	28	30	28	30	28	30	28	30
Orange Unified	29,410	4	3	3	3.5	3	6	7	1	1
San Bernardino City Unif.	28,457	21	18.5	22	20	23	20	21	17	22.5
Everett Unified	27,930	6	7	12	10	12	7.5	18	11	11
Santa Ana Unified	27,392	22	24.5	27.5	23	26	23	26	22	27
Hacienda La Puente Unif.	25,231	16	16	21	14	22	12.5	27	15	21
Montebello Unified	24,994	26	26	25.5	24	27	27	25	25.5	29
Torrance Unified	24,942	7	6	5.5	5	5	1	2	8.5	7
Riverside Unified	23,823	18	15	9.5	15	11	15.5	12	18	16
ABC Unified	23,579	11.5	12	16.5	11	14	11	18	13	19
Pasadena Unified	23,460	19	22	20	22	20	21	15.5	21	22.5
Stockton City Unified	23,459	23	24.5	25.5	27	28	26	24	27	28
Anaheim Union High	22,306	--	--	9.5	--	6.5	--	8.5	--	9
Simi Valley Unified	21,755	5	5	18	6	18	4.5	15.5	8.5	15
Merwalk La Mirada Unified	21,494	24	21	27.5	21	25	24	28	23	25
Glendale Unified	21,409	13.5	10	7	9	6.5	7.5	5	5	5.5
Grossmont Union High	21,180	--	--	11	--	10	--	14	--	8
Newport Mesa Unified	20,940	3	2	2	1	2	3	2	4	3

HISTORY OF THE SYSTEM APPROACH TO CURRICULUM DEVELOPMENT

SYSTEM APPROACH INTRODUCED

The sophisticated system of curriculum development began in 1961, in Orange Unified School District, when Mr. Gale Pattison, Deputy Superintendent, inaugurated Senior Teacher Projects. The Senior Teacher Projects were designed to reward master teachers with extra pay for extra duty, and to enrich the school district by tapping the creative ability of outstanding teachers in writing curriculum. The first curriculum project was authorized in March, 1961, to develop English Composition expectancies. Additional Senior Teacher Projects were conducted in the 60's in such areas as Home Economics, Industrial Arts, Physical Education, Language Arts, Social Science, and Reading. These projects defined two aspects, the content and the learning.

A formalized system approach to curriculum development was instigated in 1969 through 1971, when Dr. Robert E. and Mrs. Betty Corrigan served as consultants to the Orange Unified School District. At this time, the Corrigan's organized training sessions for selected district office administrators, principals, and teachers. The Corrigan System Approach for Education (SAFE) included training in Management by Objectives. The exact content of the Corrigan model included identification of curriculum goals, specifications, and performance boundaries. Based on the outline of curriculum content, the Corrigan's taught the staff to develop Terminal Performance Objectives, Intermediate Performance Objectives, and Learning Steps.

As each objective and learning step was specified, criterion referenced tests or evaluation measures were developed to measure achievement. The actual presentations to the students were included in the Learning Steps; i.e., alternate methods, media and materials through which learners might achieve one or more learning steps were assessed. Final selection of methods/media would be made in developing a Functional Learning Path, the arranged sequence of learning steps and Intermediate Performance Objectives the learner would undertake from entry to achievement of Terminal Performance Objectives. The SAFE approach used performance terms which defined: who will perform, what performance is specified, how will the performance be demonstrated, under what conditions the performance will occur, and how well the performance will be achieved.

The Corrigan training was designed to be transmitted by groups of trainers training other trainers, who would eventually train all of the teachers in the school district. The training advanced as far as triads of trainers training all of the administrators and a portion of the teachers. Based on the Corrigan approach to Terminal Performance Objectives, an analysis of curriculum areas was carried out by curriculum leaders who received this training. In particular, Terminal Performance Objectives were identified in Foreign Language, Science, Language Arts, Industrial Arts, and Girls' Physical Education.

As an offshoot of Corrigan training, a group of curriculum leaders devised a format for writing performance objectives which was developed inside the district for use by teachers and administrators in describing objectives required by the California State Stull Bill of 1971. This particular publication served well for nine years.

HISTORY OF THE SYSTEM APPROACH TO CURRICULUM DEVELOPMENT

IMPACT OF NEW SUPERINTENDENT

At this point in 1972, a new Superintendent, Dr. Donald W. Ingwerson, was selected by the Board of Education to provide leadership to the school district. Dr. Ingwerson came upon the scene with a pledge to apply the system approach to curriculum development. He promised the Board that he would supervise a fully described curriculum which would include objectives for the curriculum, materials provided to teachers, in-service components, and an evaluation design. Dr. Ingwerson's dedication to planning provided an impetus to the system approach to curriculum development. He also brought with him a strong commitment to curriculum leadership which was manifested in the appointment of coordinators and district department chairpersons in the major content areas with kindergarten through twelfth grade responsibility.

In the fall of 1973, Dr. Ingwerson appointed Mary Ellen Blanton as Director of Program Planning and Development, delegating to her specific responsibility for directing the development of a fully described curriculum.

IMPACT OF STATE PROGRAM

In addition to the school district leadership, an additional impetus for a system approach to curriculum development came through the State of California's Early Childhood Education. Although this program was voluntary, it mandated to participants that basic skills be identified in discrete parts, and that measurement or criterion reference tests be developed for these discrete parts. This program concentrated on individualized instruction with a heavy emphasis on staff development. The Board, at this time, authorized participation in the Early Childhood Education program. In order to demonstrate compliance with the ECE objectives, the district was impelled to develop Reading, Mathematics, and Language Arts Continuums. The first target in this area was Reading.

After searching commercial companies, other districts, and University objective banks, the district decided to develop its own Reading Continuum. With additional Senior Teacher Projects, this continuum was refined, developed, and expanded into a comprehensive continuum of reading skills, measured by an extensive criterion reference testing system and student worksheets. This reading system is now compiled in a 611-page notebook entitled, The System for Teaching and Assessing Reading. After the Reading Continuum and criterion reference system had been developed, Mathematics and Language Arts followed along the same pattern and were completed. For the kindergarten level, the district identified the Santa Clara Developmental Inventory as the curriculum description and criterion reference testing system for kindergarten students.

An additional component of the Early Childhood Education program in the State of California was a needs assessment system to undergird the writing of school plans. In order to provide direction for principals and curriculum supervisors as they undertook school plan development, extensive workshops on needs assessment techniques were conducted. Dr. James B. Cox, Evaluation Consultant with the Los Angeles County Schools District, worked with the Orange Unified School District in 1975. Dr. Cox presented an instructional management model which included such items as: Goal and Priority Setting, Planning, Writing, Implementing, and Monitoring. His presentations to principals were tied closely to the Consolidated Application for special funding from the State of California.

HISTORY OF THE SYSTEM APPROACH TO CURRICULUM DEVELOPMENT

LOCAL SCHOOL LEADERSHIP

As curriculum development proceeded at the district level, the need for leadership at the school level was recognized, in order to manage and achieve the objectives set in the school plans. The need for leadership extended from kindergarten through twelfth grade. A Reading/Resource Teacher was added to the staff of each elementary school to serve teachers as a resource in all areas of the curriculum from kindergarten through sixth grade. In addition, department chairpersons in each of the subject areas at the junior and senior high schools were given increased stature.

Specific training to enhance the role of department chairpersons was provided, beginning in 1977. A handbook for secondary department chairpersons was written. Department meetings were scheduled on a regular required basis on the first Monday of each month. At these meetings, the junior and senior high school department chairpersons met with the district office chairperson in each content area. The network of curriculum information and implementation expanded.

At the elementary level, an additional link between curriculum development and implementation was fostered through Grade Level Meetings and Road Shows. The Road Shows taken to the schools were in-service on new, and on-going, curriculum ideas. The Road Shows included the district office curriculum staff who met on a minimum day with each entire school staff on their own turf. The curriculum coordinators identified the areas of most interest by the school staff and presented mini-workshops related to the needs of that particular staff.

In 1978, an additional impetus to closer linkage with the district office was provided when the Superintendent designated the junior and senior high school principals as the curriculum leaders of their schools. Previously, the assistant principals at the high school level had assumed curriculum leadership.

STAFF DEVELOPMENT

One facet of the State Early Childhood Education program, and also of the Federal Emergency School Aid Act, involved staff development. Not only did the special projects require staff development, but the principals agitated for staff development help as the most important link in implementation of an advanced curriculum system. During the school year of 1975-76, Mr. Ernie Stackowski of Long Beach Unified, was hired as a consultant to provide in-service training for administrators during summer and fall workshops. The content of these workshops included training and teaching to objectives, diagnosis and prescription of instructional needs and techniques as to how to foster these practices in the classroom.

During the school years of 1975 through 1977, Mrs. Erlene Minton was hired as a special consultant to provide in-service training to teachers in the same content area as that propounded by Mr. Stackowski. The early efforts in this area provided a few administrators and a few teachers who could implement the concepts presented in the workshops. This minimal effort was seen to be of such potential that in 1977 Mrs. Minton was hired as a full-time Staff Development Coordinator to present workshops to both administrators and teachers. The thrust was pursued and expanded until 1979-80, when two full-time staff development assistants assisted Mrs. Minton in training administrators and teachers.

HISTORY OF THE SYSTEM APPROACH TO CURRICULUM DEVELOPMENT

In addition to the workshops for teachers and administrators, the principals have also been given instruction in clinical supervision which allows them to observe a teacher and provide specific suggestions to the teacher to improve instructional techniques.

COURSES OF STUDY

An additional written instrument which has helped synthesize the curriculum development has been the centralized development of courses of study. In 1971, an Elementary Course of Study was written, and revised in 1976. Beginning with 1976, courses of study for elementary, junior high, and senior high were developed and published on a yearly basis by the Director of Instructional Program Planning and Development. This act of pulling the strands of the curriculum together in one written format was critical in providing the uniform direction necessary to directing a large school district's curriculum implementation.

EVALUATION

At this juncture, moving from 1961 to 1975, the curriculum in Orange Unified School District had been described, materials had been developed, criterion measures had been written, leadership had been provided, staff development had been planned, and yet one essential element was missing. That element was a strong evaluation program. In December, 1975, the Board of Education adopted graduation requirements, effective for the class of 1979, which included proficiency testing. Proficiency areas included Reading, Composition, Mathematics, Consumer Education, and Science. These requirements dictated that tests be developed which would be the criteria students must pass before qualifying for a high school diploma.

At this point, the curriculum supervisors were delegated the task of developing the proficiency tests. The curriculum supervisors were trained by a consultant in the development of test specifications and the actual writing of test items. A great deal of involvement of teachers was solicited in terms of their concept of the critical areas which must be mastered before a student could graduate from high school. Lead-up tests were developed for specific curriculum areas. The result was that the proficiency test provided a focus for the curriculum, an impetus for re-examination of the curriculum, a sense of ownership in the tests by teachers, and a clear direction to provide a system of learning for kindergarten through twelfth grade. Proficiency tests have been developed and are in use at fourth grade, sixth grade, ninth grade, with additional retestings available through grades 10-12, until a student has achieved mastery.

It became apparent to the curriculum developers operating within a system approach that the final plank of accountability made sense out of all of the descriptions, development of materials, and in-service which had preceded this point. Teachers, parents, students, administrators, felt a strong commitment to curriculum when a student's graduation depended on achievement of minimal proficiency standards.

HISTORY OF THE SYSTEM APPROACH TO CURRICULUM DEVELOPMENT

FUTURE DIRECTION

With an appreciation for the part which accountability plays in curriculum, the future of a system approach to curriculum development in Orange Unified rests heavily on the evaluation strand. Curriculum supervisors will be addressing grade level expectancies from kindergarten through sixth grade to act as check-points between the administration of proficiency tests; course standards for secondary courses will be developed to unify and measure progress of students in specified courses.

An additional thrust of curriculum accountability will be in the broader area of program evaluation. Such program evaluation will include analysis of achievement in a curriculum area, cost of the program and its development, affective feelings of students toward the curriculum area, objective measures of total staff strength. The Program Review process engendered by the Early Childhood Education program, née School Improvement Program of the State of California, is being extended to all schools in the district. This evaluation process encompasses a broad review, from test results to parent participation and is the basis for both a self-analysis and an external assessment of the instructional program. Extension of this type of activity is of immeasurable benefit to the system approach for education.

CRITICAL ELEMENTS

Based on the experience of the Orange Unified School District, the following elements may be considered as essential to successful curriculum development:

Endorsement and enthusiastic support of the Superintendent and the Board of Education.

Leadership providing liaison between the district office and schools.

A system approach to planning.

Curriculum objectives and learnings described in writing.

Involvement of curriculum users.

Staff development.

Evaluation for staff and students (proficiencies).

HISTORY OF THE SYSTEM APPROACH TO CURRICULUM DEVELOPMENT

RECOMMENDATIONS FOR IMPROVEMENT

What would Orange Unified School District have changed if the last nineteen years could be replayed? First of all, a three-year curriculum plan with annual revisions would be proposed for adoption by the Board of Education. Within the three-year plan, one major subject per year would be addressed using the system approach. For instance, at the elementary level, Reading would be considered the first year, Mathematics the second, and Language Arts the third year. Use of criterion referenced tests would be made mandatory as the subject area was systematized. A computer recording system to facilitate recording of criterion referenced tests would be sought.

An adequate budgetary allotment would be designated for implementation of a system approach. Full-time subject matter leaders at the district level would be provided with instructional responsibilities from kindergarten through the twelfth grade. A staff development liaison person on each campus would be designated as an on-site in-service assistant to the Staff Development Coordinator. A full-time evaluator funded from a variety of sources would review local and special programs. With these additional components and the advice of districts who had succeeded with a system approach, ease of implementation would be assured.

SUMMARY

From a vantage point of 19 years of curriculum development, it would appear that school districts may learn the process of curriculum development in a systematic manner based on historical sketches from other school districts. It would be our sincere desire to share the experiences of the Orange Unified School District with other school districts throughout the nation.

Chapter 11

Duval County, Florida — A Success Story for Learners (Donald W. Johnson)

Donald W. Johnson, Ed.D.

In January 1969, Dr. Cecil D. Hardesty became Superintendent of the Duval County Schools in Jacksonville, Florida, at that time a system of 150 schools and 127,000 students. He was the first appointed superintendent in this county. The decision to replace an elective superintendent with an appointed superintendent, and the selection of Dr. Hardesty for this position, was the outgrowth of five years of frustration among the citizens of Jacksonville arising from the disaccreditation of the sixteen high schools by the Southern Association of Colleges and Schools in 1964..

The new Superintendent faced three major administrative problems. The reaccreditation of the high schools was the first and most pressing in the view of the citizens. The second problem, which would become urgent within twelve months, was the desegregation of the schools. The third problem was an instructional program in which the typical student made only two years academic progress for every three years in school. In reality, students were performing 3 grades below national norms across all grade levels.

The many years of administration by an elected superintendent left a legacy of a politically managed educational program. There were significant differences in the quality of schools dependent on the political power of the parents in that school area. It was a fiscally dependent school system with the budget requiring approval by a City Council which has just been created by a recent consolidation of city and county governments. A low tax base and a need to keep salaries low, had resulted in a teaching staff many of whom were serving on emergency credentials. In spite of the obvious needs, there was only minimal provision of exceptional student education.

The vocational programs in the county were housed in a technical high school, a small collection of buildings located in a predominantly Black area. In a student population of 127,000 there were less than 2,000 students enrolled in exceptional student programs, and an equally small number in vocational programs, most of these in Office Practice classes.

This same city, in the Spring of 1980, hosted a national convention honoring this same school system as one of the outstanding large school systems in the nation. On December 10, 1979, Duval County became the largest fully accredited school system in the nation. On April 30, 1980, both the House of Representatives and the Senate of Florida acclaimed Duval County Schools for its academic accomplishments. Although still under supervision of the federal courts, the school system had been integrated and a quality educational program was clearly offered in all schools. The scores on the Stanford Achievement tests were above national norms and students were showing gradual but steady improvement yearly.

The exceptional student program was providing services to more than 15,000 students. New centers for trainable mentally handicapped students were strategically located throughout the county.

Vocational schools had been established - one in the south, one in the west and one in the north, providing vocational training to 9,000 students from over 50 schools. In addition, vocational classes had been established at all of the high schools, making many courses available to any student regardless of his school of attendance. In fact, in a study of Jacksonville funded by the Chamber of Commerce, the Batelle Institute reported that its high quality of education was one of the strengths of Jacksonville and the reason why people would want to locate there.

The dramatic contrast of this before and after picture of a major school system provides hope for other major cities in the nation. More importantly, the process by which it was accomplished can be used by others. As a member of the management team selected by the superintendent in 1969, the author was privy to much of the planning and discussion as well as the implementation of these plans.

One of the new superintendent's announced goals was to make Duval County the best school system in Florida in five years, and the best in the nation in ten. In planning the budget for the 1970-71 school year, the author asked, "What would be different about the schools ten years from now?" This initiated a discussion in which the major differences were described as clearly as possible. We found that in order to build the 1970-71 budget, we had to answer two basic questions - (1) What is it that we want to accomplish, and (2) How will we get the job done?

It was decided that our first commitment had to be to achieve clearly defined standards of student performance. Secondly, we agreed that whatever improvements were to be made had to be made with people already employed in the system. As a consequence of these two decisions, the Board approved a major, continuing investment in the education of the human resources of the system, specifying one of the key needs as districtwide planning capability.

The need for a qualified planning team was dramatized by unplanned events initiated by the federal courts. In late December, 1969, the Duval County Schools were ordered to integrate its faculties by February, 1970 - a period of 60 days from start to finish. Over 5,000 employees were affected by this order. The staff in every school was to reflect the racial composition of the community as a whole, a 70-30% W/B ratio for teachers, administrators, coaches and support staff.

The second crises imposed by the federal court order brought to the forefront the additional need for a planning team capable of dealing with the many administrative and instructional problems facing the school system. It was felt that we needed to establish at least three levels of planning expertise in the system. First, a relatively small corps, up to twenty-five, needed a high level of expertise. Second, a much larger group needed certain skills to revise and strengthen the instructional program. Finally, the entire teaching staff needed to share a common vocabulary and a common instructional learning process to both facilitate communication and understanding and to deliver predictable success for learners.

Inasmuch as over five thousand professionals needed to be trained, it was recognized that the training program had to be one which would be used by our own staff following training. To provide this training, the administration selected Corrigan & Associates, a firm which had provided similar training programs to educational leaders in California under Operation PEP. Duval County contracted this firm to train a cadre of 30 trainers in SAFE (System Approach for Effectiveness) Skills.

Corrigan & Associates had developed and extensively validated (1962-1969) the first management skills training program to assure the delivery of most cost-effective results by managers at every level of application by providing precision skills for Planning, Management and Evaluation for Results (PME/R). In addition, the Corrigans had developed and field-tested the first skills training programs for delivering predictable learner mastery/outcomes (achievement of learning objectives and criteria) regardless of the learners being taught, the subject matter or the subject matter expertise of the teacher (Chapman College and the Alamitos School District 1960-1967). These SAFE skills training programs applied a successful TRAINING OF TRAINERS approach; i.e., after the Corrigans trained an initial cadre of trainees, these trainees could, in turn, successfully train others (their peers) to successfully apply

the practice taught either in the SAFE management program (PME/R) or in the Instructional System Design (ISD) skills training program for delivering predictable learner mastery results.

The individuals who participated in the initial SAFE training programs were selected by principals, directors and supervisors who were asked three questions: (1) Do you wish to be trained in SAFE techniques? (2) If you are selected to receive such training, would you be willing to train others? (3) In the event you are not selected, from which of your associates would you like to receive your training? Those whose names appeared on all three lists were selected for the training. The 30 individuals were put into ~~teams of three~~ and all of them completed the SAFE training program for both management and instructional system design for mastery learning.

Following training in December 1969, the development of an integration plan was assigned to a task force of selected staff members trained in SAFE Planning, Management and Evaluation Skills (PME/R). Performance objectives and standards were defined, action steps to be performed were derived and scheduled. All alternatives, and the pros and cons of each alternative were established. With this information available for review, the Superintendent and his staff developed the most feasible and efficient plan which they recommended to the School Board for approval early in January. The schools were closed the last week of January and 1,500 teachers and administrators were transferred from one school to another. Schools were re-opened on February 2 with a staff complying with the court order. All performance objectives were accomplished on time with achievement of the desired results. The action was not without its cost, for although the judge made acceptance of reassignment a condition of employment, Duval County lost 500 teachers during the second semester.

Several months later (April 1970) we initiated WAVE TWO of training. SAFE training materials were purchased and each of the teams of three trained previously trained thirty more, or a second wave of 300 persons selected in the same manner. The initial meeting was a large group session wherein individuals were given a briefing by Dr. and Mrs. Corrigan and then adjourned to attend separate sessions. Dr. Corrigan and his wife stayed in the central area to be available in case one of the teams ran into any problem in their instruction. They waited, and waited, and waited, but nobody needed help. At the end of the first session we knew we had a training program which could be used in the absence of the author. Between 1970 and 1976, all persons in the Division of Instruction or working on curriculum development in Duval County were required to take SAFE training.

NIE The people trained with this SAFE skills program provided the planning skills which guided the activities in Duval County schools during the 1970's. They were charged with the responsibility of assessing the educational needs of the students in the county and the resource requirements of the schools and other administrative and management units within the school system. Following Brickell's model relating to the conditions necessary for the design and dissemination of new programs, they were also charged with the responsibility of obtaining funds to conduct program development and evaluation through the submission of projects to various funding agencies, as well as managing these special project teams that were created to accomplish these tasks. During the four year period between 1972 and 1976, this team, using SAFE system analysis techniques, averaged 90% approval of special project applications from a variety of funding sources.

In June, 1971, the federal courts mandated complete desegregation of the Duval County Schools. The trial lasted one week and Judge Gerald Tjofladd ordered the accomplishment

of the task over a three year period. The three years were necessary because it took that long to get the buses needed for the additional transportation required.

Disaccredited Schools -- The small amount of disruption of high school attendance areas provided some breathing space for the reaccreditation of high schools and the first reaccreditation took place during the Spring of 1969. The high schools to be reaccredited first were those schools which required only minor activities such as completing a self-study, repainting, etc. The problem was different, however, for the other high schools. Not only were they in need of significant repairs, but both teachers and administrators lacked proper credentials and skills. To correct the teacher skills deficiencies, the Board appropriated \$100 per teacher in 1970 to establish a professional development fund. An intensive program of professional development and credentialing was devised by the planning team and put into effect. Among the activities funded were:

1. A reimbursement of tuition program for teachers who took classes required to qualify for credentials.
2. An incentive program which gave employees a \$300 per year increase for obtaining 15 units above the degree required for their certificate status - rank III, rank II, and rank I.
3. A cooperative academic program designed by the professional development staff and various universities which resulted in either a basic or advanced degree and credentials required to meet the staff needs of the school system.

At the same time, a similar program was established for the administrative staff. Administrative programs leading to either a master's, specialist's or doctor's degree were

designed with several universities. The specific courses, the professors to teach each course, and the scheduling of the classes was a decision shared by the system. All participants in the program were screened by both the school system and the universities.

Within three years (1973) of the initiation of these activities, all teachers in the county (with some minor exceptions in the area of Exceptional Student Education) were fully credentialed for the positions in which they were employed. In addition, a cadre of qualified and credentialed administrators was available. 95% of the administrative vacancies occurring in the school system during the next five years were filled from this cadre.

Equally important were the changes in the instructional programs at the secondary level. Provision was made for non-academic students to enter in expanded vocational programs, or to take advantage of alternatives to the typical diploma route, including advanced placement, early admission, dual enrollment and job entry opportunities in all high schools.

The resolution of the most critical issue, that of adequate financing for the schools in Duval County was a lesson in effective political action. For years, the Florida Finance Program did not provide adequate equalization factors which recognized the small tax revenues of "student rich and dollar poor" counties. The Chamber of Commerce in Jacksonville pledged its cooperation to the Superintendent to change this situation.

An equalization program was designed and a coalition of Superintendents met regularly to plot strategies and to develop specific legislative proposals. These proposals were presented to the legislature and incorporated into the budget for the State of Florida in the annual appropriations bill. Claude Kirk, then Governor of Florida, vetoed the annual budget including these proposals. Both the Speaker of the House

and the President of the Senate were from Duval County and pledged their help. A special session of the legislature was called for the purpose of overriding the Governor's veto. In a dramatic one-day session, both presiding officers withheld voting until all committed legislators could reach the capital. The governor's veto of the equalization bill was overturned by a single vote in each house. This single action established, perhaps forever, the commitment of the legislature to provide for the needs of the students in Florida schools with full recognition of the differing wealth in each county.

With a massive maintenance program financed by this action, the retraining and credentialing of the staff, and improvement of the instructional programs, all the high schools in Duval County were fully accredited by 1974.

Low Test Scores - To change the academic achievement levels of the students in Duval County required, and still requires, intensive concentration upon the elementary grades and the basic skills. To initiate action in this area a commitment was made to the concept of competency based instruction. People trained in the SAFE system were placed in positions of responsibility for both curriculum development and implementation. The sequence of events which continued over a six year period were: (1) We decided against using the traditional scope and sequence method of defining skills and course content, but rather (believing in the Mager concept that objectives need to be clearly stated and understood) we initiated and completed a description of all performance objectives in the basic skills in performance terms, applying the SAFE ISD skills training. (2) For each of the micro-level skills, objectives and criterion-referenced test items were developed. (3) An instructional management system was designed and then computerized which would keep track of student performance on each micro-level objective. (4) The SAFE Mastery Learning sequence in which the skills were to be taught applying the SAFE Closed-Loop tutorial approach was validated by the Westinghouse Learning

Corporation over a two year period. During that time, test items were reviewed and re-written to insure both internal and external validity and the instructional learning sequences field-tested and revised.

The management system known as IPI was abandoned in 1976 for two reasons: (1) The computer services, operated by the Consolidated City of Jacksonville, failed on numerous occasions to complete the processing of data from the schools. As a result, teachers could not get new grouping lists as promised. (2) We underestimated the testing time involved in a micro-level teaching system.

Many computer-managed instructional programs, developed subsequent to IPI, have profited from the lessons we learned. Both testing time and record keeping chores have been reduced through the use of macro-level objectives and the selection of a limited number of objectives for decision purposes. In spite of the administrative problems created by IPI, the principles of diagnostic-prescriptive instruction as postulated by Dr. and Mrs. Corrigan were clearly established throughout Duval County Schools. As a result, test scores on the Stanford Achievement tests showed students in Duval County at or above national norms in reading and math in all grades K-5 in both 1975 and 1976. The complete battery was never used during that period of time. Since 1977 the complete battery has been used and reports on the Stanford Achievement tests have been based upon the battery total and not upon discrete reading and math scores as were used in the Spring of 1976.

Secondary Schools - The improvement in the test scores for the secondary level involved a complex but equally systematic process. The basic problem was a tradition that every high school was an independent unit. Each school had its own permanent record card, graduation requirements and course offerings.

Our commitment to clearly defined standards for student

performance took the form of a "credit by examination" program. To create the examination we employed department chairmen and selected teachers to take the following steps:

1. Give the title and description for every course offered in their department.
2. Agree on a title and description for courses which could be used in all high schools.
3. Develop performance objectives for each of these courses.
4. Design test items for each objective.
5. From Item 4 above, develop an examination which they felt would measure a student's mastery of the objectives of the course.

By 1974 we were offering credit by examination in every required high school course. Copies of the performance objectives were in every high school library, available to students and faculty and 10 to 15% of the students taking the tests were successful in obtaining credit. The culmination of the competency based instruction program was achieved when the Board approved, as a condition of graduation, passing scores on a math competency and a functional literacy test. This action was taken in 1975 to be effective for the graduating class of 1976. Both tests were developed by staff members of the Duval County Schools trained in the SAFE ISD System.

The action of the Board requiring functional competency by all high school graduates was acclaimed nationwide and provided the stimulus for the Florida Legislature to adopt its own functional literacy test governing both math and reading. Even though the implementation of the functional literacy test in Florida has been delayed by court order until 1983

(on the basis of lack of adequate notice), the use of tests measuring the ability of students to apply academic skills to real life situations has been clearly established as both viable and necessary.

As a sidelight in the development of the functional literacy test, we interviewed over 200 illiterate persons, asking them to identify skills which they felt were necessary for survival. We were somewhat surprised to have them select the ability to read a street sign as a survival skill. The similar identification of such prosaic tasks as finding a telephone number, determining when a store was open, or finding out how many pills to take a day were equally as critical. We learned that we had to ask the question of numerous sections of the community to get an operational definition of functional literacy. We arbitrarily set a figure of 80% of all persons interviewed as the criteria for designating a skill as essential. The test was constructed with reliable data collected from the 2,000 interviewed. Before we felt we were ready to submit it to the Board for its adoption as a requirement for graduation it was administered to 16,000 students to determine its reliability and content validity. At the other end of the spectrum, mention should be made to the initiation of advanced placement courses recognized by the College Entrance Boards. Although advanced classes have been offered in the high schools, there was no control as to the level of learning required by a student in such a class. Within three years of its initiation in 1971, the advanced placement program enrolled over 1,000 students who were earning 3 to 8 semester hours college credit each year while still in high school. In fact, one student (an unusual one admittedly) took both advanced placement classes and CLEP, and entered college as a junior upon graduation from high school.

To provide the same degree of freedom to the vocational student, a job entry program was initiated wherein students could receive elective credit for successful job experience

under standards set by the Florida Legislature and the State Department of Education. During the first year of operation over 50 students received their high school diploma through the job entry program and this alternative is still available. Agreement was reached with the U.S. Navy to apply the job entry criteria to students who enlisted in the Navy subject to appropriate controls and reporting. Their recruiters indicated it had significant effect upon their ability to "sell" enrollment to students who had not yet graduated from high school.

A Special Success Program for National Dissemination

In 1976 the U.S. Office of Education funded a special program for disadvantaged learners in the district. This program, entitled PERSONALIZED INSTRUCTION, tied together the SAFE, predictable mastery learning design technique and the matching of student cognitive learning styles and skill level with teacher presentation style and materials.

The results were extraordinary in that disadvantaged learners showed marked improvement in math and, in particular, in the area of conceptual math skills development. Traditionally, this latter accomplishment is the most difficult for low achievers to master.

In 1976 the U.S. Office established this program of PERSONALIZED INSTRUCTION as an EXEMPLARY PROGRAM for national dissemination.

Conclusion and Summary - This author's experience in Duval County has made him optimistic regarding the future of education in the urban areas of this country and the country itself. It demonstrated over seven years of intensive and sometimes traumatic pressure, that expectations for students in a school system are self-fulfilling and that a commitment to a pre-determined level of program effectiveness will result in achievement in that level. This is true for a student, a class, a school or an entire system.

Finally, it has proven that SAFE training is a viable generic problem-solving program which can be replicated by those trained in its use. These trained people can make that commitment a reality. They can deliver predictable quality results applied to both planned management outcomes and to the delivery of predictable learner success in the achievement of predefined learner mastery objectives and criteria. The result is programmed success in your schools and painless accountability for all contributions.

About the Author:

Dr. Donald W. Johnson is currently Associate Superintendent for Instruction in the Leon County District Schools, Tallahassee, Florida. His career in education spans forty years, and includes service as a teacher, principal, and district level administrator including five years as Superintendent of Schools. For ten years he was on the staff of the California State Department of Education where he served as head of the Program Planning and Development unit from 1965 through 1968. Among his contributions in this position was the development of the PACE centers and the initial design of the training program known as PEP (Preparing Educational Planners). In 1969 he was invited to become Assistant Superintendent for Curriculum in Duval County, Jacksonville, Florida. This article is based upon his service in that position from 1969 through 1976.

Chapter 12
Student Centered Education: Predictable
Learner Mastery in Operation (George W. Bailey, Harvie L. Guest)

The mission of public schools is to provide opportunities for each student to learn to the extent of his/her capabilities and potential in order to function as an active and productive citizen. In carrying this mission, public education for almost two generations has been impeded with four major problems: (1) unwillingness to identify exactly what students should learn; (2) reluctance to set levels of achievement expectations as high as they should be; (3) hesitancy to establish uniform standards for student achievement; and (4) failure to alter the time needed for individual student mastery. Past practice in most school systems has been, instead, to vary the standards for student achievement according to the individual teacher's desires and to expect student mastery within the rigid time frame of nine school months. Predictable Learner Mastery as undertaken in Adams County School District No. 12, Northglenn, Colorado, is an attempt to correct these problems. The results obtained since 1976 indicate significant improvements in student learning in mathematics, reading and language arts.

Predictable Learner Mastery (PLM) is defined as the process of predicting the level of achievement in specific subject areas that the large majority of pupils are expected to attain at each grade level and then supplementing regular group instruction with diagnostic procedures, prescriptive methods and alternative materials in such a way as to bring most pupils to that predicted standard of success. PLM emphasizes altering and providing the time different individuals need for attaining the predicted standard.

Predictable Learner Mastery includes all of the components of mastery learning as defined by Benjamin Bloom, James Block

and others plus three additional components. All components are described below:¹

1. A set of publicly stated district-wide educational goals;
2. Objective based core and alternative curricula which match the stated goals and are supported by appropriate instructional materials and teaching strategies;
- *3. A prediction of the number of students which can reasonably be expected to attain mastery this year in each subject at district, then building, and finally classroom level;
4. Teaching behaviors which increase student learning. These are:²
 - 4.1 Diagnosis --
 - .analyze the content and task(s) of each objective
 - .diagnose the student for prerequisite skills
 - 4.2 Prescriptive --
 - .prescribe which objectives should be taught to which students
 - 4.3 Presentation --
 - .teach to the objective
 - 4.4 Monitoring --
 - .evaluate the progress (formative assessment)
 - 4.5 Feedback --
 - .provide correctives
 - .test for mastery (summative assessment)
 - .reteach or go on

*¹Spady, William, "Operational Essentials of Outcome-Based Programs," Committee Report of Network of Outcome-Based Schools, AASA, Arlington, Virginia, 1980

*Component peculiar to the PLM System in District No. 12. All others are components of classical mastery learning.

²California Department of Education, The Beginning Teacher Evaluation Study, Phase II-B, California Commission for Teacher Preparation and Licensing, Sacramento, 1978.

- *5. A comprehensive staff development program to provide training and follow-up support to insure that the staff possesses the skills needed to apply the behaviors listed above;
- *6. A system of managing and budgeting which prioritizes and focuses human and monetary resources on student achievement;
- *7. A student and management information system which validates and records improved levels of performance at frequent intervals in the student's career.

The basic precept for the PLM approach derives from the fundamental concept of management by objectives. That is, determining what ought to be achieved and developing strategies to bring it into attainment. The predictions of student achievement levels are established through application of a statistical regression formulae utilizing student group performance as measured by previous performance on district developed and validated program criterion referenced tests.

The instructional objectives are terminal and represent the essential concepts, knowledge or skills in a subject at a particular grade level, thereby establishing the framework for the curriculum. In other words, the objectives represent the vertical rungs in the curricular ladder; curricular "extension" of the terminal objective is optional but highly desirable. The teacher has the freedom to "extend" the student's thinking as far as possible, but has the responsibility to teach at least the identified objectives.

We shall explain how PLM functions in District No. 12 by reviewing the strategies used to gain understanding and commitment and by summarizing the results in student achievement attained to date.

*Components peculiar to the PLM System in District No. 12. All others are components of classical mastery learning

STRATEGIES FOR DEVELOPING UNDERSTANDING AND COMMITMENT

Specific strategies are essential in order to implement a PLM system with optimum success: We use these approaches to generate understanding and commitment: (1) involving the staff; (2) communicating program requirements and expectations; (3) developing staff's skills; (4) managing/monitoring for high levels of expectations; (5) budgeting resources to support student achievement (ZBB); and (6) involving the community. Each will be discussed in the order listed.

Involving the Staff

Gaining support requires organizational behavior change strategies. The first of these is to create at once a dissatisfaction with the status quo and the second is to develop a belief that improvement is possible and a commitment that it is needed. Involvement builds toward that commitment.

Ten representative groups of employees and patrons were involved in setting educational goals for the district. Once the goals were established and adopted as board policy, the board directed the superintendent to recommend standards of performance for each goal. One such standard was that at the end of the three year period 80% of the students in the district would master 70% of the instructional objectives established for their grade level in reading and mathematics.

This brought into focus a second category of actions: (1) defining and validating instructional objectives at each grade level; (2) developing and validating matching criterion-referenced tests; and (3) developing a management information system to streamline the record keeping required. Again, involvement of staff was an overriding aspect of success. Curriculum committees composed of at least one representative of each school building in the district and at least one parent member of the District Accountability Advisory Committee had the responsibility to develop the objectives. Objectives

were validated by at least 70% of the teachers at each grade level agreeing that the objective was appropriate and at the correct level. Test items were validated in a similar manner.

Communicating Program Requirements and Expectations.

Time and communication became key considerations in successfully creating an environment of acceptance and commitment. Communication about PLM can be a significant risk for the administrators both from within and outside the organization. Whenever it is stated that a school district can achieve more in student learning than it has previously been achieving, the staff, if not properly oriented to the concept, will resist and probably oppose any change. Moreover, patrons react by wondering why more students haven't been mastering the subject in previous years.

Success in dealing with both of these audiences requires careful communication and sufficient time. There must be sufficient time to prepare people adequately with an understanding of the changes which can and should be made to make PLM a reality; time for the staff to prepare itself with the skills needed to help most students reach mastery; and time for teachers to experience some success through application of those skills in the classroom. Our approach has been to keep the levels of expectation high, but to communicate clearly that the standards can and should be attained over a period of several years, not one year.

Developing Staff Skills

With the objectives clearly stating what students are to learn and with tests designed to measure the degree of learning, teachers must plan the most effective method of teaching. To assist the teaching staff, specific training has been developed and made available in the diagnostic/prescriptive teaching methods required for PLM. An advisory committee of teachers representing each school provided input into staff development programs. A chronology of succeeding events and

their results follow.

In February 1977, a committee composed of teachers, principals, subject specialists and curriculum administrators met to discuss improvement of instruction. The result of this meeting was an identification of the knowledge, skill and attitude needed by the staff to effect a positive change in instruction and student achievement. A staff development model to develop those attributes was adapted from a program in operation in California called the *Teaching/Learning Cycle, embodying the diagnostic-prescriptive approach to instruction.

Initial training began in the summer of 1978 during which administrators concurrently were trained in the Teaching/Learning (T/L) Cycle and in clinical supervision. During the ensuing school year, over three hundred teachers were trained in the diagnostic-prescriptive teaching process. To date over six hundred district teachers have been trained in the use of the T/L cycle and all administrators have been trained in both the T/L cycle and clinical supervision.

The district's teacher performance appraisal system requires several classroom observations and follow up instructional conferences. Clinical supervision provides the administrator with skills to focus on specific aspects of the diagnostic-prescription process and to give teachers direct feedback on how well they did what they were trying to do.

These training programs have consistently been rated very high by participants, not only in respect to the degree to which they learned needed skills and knowledge but also in the direct application to their jobs. Typical comments received on course evaluation forms from teachers are: "I have developed more awareness about meeting needs of students;" "This class should be mandatory for all teachers;" and "For the first time observation feedback information has been specific

*The Teaching/Learning Cycle, Orange County Unified Schools

and meaningful for my performance on the job." Some teachers were pleasantly surprised at the administrators ability to provide them with so much relevant information about their teaching performance.

Managing/Monitoring for High Levels of Performance

One of the more significant factors in building and maintaining commitment to PLM is the managing/monitoring system. As stated on page 143, the basic precept of PLM derives from the fundamental concept of management-by-objectives -- determining what should be achieved and developing strategic plans to bring it into attainment. Schools and other administrative units set goals, most of which support district priorities, and standards. Then beginning with the superintendent and his immediate staff and moving from this group to the building administrators and finally to the classroom teacher, the individual decides with his or her immediate supervisor (monitor) upon the essential objectives. The monitor and monitoree then determine together the specific strategies which will be employed to reach objective and the expected level of performance or student mastery as the case may be.

All of this is reduced to writing in the individual administrator's or supervisor's management agreement or in the teacher's personal growth agreement. The goals, standards and strategies become the basis for the supervision and assistance provided in each building and individual classroom. The use of clinical supervision enhances the supervisor's role by focusing on specific aspects of teaching and pinpointing areas of strength and areas where help is needed. Subsequent performance is evaluated by the monitor on the extent to which each standard has been attained.

We do not hesitate to establish relatively high but attainable levels of expectations for our own as well as others' performance. We believe that high levels of performance seldom just happen; they come because people know someone "expects"

high performance. It was this belief that prompted the board of education in 1978 to establish the standard that 80% of the students would attain mastery of 70% of the instructional objectives in each subject (mathematics, reading, and language arts) by 1982. Students in grades one, two and four across the district surpassed this standard in May, 1980. Moreover, we believe that successfully attaining high standards of expectation builds pride and boosts morale.

Since many objectives and standards relate directly to student achievement in the building and classroom (i.e., the number of students expected to attain mastery this year), the entire management system supports PLM directly or indirectly. Copies of one page from each of two principals' management agreements illustrate this support. (See Figure 17)

Next, we explain how monetary resources are tied to this system, thereby providing a budgeting system in support of PLM.

Budgeting Resources to Support Student Achievement (ZBB)

In an effort to relate funding to priorities and to some extent provide incentives for school building staffs to reach predicted mastery levels, School District No. 12 instituted Zero Base Budgeting (ZBB) in 1979. ZBB is a planning and budgeting process which requires that each program in the school system re-establish its relative priority each year based on that program's contribution to the overall goals of the organization. Moreover, it requires that the staff in each building must prioritize all programs offered and then determine spending alternatives for each program, i.e., continue present funding, reduce present funding or increase present funding. This method pre-establishes base funding for each administrative unit (including each building) depending upon the unit's size and type (Title I building, Special Education, regular school, alternative school, warehouse, transportation, etc.).

Figure 17 Actual Pages from Two Principals' Management Agreements

CENTENNIAL ELEMENTARY SCHOOL YEAR(S) 1980-1981
MANAGEMENT AGREEMENT
BETWEEN

Monitors DR. SAUND, Principal and Monitor Ted Rogers RESPONSIBILITY WEIGHT

GOAL (Responsibility): 6.8 To contribute to the identification/attainment of district goals and ensure the attainment of building level goals and objectives. 3

Type of Goal: _____
District: _____
Unit (Bldg.): _____
Personal: _____

Signature: [Signature] Review Code: _____
Date: February 19, 1980 A. On Target D. Deleted
B. Behind Schedule E. Revised
C. Completed F. Continued

TASK WEIGHT	PLANNED PROCEDURES - Key Tasks Required	Assigned to:	Target Date	(Key Task Standard(s)) Results Comments etc	Quarterly Review				ACH. PTS.
					1	2	3	4	
3	6.1 Ensure progress toward the development of higher-level thinking skills.	Saund/Mon Ward	12/80	All certified staff being formally evaluated and having been trained in T/I model and/or BASICS will apply the skills learned - specifically diagnostic, prescriptive, teaching and/or development of higher level thinking skills.					
3	6.2 Direct the administration of the Comprehensive Tests of Basic Skills in grades 3, 4, and 5.	Saund/Mon Ward	12/80	C.T.B.S. scores will show a difference (on the negative side) of no more than five months between each grade's calculated and obtained grade equivalents.					
3	6.3 Direct the administration of District Program Criterion Reference Tests in grades 1 - 6.	Saund/Mon Ward	12/80	P.C.R.T. results will show an average of seventy percent of students enrolled the previous school year achieved seventy percent mastery of the Reading and/or Math and/or Language Arts objectives.					

RD18 ADDD
Rev. 5/78

FEDERAL HEIGHTS ELEMENTARY SCHOOL YEAR(S) 1980-81
MANAGEMENT AGREEMENT
BETWEEN

Monitors FLINT, RICHARD J., PRINCIPAL and Monitor DR. MARIE GUNN RESPONSIBILITY WEIGHT

GOAL (Responsibility): To ensure the implementation and evaluation of curricular and co-curricular programs. 20

Type of Goal: _____
District: _____
Unit (Bldg.): _____
Personal: _____

Signature: [Signature] Review Code: _____
Date: February 17, 1980 A. On Target D. Deleted
B. Behind Schedule E. Revised
C. Completed F. Continued

TASK WEIGHT	PLANNED PROCEDURES - Key Tasks Required	Assigned to:	Target Date	(Key Task Standard(s)) Results Comments etc	Quarterly Review			
					1	2	3	4
10	1. Insure that basic concepts of math are taught with special emphasis on District objectives and math facts. a. Review program to date each nine weeks with individual math teachers. b. Call for review testing of students for each objective taught. Requests for testing will be made at random intervals.	Flint	6-80	1. The district standard of 70% will be met by 70% of the students in the spring testing of 1980 in levels one through three. <i>1st 90% 2nd 80% 3rd 70%</i>	A	A		
10	2. Improve the pre-test results at Federal Heights Elementary School for those Title I students who took the California Achievement Test during the fall of 1979. a. Review, with instructors, the topics to be screened during Title I language offering. b. Have teachers construct teacher-made tests representative of each topic of their teaching through the first semester. c. Review individual test results with Title I teachers.	Flint	6-80	2. Those students who were pre and post tested for the 1979-80 school year will show growth of at least 8 months per individual. <i>April 22</i> <i>+ 1.5 to 6.0 months</i>	A	C		

RD18 ADDD
Rev. 5/78

In determining spending alternatives, a decision package is developed for each program, providing data concerning the consequences expected if funding is reduced or maintained and the results to be expected in terms of contributions to building or district goals if funding can be increased. A decision package relating to language arts in a junior high school for fiscal year 1980, which follows, illustrates how monetary resources are funded to support PLM. (See Figure 18, opposite page)

The results obtained through the use of ZBB as a financial management tool have been subtle, but significant. They seem to indicate (1) better budget planning and decision making at the unit level; (2) better justification of activities and related costs; (3) increased participation of personnel in the planning and budgeting process; and (4) sharper focus of resources on student achievement.

Involving the Community

The impetus for PLM in School District No. 12 did not come from community groups, rather it originated with the board of education and the administration. Like most suburban communities, this district strongly supports quality education and is equally supportive of innovative practices once the need and the concept are explained and generally understood. Because the impetus for change generally comes from other sources does not imply that school patrons here are either disinterested or acquiescent. Indeed, they are just the opposite. As with other innovative practices, the community has become involved in PLM primarily through the District Accountability Advisory Committee. The strongest support at this time is emanating from the Citizens Advisory Teams in the individual buildings which are a part of the total accountability thrust. In order to understand this fully, it is necessary to explain how this district is organized to fulfill the requirements of the Colorado Accountability Law.

Figure 18 ZBB Decision Package - Junior High Language Arts Program

(Front side)

DECISION PACKAGE - INSTRUCTIONAL SERVICES

DISTRICT PRIORITY NO(S):

Decision Area Name ENGLISH/LANGUAGE ARTS Prepared By GARY H. WEBER Date Prepared 5/22/79
 Decision Unit (School/Department) MERITT HUTTON JR Approved By _____
 Check One: Existing Decision Area New Decision Area
 Check One: Curriculum & Instruction Management Services Auxiliary Services

Check one Criteria Code(s)
 A = Legal Requirements
 B = Contract Requirements
 C = Board Requirements
 D = Other: _____

PRESENT FISCAL YEAR - DECISION AREA:

Function or Purpose of Decision Area: To provide the opportunity for each student to develop a functional level of competencies in speaking, reading, writing, and spelling.

Description of Services Provided by Decision Area: This area offers courses in grades 7, 8, 9 in both language arts and reading.

District Performance Standard(s): 70% of the students will master 70% of the grade level objectives at assigned grade level as measured by District P.C.R.T.

Consequences if Existing Decision Area is eliminated: (Partial or All) skills will have to be taught by other subjects, private tutoring, parents, and other sources external to the school.

NEXT FISCAL YEAR - DECISION AREA:

Existing Decision Area:

- a. Description: Seven teachers providing instruction to 760 students.
- b. Justification: Basic curriculum requirements.
- c. Present Performance Level: 56% of the students will master 65% of the grade level objectives at assigned grade level as measured by District P.C.R.T.

Alternative A:

- a. Description: Add one teacher to reduce pupil teacher ratio and expand curriculum to provide more elective courses.
- b. Justification: Reduction in pupil teacher ratio and expansion of curriculum.
- c. Expected Performance Level: 70% of the students will master 70% of the grade level objectives at assigned grade level as measured by District P.C.R.T.

Alternative B:

- a. Description: Reduce one teacher.
- b. Justification: Reduction in budget.
- c. Expected Performance Level: 40% of the students will master 55% of the grade level objectives at assigned grade level as measured by District P.C.R.T.

NOTE: Use the reverse side for recording cost data.

LOCAL DISTRICT NO. 12, MOORE COUNTY

Form 4025/Jan. 79

(Reverse side)

COST ANALYSIS

DECISION PACKAGE - INSTRUCTIONAL SERVICES

School District Code: 12 Year Code: 0

Long Code: Fund Code: 5100 Function Code: 1100 Location Code: 1100 Program Code: 0100

Short Code: 42-22 (8 digits)

Cost Element	Object Codes	Present Fiscal Year		Next Fiscal Year	
		Existing	Existing	Alternative A	Alternative B
1. SALARIES:					
Base Teachers - Full Year	1110	47	\$ 97,800.00	47	\$ 97,800.00
Base Teachers - Part Year	1111	(1 - Jan. - June)			
		(60% of Yr. Sal. @ 200)			
Paraprofessionals	1205	1	\$ 1,800.00	0	0
Sub-total		8*	\$ 113,520	6*	\$ 97,800.00
2. EMPLOYEE BENEFITS:					
Total Emp. Benefits	2900		\$ 16,008.24		\$ 16,137.00
Sub-total			\$ 16,008.24		\$ 16,137.00
3. PURCHASED SERVICES:					
Mileage	2120				
Instructional Field Trips	3110		\$ 113.00		\$ 250.00
Building Insurance	3140		\$ 116.00		\$ 200.00
Sub-total			\$ 229.00		\$ 450.00
4. SUPPLIES & MATERIALS:					
Instructional Materials	4110		\$ 4000.00		\$ 3300.00
Postage	4030				\$ 7500.00
Sub-total			\$ 4000.00		\$ 3300.00
5. CAPITAL OUTLAY:					
Instructional Equipment	5110		0		0
Sub-total			0		0
GRAND TOTALS			8* \$ 133,757.30	6* \$ 117,466	7* \$ 140,876.50
Number of students served (P.Y.E.) or Performance Units			760	770	770
Number of stated Performance Objectives					
Total number of Objectives Achieved					

In 1971 the Colorado Legislature mandated accountability in the public schools by passing the State Accountability Act. This law requires that each district have a District Accountability Advisory Committee composed of patrons (one having no children in the public schools), students, teachers, and administrators. This committee is to advise and provide to local school boards assistance in helping their school patrons to determine the relative value of their school program as compared to its cost." The District No. 12 Accountability Advisory Committee consists of two patrons from each building together with six high school students, four teachers, and four administrators, totaling about 70 members.

Since about one-third of the membership in the district level group changes each year and since the group is large, the board of education provides a specific "charge" to the DAAC each year. The board's charge for 1980 was subdivided into several distinct areas. Two of these relate directly to PLM and were turned over to a subcommittee of the DAAC for study and recommendations. They are:

- To secure whatever knowledge is necessary to provide the board with recommendations from the DAAC pertaining to mastery learning.
- To review and become aware of the general rationale for the student achievement testing program, and to make recommendations to the board based upon the review.

The Citizen Advisory Teams in the buildings from which the patrons on the DAAC are selected are closer than the DAAC to PLM in the classroom, seem to understand it better and are generally positive toward and supportive of the process. It is for these reasons that the board is contemplating some change in the structure of the DAAC. In the future it may seek direct advice and recommendation concerning PLM from the Citizens Advisory Team in each building.

We now turn our attention to the "bottom-line" of Predictable Learner Mastery, the results in student achievement.

RESULTS IN STUDENT ACHIEVEMENT

In order for the reader to comprehend student achievement results in District No. 12, it is necessary to explain the stages of development of both instructional objectives and criterion referenced tests in the major subject areas. These data are provided in Table 16. Instruction by identified objectives in reading and mathematics began in 1974 and testing commenced in 1976. Instruction by objectives is now underway in all other major subject areas with the "last date for criterion referenced testing being the end of the 1981-81 school year (See Table 16). Testing is underway or will commence next spring in all other areas.

TABLE 16
STATUS INSTRUCTIONAL OBJECTIVES AND CRITERION REFERENCED TEST DEVELOPMENT IN SCHOOL DISTRICT NO. 12

SUBJECT	GRADE LEVEL	STATUS	
		INST. OBJECTIVES	CRITERION REF TESTS
Mathematics	K-8	Developed 5/74 Revalidated 9/79	Testing Began 5/76
	9-12	Revalidated 6/80	Test 5/81
Reading	K-6	Developed 5/74 Revalidated 12/79	Testing Began 5/76 New test 5/80
	7-9	Developed 5/79 Revalidate 5/81	Pilot 5/81
	10-12	Developed 12/79 Developed 5/79 Revalidate 5/81 Developed 9/80	Test 5/80 Pilot 5/81 Test 5/82
Language Arts	K-6	Developed 12/79	Test 5/80
	7-9	Developed 5/79 Revalidate 5/81	Pilot 5/81
Social Studies	K-9	Developed 5/78 Revalidate 5/82	Pilot 5/81
	10-12	Developed 5/80	Pilot 5/81
Science	K-6	Developed 4/79	Pilot 5/81
	7-12	Developed 8/78 Revalidated 5/80	Pilot 5/81

FIGURE 19a.

**PREDICTED MASTERY AND ACTUAL MASTERY
OF MATHEMATICS
GRADES 1-8**

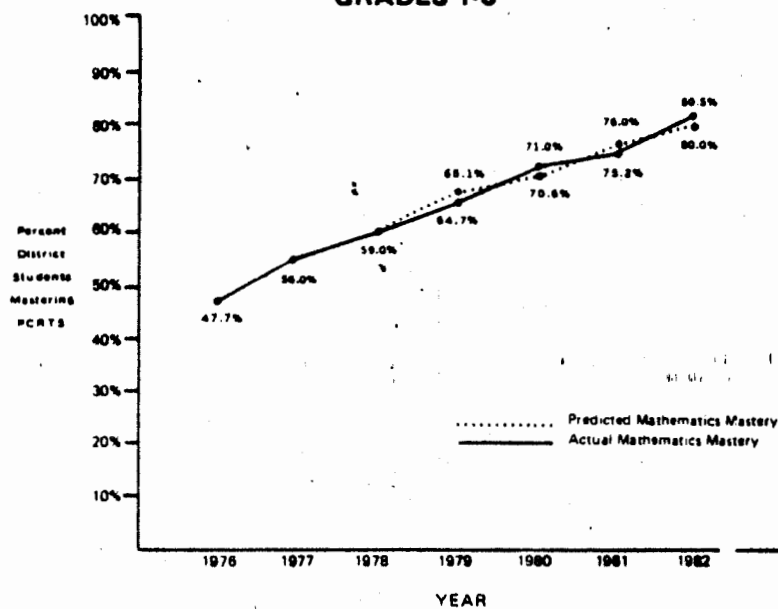
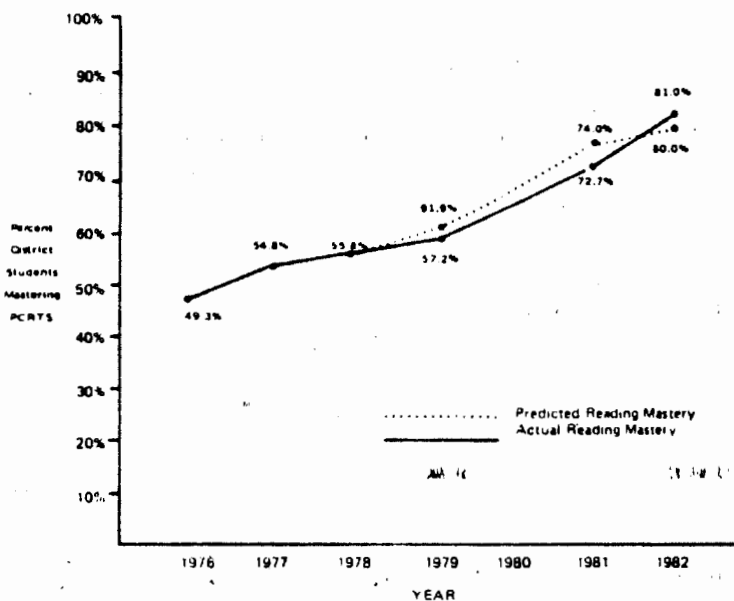


FIGURE 19b.

**PREDICTED MASTERY AND ACTUAL MASTERY
OF READING
GRADES 1-6**



A graphic, year to year comparison of achievement in mathematics grades two through six is provided in Figures 18 and 19, page 296. Although the district has been testing both mathematics and reading in grades two through six since 1976, substantial changes were made in the reading objectives in September 1979, making past test data invalid for comparison with 1980 results. Although only the mathematics data is provided here, progress in reading from 1976 through May 1982 reflected gains similar to mathematics over the same period of time.

The results of criterion referenced testing in elementary school mathematics for 1980 are highly encouraging. As shown on Table 17, the median percentage of students mastering the mathematics objectives to be 78. Approximately one-half of the elementary schools have already surpassed the goal of 80% mastery of the objectives by 1982. Eight of the elementary schools are above the 80% level and six schools are between 70% and 80%.

TABLE 17
 RANKING OF SCHOOLS BY PERCENTAGE OF STUDENTS MASTERING
 THE MATHEMATIC INSTRUCTIONAL OBJECTIVES
 GRADES 1-6

SCHOOL	PERCENTAGE OF MASTERY	QUARTILE
A	89%	
B	86%	
C	85%	
D	85%	
E	84%	1st
F	83%	
G	81%	
H	81%	
I	79%	
		Median = 78%
J	77%	
K	75%	
L	75%	
M	73%	
N	72%	3rd
O	68%	
P	67%	
Q	62%	
R	60%	

The exact names of the elementary schools have not been used. These can be obtained by calling or writing the Superintendent's Office, School District No. 12, Adams County, 11285 Highline Drive, Northglenn, Colorado, 80233; telephone: (313) 451-1561.

Several elementary schools have already surpassed the 1982 goal of 80% of the students achieving mastery of the criterion referenced test. Hulstrom, Centennial and Federal Heights elementary schools are among those which started in 1976 with less than 50% of the students achieving mastery and have progressed steadily upward. These data are provided in Table 18 below.

TABLE 18

**A YEAR BY YEAR COMPARISON OF PERCENT OF STUDENTS
ACHIEVING MASTERY IN MATHEMATICS, GRADES 1-6
IN THE ELEMENTARY SCHOOLS**

SCHOOL	1976	1977	1978	1979	1980
Centennial (700 students)	45%	47%	49%	62%	80.3%
Hulstrom (300 students)	50%	55%	60%	72%	85.5%
Federal Heights (800 students)	34%	40%	69%	69%	84.9%

Not all elementary schools can report the success in achievement that is reflected in Table 18 and only eight have already surpassed the district goal of 80% of the students achieving mastery by 1982. But we can say, unequivocally, that the number of students achieving mastery in all schools has increased significantly since 1976 and most will reach the district goal by 1982. Moreover, CRT results in other subject areas now being measured indicate a similar trend in the number of students reaching mastery level. It will

take several years, however, before 80% reach mastery in any of the other areas.

Although it is far too soon to say that we have "solved" the achievement issue in our schools, the district and building level test results are highly encouraging. Not all of our teachers feel ownership in PLM, but many do, and more teachers "buy in" each year. Not all teachers feel they have a responsibility to teach to the identified instructional objectives, but many do and each year this number increases. Not all principals are as capable as others at clinical supervision, but they all practice it and their security with the process is enhanced with experience.

All of this leads us to believe that the goal that 80% of the students should achieve mastery is probably too low. We believe that eventually we will prove that most students (90% or more) across the district can and will achieve mastery of the subjects being studied. We believe we have the tools - the teachers, the board, the administrators, and the patrons - to predict and achieve learner mastery. We rest our case.

About the Author:

Chapter 13

Instructional Systems Development in Korean Educational Reform (Robert M. Morgan)

A Systems Study of Korean Education - 1970

The aim of this study was an attempt by the Republic of Korea to determine if it might be able to organize its educational resources in ways that would make its educational programs more responsive to the nation's needs and, simultaneously, function more efficiently. The Korean government invited the Florida State University to assist with the project and an interdisciplinary study team was assembled. In the planning phase of the project it was judged that a "systems approach" to the analysis of Korea's educational sector would be suitable.

The study team spent three months in Korea in 1970 gathering information about the educational system, the economy, the nation's needs and wants for its educational programs, and the resources available for potential improvement of the system. Members of the study team visited schools at all levels throughout Korea and talked to hundreds of teachers, administrators and students. The team also worked closely with several Korean government ministries.

The focus of the study was on those variables which would help provide a better, more relevant education for more Korean young people

at a lower unit cost and at a total cost not greater than the nation could afford. To this end, the study team collected historical, cultural and educational data, including demographic reports, economic forecasts, manpower needs projections, educational fiscal data, current and long-range educational plans and such information as was available on educational objectives and attainment. The data was analyzed in terms of future manpower needs and educational output, estimated cost benefits, and strategies for appropriate introduction of innovation and technology into the system. Alternative approaches to relating resources to educational objectives and problems were examined.

Economic Factors

Following the Korean War the Korean economy experienced remarkable industrial progress and growth which was predicted to continue into the foreseeable future. The labor force was increasing steadily and the rate of unemployment, decreasing. However, a major problem was anticipated from the lack of congruence between the nation's manpower requirements and the projected supply of skilled technical labor. The only long-range solution to these problems was a reordering of the educational priorities in the schools of Korea.

The Contemporary Korean School System

The educational goals that characterized the Korean elementary and middle schools in 1970 were restricted to the conventional academic domain. The student learning outcomes at these levels fell almost exclusively into the informational and skill categories of education.

and was characterized by rote memorization of classically academic subjects with the overriding objective of preparing students for the national competitive examinations which were used to select those students for entry to the next level of education.

The existing curriculum was not as relevant to preparing Korean children to live and prosper as adults as it could and should have been. While the study team did not attempt to specify educational objectives it believed the curriculum could be broadened to include the teaching of inquiry skills and problem solving approaches and generally attend more to process objectives--and that these should not only be learning outcomes, but also serve as effective instructional means. It was also suggested that preoccupational training would add to the graduates employability, retrainability and occupational mobility.

It was predicted that the system could not achieve these objectives through simple expansion or minor alteration.

A Proposed New Educational Model - 1971

The study team suggested that a nine-year, free and compulsory educational program was necessary to support Korea's continuing economic expansion.² The vocational high schools of Korea, were not effectively serving the purposes for which they were formed. Based upon assumptions about the potential for improved academic accomplishment at the elementary-middle school level, the study team recommended that this training

²Morgan, Robert M. and Chadwick, C.B. Systems Analysis for Educational Change: The Republic of Korea (1971) The University of Florida Press, Gainesville, Florida.

be directed exclusively to preparing people for specific jobs. The job training programs would be of variable duration, would be operated only as long as there were known manpower needs for the jobs in question, and would be open to qualified citizens of any age level. It was believed that through the development and validation of a significantly different kind of elementary-middle school that Korea could provide an educational program of demonstrably high quality and relevance for all age-eligible Korean youngsters. Furthermore, it was predicted that this program would not only be cost effective, but would in fact cost less per student to operate than was presently the case.

The new school proposed by the study team involved a number of changes from the existing system. These included changing the basic instructional unit from its present class size to a larger grouping, introducing individualized instructional concepts and associated materials, modifying the role of the teaching staff, increasing the ratio of students to teachers, and using programmed instructional television and radio.

It was proposed that the students be organized into "instructional units" of 300 students with the average-sized Korean school having three such units. Each instructional unit would become the responsibility of a four person teaching team which would raise the student-teacher ratio from 55:1 to 75:1.

Another recommendation was that the elementary-middle schools be moved to a system of individualized instruction which be performance based, permit students to move at their own learning rate, and would place a larger measure of responsibility on the students for self-direction of their learning experiences. It would also reduce reliance on direct

teacher-to-student instruction. The basic instructional resource for that portion of the curriculum to be individualized would be a "student-learning unit" prepared in modular form and packaged for ease of storage and retrieval by students. These units would be developed using the Instructional Systems Design (ISD) approach. The student-learning unit would contain the behavioral objectives for the unit, critical instructional materials, directions to other learning resources, and criterion-referenced test items which would permit the student to assess his own progress through the unit. The principles of programmed instruction would be employed in the development of these units even though most of the instructional materials were not programmed instruction per se.

Another feature of the proposed program was that the teaching staff should be differentiated in a manner that called for professional staff with different specialties. This would provide a better means for having the full range of competency available in the instructional unit and make it possible to allocate different responsibilities to the individual professionals making up the team. The teaching team would operate under the direction of a master teacher whose main job would be the management of the learning environment.

The study team proposed that a national educational radio and television system be developed which would continuously transmit instructional programs during the school day. It was estimated that one and one-half to two hours of television instruction would be received by each student each day, comprising about one third of the students

instructional day.

It was suggested that the television would couple the principles of programmed instruction with good dramatic television production to yield programs which are interesting and will teach youngsters who are widely varied in age and socio-economic background. It was estimated that a functional national educational television system could be built which would be an integral component of the system of instructional resources and would not be an "add-on" to the existing instructional program. It would be a form of programmed instructional developed to teach specific behaviors and would call for active responses from the student. Auxillary printed materials would be developed to go with the ITV programs in which the students would write responses, solve problems and record reactions and questions. Student learning would be closely monitored and the teacher would be furnished supportive and supplementary materials to help her work individually with any students who experience difficulty or who fall behind in the televised instruction.

Development and Implementation - 1972

Korean educational leaders concluded that the elementary-middle school proposed by the study team was sensible for the nation. These officials also had to judge whether or not what was proposed was possible. Are the resources -- people, money and time -- available? How long would it take to develop such a system? How much would it cost to develop such a system? How much would it cost to tryout; how much to install nationwide; then how much to operate on a yearly basis?

The study team was optimistic that the key resource - a group of aggressive, technically-sophisticated Korean educational researchers - was available. However, these personnel needed an organization to undertake the development and validation of the new system. The study team proposed an organization, which it labeled the Korean Educational Development Institute (KEDI), to design and tryout the system and its components. KEDI would reappraise the educational goals and objectives for the elementary-middle schools. It would develop definitions of desired learning outcomes at the various levels and then design and build the instructional programs to achieve these outcomes. The instructional resources would be chosen in terms of their appropriateness to particular content and objectives in the curriculum. KEDI would empirically demonstrate the instructional effectiveness of the new instructional system. Evaluation should provide for assigning responsibility for student learning to the principal elements in the educational program, provide for periodic audit of performance, and permit system accountability.

The study team recommended that a three phase effort be undertaken: (1) system development; (2) tryout and revision in pilot communities; and (3) nationwide dissemination.

Estimates were that it would take approximately four to five years to build and test the new system. The cost of development and installation on a national scale was estimated to be approximately \$17,000,000, while the same program installed only in test sites was estimated to cost approximately \$7,500,000.

The Korean Education Reform 1971 - 1977

The study team report was delivered to the Korean government in February of 1971, and several years have elapsed since then. Although work on the proposed educational reform is still in progress, enough has been accomplished to justify a summary of the activities to date.

In terms of the Korean educational program the report included two broad targets of reform: the elementary-middle program (the grades one through nine), and the post-ninth-grade vocational educational program.

The decision was made to undertake the revision of the elementary-middle school programs at once, deferring action on the vocational educational programs until later. Clearly, this was a step of enormous importance and one which would require a highly complex developmental effort. It was anticipated that the development and tryout of the new program would require six to seven years before it would be ready for national implementation.

The first concrete action was the creation by the Minister of Education, of a Korean task force to complete the planning for the project. They estimated the number of instructional hours for which materials of various kinds would need to be developed, for all subject areas for the nine grade levels as nearly 8,000 hours.

This included instructional television, the multi-media mastery learning units, texts and workbooks, and teacher guides.

This effort led to the definition of the organizational structure of the Korean Educational Development Institute. The Program Evaluation and Review Technique was used in this early stage to show how human and material resources would need to be orchestrated in time. Projections of financial requirements by month and year for the life of the project were estimated. Parallel to this process was a nationwide survey of personnel who could be employed on the project and enough people were identified to begin staffing KEDI.

During the last quarter of 1971 the KEDI staff focused on two major activities. These were: (1) an intensive series of meetings with Korean educators on the E-M project, and (2) the writing of the international loan agreement. The first of these activities was essential to broaden the base of support for reform effort, respond to questions or criticisms and to secure the cooperation of educators throughout the nation. Very little public disclosure of the nature of the E-M project had been made prior to this time, though the systematic publication of all aspects of the project to all levels of Korean society has been an important continuing process since the early part of 1972.

While the *raison d'etre* for KEDI was the conduct of the Elementary-Middle School project, it was expected that it would also serve other purposes for the Ministry of Education. For the first couple of years the attention of the KEDI leadership had to

focus on institution development and one of the most urgent needs of KEDI was to rapidly train and expand its professional staff.

Since 1974 instructional development has been the main activity of KEDI. Principal activities include:

1. Development and tryout of new instructional delivery models including classroom, media and management considerations;
2. Development of instructional materials and programs (print, ITV and radio) compatible with MOE curriculum and suitable for the new instructional delivery system;
3. Construction and operation of broadcasting and transmitting facilities for television and radio;
4. Experimentation and evaluation;
5. Development of teacher-training programs and materials and training of participating teachers and administrators;
6. Development and maintenance of a network of contacts and communication linkages at provincial and local levels.

Field Validation and National Diffusion - 1978-79

As the project has matured and the KEDI leadership has gained experience many changes in the original plan of action have been made. The systematic emphasis of the FSU study appears to have survived, but many of the specific strategies for implementation have

been modified. While the strongest rationale in 1971-72 for the reform was in the cost area, this was soon reduced as a priority. The FSU report had projected a continuing shortfall in the possible school enrollemnts based on Korea's predictions in growth rate of its GNP from 1970 to 1978. The report also anticipated a continuing shortage of teachers. Both of the predictions missed the mark. GNP grew at a much higher than predicted rate and more teachers were trained for classroom assignment than had been expected because of substantial increases in salaries. With the increases in per capita GNP there was simply more money available to support education.

There are two consequences of this: (1) Korea has been able to enroll nearly 90 percent of the age cohort in the first nine years of education and expect to make attendance for elementary middle school education compulsory and available for all in the early 1980's;

(2) KEDI, relieved in large measure of the numbers problem, could concentrate on improving instructional quality and content relevance.

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With the reduced pressure to save money, some of the more politically and socially troublesome recommendations of the FSU report were abandoned. These included double-shifting of schools, differentiated teaching staff functions, and grouping students into larger learning groups. ITV and instructional radio have also experienced a major change in their respective roles in instructional delivery, but for different reasons. It was originally intended that they would be an integral part of the daily instruction delivered by ITV and radio and would not be given any other way. These elements had been included

to contribute both to cost-saving and improvement in the quality of instruction. KEDI purchased a TV and radio broadcast transmission system, which included a helium-filled, tethered balloon flying at an altitude of 10,000 feet to which transmitters were affixed. It was planned for KEDI's ITV and radio programs to originate at the main studios near Seoul, be relayed to the transmitters carried by the balloon and be transmitted to television and radio receivers in school classrooms.

This aspect of KEDI's project was fraught with technical problems from the onset, both in terms of the aerodynamic stability of the balloon and the quality of the signal. After a few trial broadcasts in late 1975, the technical problems were judged insurmountable, and the system was declared unworkable and the site was dismantled in 1977.

During the same period KEDI had completed the installation of its TV and radio production studios and many lessons using these media had been produced. KEDI made the decision, consistent with the study team's original recommendations, to develop a groundbased microwave relay system when the balloon technology was abandoned. Such a system would parallel the existing microwave relay system presently owned and operated by the Korean Broadcasting System.

Because of the failure of the tethered balloon transmission system it was impossible for KEDI to build a reliance on the ITV and radio components during the development period. The instruction to have been provided by ITV and radio had to be given in other ways,

using teachers and instructional materials which could be made available to remote schools. While a great many instructional programs in ITV and radio were developed by KEDI--and most of these were tried out in classrooms on a fragmental basis--the new instructional system neither depended upon them nor provided for their inclusion as an integral instructional element. It now appears these programs will be broadcast as adjunct to the new teaching system, rather than as an essential part of it.

What then remains of the ambitious reform project started in 1971? As it turns out, a great deal remains and probably all of the truly essential concepts have been preserved. KEDI seriously addressed the task of analyzing the existing curriculum and the educational needs of Korea's citizenry and systematically identified the places where the curriculum was not sufficiently responsive to these needs. It then developed relatively inexpensive instructional materials and student learning evaluation instruments which articulated with those text and other materials already in common use. It devised a teaching/learning process which could be managed by the existing teaching personnel and school administrators. It then devised teaching guides and intensive training programs for teachers and administrators to prepare them to function effectively as the managers of the new instructional programs.

Finally, they conducted an iterative series of validation tryouts of the new instructional elements and the elements in aggregation. These field tryouts were started in May, 1973, and 745 students

from two schools in Seoul were involved. There were two subject areas--mathematics and science--in the third and fifth grades which were tested. This test, the first of several was the means of formative evaluation and feedback of the new instruction. It told the KEDI developers what needed to be changed in the materials and processes tested and provided a basis of experience for future development. The indicated changes were on the basis of how effectively the programs caused children to learn. It was the beginning of competency-based program of student learning.

During the successive demonstrations tryouts KEDI learned a great deal about areas where remediation materials were needed for some students and enrichment programs were needed for others. Student learning data suggested areas for individualized or self-teaching and pointed up those areas where teacher-directed group instruction was most appropriate. Most important, the teachers and students knew on a daily basis what the desired learning outcomes were and had a means of assessing progress toward these ends. The latest tryout, completed in 1978, included 231,567 students in the first six grades of 231 schools from throughout the nation. All subjects areas were included. Student achievement data, student, parent and teacher reaction, and process efficiency data were collected from both the tryout schools and a comparable sample of control schools providing conventional instruction. The massive array of data collected during this tryout has not been completely analyzed but the results on all of the major variables significantly favor the new

program. In the several tryouts since 1973--four small scale and four large scale - the achievement levels have generally been higher for the demonstration students than for the comparison group. As a rule, the achievement differences between the two groups tended to become larger with each successive tryout.³

In 1978, the President of the Republic appointed an external commission to conduct an independent evaluation of the new E-M program. This group assessed student and teacher attitudes toward the new program as well as community reaction. They also selected 18 schools and directed that the new KEDI system be implemented in these schools for five months in six basic subject areas, and identified a group of traditional schools to serve as the control. They found that mean achievement across all of subject areas was 24 percent higher in the experimental group than in the control group, and that 30 percent more of the experimental students achieved subject mastery. Another finding was that experimental students in rural schools--rural students were usually well behind urban students in achievement--performed as well as students enrolled in city schools. The commission recommended an orderly implementation of the new E-M program in all of Korea's schools.

³Masoner, Paul H. (Editor) Analytical Case Study of the Korean Educational Development Institute. (1979) American Association of Colleges for Teacher Education. Washington, D.C.

SECTION III:

TRY IT, YOU'LL LIKE IT

Chapter 14

Success for the School District: A Predictable Event (C. Hines Cronin)

Chapter 15

**Is Creating a Learner-Mastery Outcome-Based Program Worth the Extra Effort?
A Superintendent's Perspective (John R. Champlin)**

From the public perspective, schools are where students go to learn and the stewardship of the educator is rewarded according to levels of student achievement. The resolve of the problem is to "success the staff" for rewards through a focus on student learning to achieve maximum results.

SUCCESS PROCESS

The solution to redirection for success in education must therefore focus on learning through the "eyes of the learner;" the first priority is mastery of knowledge content and application of skills. The educators must at the maximum commit to this singular mission and manage for results through the effective delivery of: (1) student achievements; (2) classroom service; (3) administrative practice; and (4) resource allocation. These are generic functions under control of educators and constitute requirements to deliver success.

The process and technology exist to assure success for learners, and for the staff and for the institution*. Academic competence and career commitments also exist; in fact, within most communities the highest credentialed staff based on academic preparation presently exists in school districts. The success process must direct energy, time commitments, and resources for the controlled delivery of maximum student mastery for priority knowledge and skills within an environment conducive for learning. There must also be an acceptance of the responsibility for district-wide accountability, individual professional accountability, and personal accountability, each based on effective** student performance. With the acceptance of these requirements imposed by the public, the criteria of and requirements for success can be clearly stated and support earned and obtained. The reward shall come when the products of

*Systematic Approach for Effectiveness (SAFE)

** Effective: Achievement of pre-established measurement standards for both interim and final learning objectives.

Chapter 14

Success for the School District: A Predictable Event (C. Hines Cronin)

The public heroes, leaders, winners, and valued practitioners are those who have obtained the American dream of success. Without exception, the success is earned by "doing the right things." It is the reward for effective performance in something the public values; an outcome which causes self satisfaction, security, and confidence and public support. In terms of public opinion, the degrees of success or failure will be reflected in praise or criticism and, if part of a public institution, in the level of financial support.

The parallel for success of individuals also applies to the public institutions, with the criteria how it is "doing the right things." In fact, institutions are perpetuated by public support with a high expectation for success of the participants. An institution and its staff are generally seen as the same entity and both are publicly assigned into success or failure categories according to the perceived quality outcome or product. The ratings within the categories, in the main, are greatly influenced by the recipients of the services and their views are usually expressed by the media, published reports and laws enacted by legislative bodies.

Education may be the highest valued public institution in America, yet the most criticized, with few rewards for success. The staff is probably the highest credentialed, yet paid in a low category. The public rhetoric in all sectors indict the staff for declining test scores, inadequate reading and math skills, unacceptable student behavior, and lack of motivation to achieve. Although blame for failure of schools is scattered among many institutions, the most severe punishment is inflicted on the educators who are employed and paid from tax dollars.

defended -- it will be personal preferences not supported by data which will cause some personal disappointment. An example is this school district. The district was in deficit financing and test scores were unacceptable. Academic needs were established as the priority, thus the support functions of maintenance and transportation had to be assigned a lower priority. Within one year, when test scores began to improve and more positive public support was concurrently verbalized, the revenue increased. The reward at this time, however, was limited to the needs of students, not for the school district nor staff because adequacy of performance had not progressed to that level. Within a three-year period the school district began to adequately fund all support functions and gain financial stability.

SYSTEM TECHNOLOGY APPLICATION

The application of system technology is a disciplined process, performed by people to achieve pre-determined performance objectives and measurement standards. Because of the discipline, the application is a directed effort along a success-referenced, planned process. While the focus is on delivery of effective student learning, the skills to perform must be provided to all staff members at a level to assure effective, recognizable results. In most instances, the degree of success of each staff member will be directly related to that person's skill level, and the perceived level of capability to adequately contribute. The extent of training and skill acquisition must be matched with responsibilities and accountability for performance.

A good rule is to assign tasks to those who have the skills to succeed; or do not assign tasks until skills are acquired.

Timing or scheduling of all events are critical to maximize performance-related resource utilization. There is always a best progression for events, and in most cases the sequence can

these efforts are shown to be effective. It should be remembered that the public wants and expects success, and will with great pleasure endorse and acclaim effective performance.

SYSTEM TECHNOLOGY

Properly applied system technology will produce specified outcomes or products, with staff using process skills needed to deal with management and learning delivery systems for student achievement, classroom service, administrative practice, and resource allocations. If the product is clearly defined with a focus on student mastery of knowledge and skills, success is assured through application of the system technology.

As any other application, people will need the skills to achieve necessary proficiency and comfort, without sacrificing valued attitudes of caring, creativity, and self-worth. The systems training for staff must provide at the minimum the "how to" skills to meet individual responsibilities under accountability standards with an assurance, both perceived and real, of success when properly applied. The diversity of responsibilities within a school district requires the use of different skills, i.e., management skills for administrators and for support staff and instructional learning skills for teachers. All must be compatible and interrelated to assure consistency over time.

Success must be narrowly defined in terms of resources and priority needs. At the very core of effectiveness is the capability to control the use of available resources and priority needs. At the very core of effectiveness is the capability to control the use of available resources over the necessary time required to produce quality products. Probably, the hardest decision will be to identify priorities, thus minimizing efforts toward or elimination of some existing functions. With proper application of the system process, however, the priorities will quickly emerge and be easily

of possible catastrophe. In most cases informal process evaluation will identify needs for correction on a timely basis.

When system technology application becomes a routine operational procedure after three or four years, there will be a tendency to gain satisfaction, and to relax monitoring and informal evaluation processes. There develops a false sense of escalating progress based on the assumption of unlimited inertia. This is an indicator that the challenge of installation probably must be redirected toward sophistication of processes, and renewal of academic competencies.

The audit process, which is in fact a validation procedure, is probably the most useful forcing function for continuous achievement of quality results. The audit report becomes a reference in the form of a district data base for making short and long range decisions. The annual audit report, coupled with in-house data, should provide a clear overview of the progress of the school district. During and after the initial installation of system technology applications, the annual reports can provide an audit trail of objectives not met or compromised as well as a trail of objective accomplishments. Even with the highly disciplined requirements of the performance system, one must not forget that education is a people service and all of the limitations persist; system technology applications only provide a process to maximize results and performance of people working with other people and things.

SYSTEM TECHNOLOGY'S INFLUENCE ON PEOPLE

System Technology is a disciplined process to assure that people work with other people and things to successfully deliver quality results. When results are perceived to be or are accurately determined to be unsuccessful, new skills to produce must then be learned and applied. The time and effort necessary to attain success by application of the new skills will depend on the degree of failure, the expected level of success to be

be specified. For each event, the two major requirements are people preparation and available resources. Another rule is to accomplish effective planning and commit necessary resources before initiating performance. Bob Corrigan has said it well, "You must have ham before you can have ham and eggs."

The scarcity of resources linked with requirements for successful performance requires the very best decisions from top management, decisions based upon an accumulation of data necessary to make the wise decision. The challenge of constraint cannot be deferred, but must be met with specific strategies to reduce negative effects to acceptable levels. The success of these strategies is directly related to the capability of selecting performance strategies and accurately predicting outcomes. With comprehensive results-focused planning, the best results can be obtained by identifying the best alternative. A compromised benefit contributes many times to success if it reduces a need to a managed level. The degree of compromise of specific needs, of course, must depend on criticality and priorities. Experience has shown that when needs are prioritized, the extent of compromise becomes a relatively simple decision. Through system technology application, it becomes obvious that some needs cannot be resolved to the extent desired; but all critical needs can be resolved to assure success, and less critical needs can be reduced to the level of acceptability and effective control.

Operationally, system technology application is a manager's "security blanket." It puts in motion a controlled, planned operation directed toward pre-specified results. Flexibility of design, knowledge of operational functions, and feedback information provide necessary conditions for effective decision making and communications. When staff members are performing prescribed functions, when they are committed to success, and when they have been adequately trained, the security of open interactions with staff members is predictable. Thus, the unexpected becomes a requirement for adjustment and not a threat

SYSTEM TECHNOLOGY EXPERIENCE REPORT

From over twelve years of experience in system technology application as designed by Bob and Betty Corrigan*, properly applied technology has produced effective results. Application of system technology is in fact a discipline which must be learned, and which must be applied to gain proficiency. Acceptance by policy makers has always been most easily obtained, whereas, staff generally maintained a "show me" posture until results were produced. Critical mass and broad based acceptance followed as involvement increased. When total rejection of the process by individual administrators occurred, that administrator's resignation generally followed. Teachers usually were either enthusiastic or expressed reservations, but remained accepting to limited effort. Most of the time, those who express reservations but exerted the limited effort became sincere advocates when results were produced. In all cases, student achievement improved dramatically following the application of system technology. These results, when shared with policy makers, have consistently resulted in praise for staff and increased funding for the schools.

System technology is conceptually difficult in terms of district-wide application, but much less difficult when separate components are considered. The effort to gain mastery of system skills at the top level will require much more time than at the school building level, i.e., principals and teachers. The requirement for training, prioritizing needs, accumulating data, allocating resources, and preparing plans will require maximum effort and adequate time -- from six months to one year. Without exception, every top administrator should receive training and should successfully apply the learned skills prior to the involvement of other administrators. This will establish

*Systematic Approach for Effectiveness (SAFE) practices and skills.

attained, and quality of performance by people.

Because of the lack of success, failure will appear as crisis and cannot be tolerated by the public over a long period of time. When intervention is implemented to attain success, the people-influence will vary according to perspectives of the individuals. Those who see the need for intervention will become a successful, contributing part of the solution. On the other hand, some will reject the intervention process and will oppose efforts. Typically, when system technology is used, those who initially reject the application will in time become an advocate, or resign for other employment. Critical mass, however, will probably be obtained within six months after intervention is initiated, and broad based acceptance will be obtained within an eighteen month period after results become obvious.

Initially, the most critical factor is the commitment of policy makers and top level administrators. The first test of acceptance or rejection should be the comprehensive training of key administrators and degree of their effectiveness in using the skills for planning intervention processes. When the top level administrators accept and effectively demonstrate competence in use of system technology, plans should be formulated to install system application on a broad base. As is common to good management, phasing of efforts against a needs referent, coupled with success criteria, can proceed with predictable results. The initial effort when working with staff below the top level administrators should be: (1) to involve selected staff; and (2) to produce easily recognizable positive results within a short time period. After the initial effort, less caution is needed and general acceptance will prevail. This process will "success the staff" and will assure quality results and institutional success.

an influential, skilled nucleus for direction for monitoring and for control of rumors which are always associated with intervention.

Probably the best advice is for the superintendent, administrators, and key teachers to collectively gain proficiency in the use of the system technology skills and apply the technology in the proper, disciplined procedure. Without reservation, system technology, when coupled with reasonable judgment, will produce dramatic benefits over time which can be measured in student learning, staff comfort, and public acceptance.

an honest point of unhappiness with what your schools are doing compared to what is really possible. Your unhappiness should peak at a point of dissatisfaction which produces a strong personal commitment to do everything possible to develop more efficient and more effective school programs.

* It is worth the extra effort only if you have the personal drive and dedication to stay with it, see it through, and make it "go." You must understand that MOBP implementation is evolutionary and not revolutionary. The difficulty with which long-established belief systems about education are attacked and changed is a serious problem. There is no guarantee of smooth progress or orderly development, primarily because of the multiple complexities of dealing with the frailties of human nature in yourself and your colleagues.

* It is worth the extra effort only if you are tired of "fluff" and "catch programs" which seem periodically to sprout and then fade away just as quickly. The development of an MOBP requires your willingness to dig in and see a program develop from a sound philosophical understanding, based upon sound operational understandings, supported through a vigorous program of staff development wherein participants can acquire new skills. This development must reflect your determined willingness to challenge and revise your own belief system whenever necessary.

* It is worth the extra effort only if you believe that educational leadership requires activism, involvement, and ownership. These are not automatic by-products of AASA membership or participation in a professional group such as the Network for Outcome-Based Schools.

Chapter 15

Is Creating a Learner-Mastery Outcome-Based Program Worth the Extra Effort? A Superintendent's Perspective (John R. Champlin)

The interest in Mastery/Outcome-Based programs has grown tremendously in the last years. Many are attracted to it because of both the genius and the merits of the concept. Others have come to consider Mastery for less noble reasons, such as "it sounds good," "it's the latest thing on the market," or "why not give it a try; it might help."

As a practitioner who has been involved with Mastery for over ten years in a pretty "typical" school district, I want to share my personal views with prospective users. My message can be divided into two parts. The first is a series of admonitions concerning any potential user's intentions and motivation. The second reflects my view that involvement with Mastery/Outcome-Based Programs (MOBP) both forces and leads a district into a multitude of decisions and considerations of issues which defy simplicity.

Those intent on implementing Mastery must be aware that it requires an obvious, extra effort beyond that required to maintain an existing program. That extra effort is often a constant test of one's professional dedication, management skills, technical understanding and proficiencies, and -- last but not least -- a severe test of the willingness to re-examine one's own attitude and belief system.

For those in the entry phase of Mastery implementation, the answer to the question, "Is it worth the extra effort?" should be based on the following:

- * It is worth the extra effort only if you have reached

which must be considered in operating schools. For example, it requires a thorough understanding of the instructional process and its inherent skill demands; it warrants restructuring curriculum to produce a format consistent with advanced methodology; it demands new and more productive relationships between people (often rendering obsolete the stereotypes associated with established roles); and it requires an organization willing to examine its overall health and well-being. Significant growth cannot take place in an organization which is not "healthy" as defined broadly by the behavioral sciences. It also requires the presence of a renewal process which forces constant growth and reassessment on all staff, never dealing in the win/lose of typical evaluations, but always demanding an upgrading of professional activities. And finally, it requires the creation and sustenance of a strong staff development program wherein all participants can identify, acquire, and strengthen the professional skills and personal understanding necessary to make an MOBP successful. All of these various strands, both singly and collectively, attack the belief system which has held schools captive and static for so long.

Working as I have with many school districts throughout the nation reveals that many of the essential components associated with Mastery are often present in some measure. I often hear administrators say, "I am doing that already." While this serves to reinforce the notion that MOBP is a collection of sound instructional practices and understandings, it frequently creates the false impression that districts are already fully into Mastery. This, I fear, is an illusion that falls far short of the encompassing nature of a total Outcome-Based program.

Johnson City has been into Mastery for over ten years. Our experiences, which began with six teachers and one hundred and fifty students, now extend to the complete district, K-12, with total staff involvement. Our involvement and

- * It is worth the extra effort only if you believe that professionalism is not possible unless practice reflects the best available data. To operate on a lesser basis reduces our work to that of being a craftsman or a semi-skilled practitioner.

- * It is worth the extra effort only if you believe that schools should be organized around how children learn and not around time-honored arrangements. This dedication should be intense and should motivate you to make sharper, keener professional decisions consistent with and reflecting sound data.

- * It is worth the extra effort only if you are increasingly impatient with those who say, "It won't work," "It's a fad," "It didn't work there," "I would like to know more about the research," ad infinitum. Progress is never made by reluctant participants, nor is it stimulated by negative "killer phrases" such as these. The dedication to create and develop sound programs requires risk taking, the creation of a high silhouette, and a willingness to stand apart and above the reluctant.

- * It is worth the extra effort only if you believe that education doesn't have unlimited chances for success in the eyes of a public that has grown ever more doubtful about us. This is not necessarily a message of gloom and doom; only a reminder that we are overdue in using the vast understanding at our disposal to create more efficient and more effective schools.

Having raised some questions to test your seriousness about MOBP, I will now share my perceptions about its value. Mastery offers an omnibus approach to education which mandates bringing together and fusing many critical educational practices

5. New skills and new roles^{am} for managers, particularly middle managers, soon emerged. The traditional leader/subordinate role, so prevalent in many schools, had to be amended to promote more collaboration and collegiality. This often places middle managers in co-learner roles with colleagues.

6. An MOBP intently focuses on the intricacies of the instructional process. We identified discrete skills, understandings and techniques which promoted greater teacher efficiency and greater student learning. These became the basis for staff development and, eventually, for staff evaluation.

7. Mastery demands the clear identification of what is to be taught and learned. Establishing clear goals became essential. This often meant eliminating superfluous curriculum materials that had little to do with student learning.

8. We soon came to be committed to a strong, continuous program of renewal. The spirit of constant growth and revitalization is essential for program vitality.

9. Because we made substantial changes in procedures and traditional methodology, working with our community became a strong priority. This included having the community understand why we were effecting change, what the changes were all about, how we intended to implement these changes, and what they would look like. We gave frequent feedback and interaction opportunities to all parents and other members of the community. This resulted in our receiving strong support, primarily because we chose not to hide behind professional jargon and "educationese" but, instead, to accept the public as partners in the learning venture.

10. Our staff reached new heights in personal satisfaction and esteem as they came to understand and accept that

experiences both motivated us and forced us to recognize the following considerations, which I see as important benefits and gains.

1. It became important for us to know why we were making certain instructional decisions. Consistent with our commitment to embody the essence of professionalism (i.e., decisions that reflected the most appropriate and valid data available), we created a series of educational specifications which serve as a "screen" for decision making. No instructional or educational decision can be made or implemented in our district without successfully passing through this screen.

2. As we moved into program implementation, we encountered problems. It became evident very early that it was going to be necessary to create a problem-solving procedure which mandated the consideration of non-obvious alternatives, the utilization of sound data, and a deliberate choice process. We insisted that all school problems be approached in this way, so that personal biases and former beliefs did not supersede solutions emerging from the process itself.

3. Because Mastery demanded multiple dimensions of change and revision of traditional practices, it became clear that we would have to both understand and manage change. The literature on change is abundant, but its findings are too often ignored, with the result that change is too often clumsily implemented.

4. While we were aware of the need, it became a top priority that our organization had to be healthy in every respect. This meant addressing the interaction and affiliation of people within the organization and the manner in which the mutual needs of individuals and organizations are met.

16. As we created opportunities for a wider range of achievement, we were able to deal better with learning problems of varying complexities. Because we became more responsive, we were able to resist classifying problem children as learning disabled and were able to respond to their needs within the flexibility and the capability of our MOBP.

Mastery Learning/Outcome-Based Programs are not a Utopian panacea. They are instructional systems with a sound base and with a sound series of technologies and understandings which, if carefully and faithfully implemented, hold great promise. Are they worth the extra effort? I have suggested that the answer lies in the users' willingness to challenge themselves first, and to be faithful and diligent in their professional dedication once an MOBP is initiated. Mastery deserves a better fate than to fall by the wayside as many promising innovations did during the hysteria of the 60's and 70's. We are, I am convinced, on the verge of creating a sound management and technological approach to education which holds great promise for the future. But we can't as a profession afford to blow it by presuming that we have already been there and back, while the critical public looks frantically for alternatives to our apparent ineffectiveness.

their role was important and they could do things that made an appreciable and positive difference in the learning and development of students.

11. Our efficiency was enhanced through restructuring the curriculum. This restructuring was consistent with the flow of the instructional process in an MOBP. We came to accept sound and thorough planning as an absolute necessity for effective instruction.

12. The emergence of talented and gifted youngsters who learned more rapidly than others forced us to consider how to deal with this group. We incorporated into the curriculum and into teachers' instructional techniques opportunities for challenges and experiences centering Bloom's higher-level cognitive activities. We found that we had much to offer talented students without creating either a "pullout program" or separate and different course offerings.

13. Mastery requires new roles for teachers and pupils. Emerging from these roles came revised role relationships, particularly those affecting the standard acceptance of the teacher as giver and the student as receiver. Opportunities for choice and fuller participation and influence for students soon emerged as priorities.

14. Mastery is predicated on success. By creating opportunities for practically all to learn and succeed, we created a spirit of dignity for the learner which, in turn, brought about a much closer, productive relationship between students and the school system.

15. As we made key decisions about process, curriculum, and roles, we discovered that we had far more time than we imagined was available to us. We were able to free up instructional time without changing the school year, the school day, or eliminating special subjects.

APPENDICES

Appendix A. SAFE Self-Directed Skills Training Kits

Appendix B. Group Tutorials: Predictable Mastery Learning in Science

INSTALLING SAFE SKILLS TRAINING PROGRAMS

THE major objective for the initial phase of your installation program would be to *qualify all professionals with required Learning-Centered skills to install the proposed Learning-Centered Performance System* in the following phases.

This will require qualifying *all professionals* through the SAFE Learning-Centered SERIES for teachers, counselors, and for administrators.

It is of critical importance that each teacher, administrator and counselor *demonstrates* concise entry prerequisite skills to successfully apply the proven Learning-Centered skills and practices **BEFORE** proceeding to subsequent implementation steps.

In performing all coordinated SAFE skills training activities described below (please see sections A, B and C), each trainee **WILL** achieve stated SAFE training objectives— and — in turn **WILL** demonstrate "mastery" of required Learning-Centered skills which are *prerequisite competencies and professional practices* to design and, in turn, to deliver **PREDICTABLE MASTERY** for learners in your school district.

This most significant requirement is fulfilled through the initial training of all professionals in the SAFE Training Series.

COMBINING GROUP AND SELF-DIRECTED TRAINING SEQUENCES

The installation of the SAFE training programs will involve a combination of **GROUP DIRECTED** and **SELF-DIRECTED** training activities; and, a "tryout application" of skills developed, as follows:

A. **GROUP DIRECTED** training activities are performed by a cadre of Trainer/Managers who are initially trained in the prescribed SAFE Skills Training Series by Corrigan & Associates consultants. The primary job of the trainer/manager will be to maintain the quality of training products developed by individual trainees. These Trainer/Managers will:

1. be qualified to manage the training of all professionals as they complete their Self-Directed assignments.
2. be qualified to critique and revise (when appropriate) the work performed by each trainee in their **SAFE SELF-DIRECTED** (outside the school) process.
3. maintain the **QUALITY CONTROL** of each individual's progress, thus assuring predictable successful progress by each trainee.

B. The completion by each trainee of his/her **SAFE SELF-DIRECTED** program. The SAFE Training Series are **SELF-DIRECTED** programs to be completed by professional educators (administrators, teachers and counselors) on one's own time and at one's own pace outside of the daily school program. At appropriate points, individual trainees will meet in groups with the trainer/manager to check on correct application of SAFE principles learned.

Each SAFE Self-Directed Series must be accomplished as directed and will be measured against carefully defined performance standards (Step-by-Step) as the basis for the money-back guarantee.

C. The completion of a **TRY-OUT APPLICATION** by each trainee of skills learned. On successful completion of the **SELF-DIRECTED** SAFE Training Program (PME/R for administrators and **Delivering Predictable Learner Success** (DPLS) for teachers and counselors) each professional will prepare a "try-out application"; implement the "try-out application"; and evaluate and revise for increased performance effectiveness, thus assuring the qualification of all professionals to successfully apply SAFE skills learned to **Learning-Centered** assignments.

The Group Installation of SAFE Skills Training Programs in Your School District, College or University

QUALIFYING YOUR PROFESSIONAL EDUCATORS TO DELIVER PREDICTABLE LEARNING SUCCESS:

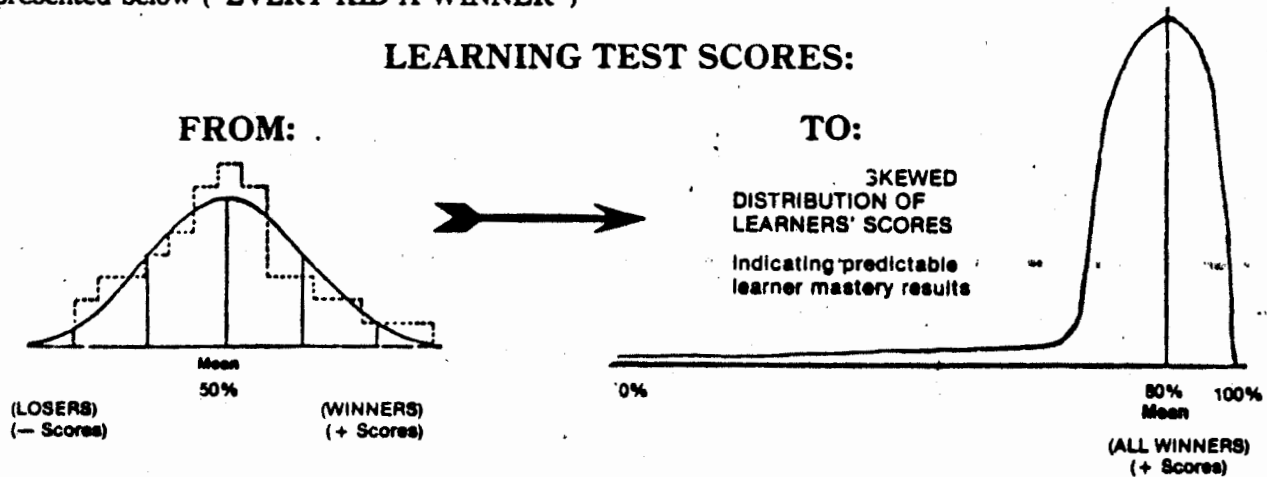
The major objective in installing SAFE* Learning-Centered practices is to guarantee the delivery of predictable Learning Success for your learners.

To install a successful GUARANTEED learning-centered delivery system in your institution there will be the REQUIREMENT that *all professionals be qualified with learning-centered competencies.*

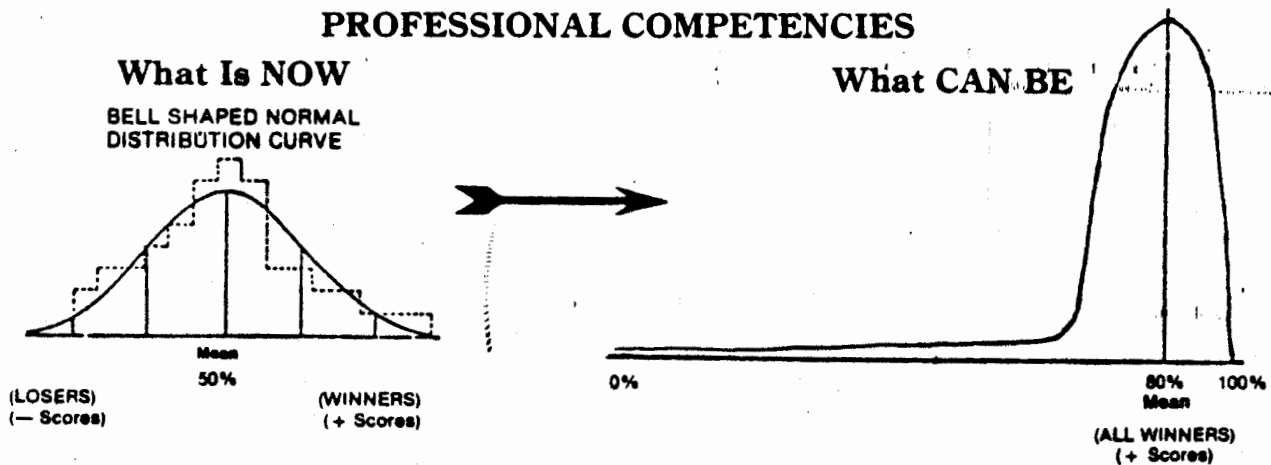
IF we are to shift the performance of your learners

FROM: Current bell-shaped test score distributions

TO: The distribution of learning test scores depicted in the highly skewed test score distribution presented below ("EVERY KID A WINNER")



THEN professional educators must demonstrate the entry prerequisite skills depicted as the highly skewed distribution of *professional Learning-Centered competencies* below:



SAFE Skills Training Programs GUARANTEE (on a money-back basis) predictable terminal success for each professional with the desired skewed distribution of entry skills to deliver predictable learning success — and — upon completion of training, all educational professionals will be qualified with those Learning-Centered competencies which will provide predictable success for learners (skewed learner test score distributions for all grades, all students, all content areas)

*SAFE (Systematic Approach for Educational Effectiveness)

WHAT LOUISIANA PROFESSIONAL IMPROVEMENT PROGRAM (PIP) PARTICIPANTS SAY

Mrs. Troy Williams; Teacher; Fairview School, Allen Parish:

"Delivering Predictable Learning Success is a program to be praised by present day educators. The realization that professional practices currently applied have not delivered mastery of skills for our learners should tell us something.

A shift from teaching-centered to learning-centered practices refocuses on new skills and practices designed through the eyes of the learner. If we practice the SAFE way presented by Corrigan & Associates, we establish a learning path which assures the learner to proceed step-by-step from points of entry to achievement of the terminal objectives.

Implementation of a closed-loop model such as this is truly a Systematic Approach for Educational Effectiveness.

P.S. Your firm has done a great job in organization and presentation of materials."

Mr. Terry Chain; Teacher; Buras High School; Plaquemines Parish

"This program has proved to be a very worthwhile experience for me. I plan to use much of what I have learned in my day-to-day lesson planning.

Please send me a Certificate of Achievement of inservice PIP points.

Please send me information about your other programs."

PIP Participants are taking SAFE Home Study Programs in the following Parishes:

Orleans, St. Charles, Jefferson, Catahoula, Plaquemines, St. Martin, St. Bernard, Iberia, Caddo, East Baton Rouge, Terrebonne, Livingston, Allen, St. Helena.

Mrs. Joyce B. August; Principal; Carver Elementary, St Charles Parish:

Please allow me to take this opportunity to convey to you how much I enjoyed and profited from your home study course PME/R.

The preciseness and organization of the course helped me to plan a very effective program in my school. With the PME/R method the directions were so concise and clear that I knew exactly what I wanted to do, the procedures I would take, the cost, personnel needed, timelines, support services, etc. needed to be successful in my endeavor.

Thank you, Corrigan, you have definitely been a tremendous help to me.

I highly recommend your program to all administrators who want to be successful."

Mr. John Smith, Principal, and 53 Faculty Members, Alcee Fortier High School, Orleans Parish: (Evaluation responses)

A. Select a score from 0 (worst) to 10 (best) indicating your judgement of the SAFE Skills Training Program.

N=53 Mean=8.15 Median=9.1 Mode=9

B. Please give reasons why you selected the number above. (Sample of answers)

... Good organization ... Excellent materials ... Easy to follow ... Feeling of having accomplished by doing ... Extremely informative and helpful to me as a teacher ... Most effective in helping me to make better preparations, assessing student needs or developing plans of action ... SAFE Training was nearly perfect.

C. Would you recommend SAFE program to other teachers?

YES-51 NO-0 Undecided-2*

(*Comment: "I want to try it in my classroom first")

ROVEN SUCCESS STORIES BY ENTIRE SCHOOL DISTRICTS APPLYING SAFE PRACTICES TO DESIGN FOR AND TO DELIVER PREDICTABLE LEARNING SUCCESS*

Duval County Schools, Jacksonville, Florida (1969-present)

With district personnel applying SAFE skills to design all instructional programs, the district moved from a position of district-wide failure (1969) with the majority of learners being 3 grade levels below national norms, and all schools non-credited - to a majority of students performing at or above national norms and all schools accredited in 1979-80 - cited by the Office of Education as an exemplary learning success model (1976) for disadvantaged learners in Math applying SAFE skills and practices.

Orange Unified School District, Orange, California (1969-present)

Total district-wide commitment (1970 to present) to Systematic Approach for Effectiveness (SAFE) practices and application with current results (1980) being that the Orange Unified School District is in first position in Math and first position in Reading and Written Expression for the 30 largest school districts in California.

Moss Point Municipal Separate School District, Moss Point, Mississippi (1977-present)

Applying SAFE practices, Moss Point developed five year management plans, articulated curricula in all subject areas K-12, and is in process of completing Functional Learning Paths. District developed Criterion Referenced Tests are strongly correlated with CAT 77. Evaluation, grades 9-12 in 1980-81 and 1981-82, found no significant difference in scores between blacks and whites whereas in previous years there had been bi-modal distributions attributed to race... "race does not seem to be a systematic factor in determining how much a student learns from year to year."

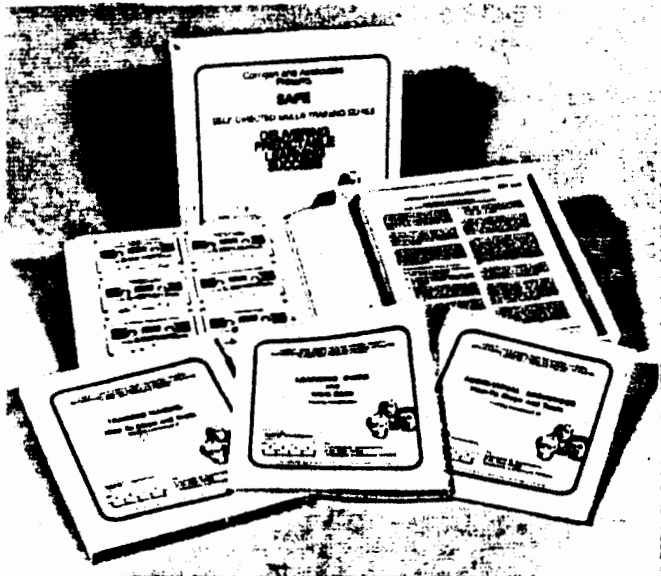
Application of SAFE PME/R practices has moved the district finances from a deficit position to a balanced position with reserves.

Newton Public Schools, Newton, Mississippi (1978-present)

With a student population 60% black, 40% white and 64% in the free lunch program, Newton students scored as a group in the 32nd %tile on the State Assessment Testing (CAT 70) in 1977. In 1978 all teachers were trained and started applying SAFE practices. First grade scores in 1979 were at the 49th %tile; in 1980 at the 51st %tile; in 1981 at the 53rd %tile and in 1982 at the 62nd %tile. "The steady growth from 1979 is attributed to the progressive installation of SAFE and the quantum leap to the 62nd %tile in 1982 represents completion of the SAFE model for 1st grade. Across the grades only one class was not above national norms (4th grade at the 49th %tile)." State Evaluation reported... "Newton Schools were unusual in Mississippi because you could not predict race or socio-economic status from achievement scores... Most schools tend to present two distinct curves for achievement (bi-modal) that reflect race and/or socio-economic factors."

PRESENTING OUR SAFE SELF-DIRECTED TRAINING KITS

MONEY-BACK GUARANTEED SUCCESS FOR EDUCATIONAL PROFESSIONALS



Each SAFE Self-Directed Skills Training Series provides these self-directed Skills Training Components:

A. LEARNING GUIDE & WORKBOOK

You are directed Step-by-Step with this tutorial guide to complete successive reading, audio-visual sequences, and how-to-practicum exercises for individual instructional UNITS.

B. TRAINING MANUAL: HOW-TO STEPS AND TOOLS

You are presented all need-to-know and do concepts, principles and practicum steps to design and to install results-oriented plans which will deliver predictable success when skills are correctly applied.

C. AUDIO-VISUAL SEQUENCE: HOW TO STEPS AND TOOLS PLUS AUDIO TAPES CONTAINED IN AUDIO CASSETTES

You are presented audio cassettes to be played in conjunction with visuals to explain concepts and steps presented in training.

Each self-directed learning Unit is checked for correctness of application by use of pre-defined criteria standards and revision loops.

Trainees are continuously directed step-by-step by the use of the training Manual, the A-V sequences and each series of Application Exercises. A process of continuous feedback using criteria for correction is offered at every step.

While learning the SAFE skills, each trainee will produce lesson plans (learning units) or management plans which can be used in the classroom or in the school.

TRAINING OBJECTIVE:

To provide each PIP trainee of the SAFE Series — those guaranteed skills to plan, manage, and evaluate for the delivery of quality results (all applications); and in turn, to fulfill the State-level mandates for:

1. Accountability standards, and
2. Competency based instructional standards.

- A MONEY-BACK GUARANTEE OF SUCCESS
- ALL SAFE SELF-DIRECTED TRAINING COMPONENTS
- CERTIFICATE OF ACHIEVEMENT FOR 30 PIP POINTS
- CRITIQUE OF YOUR PROGRAM

You will be required to complete ALL activities as stated in the SAFE SELF-DIRECTED SKILLS TRAINING PROGRAM to achieve predictable success. Upon completion, you will send us your completed LEARNING GUIDE containing your trial lesson plan or management plan and your notebook containing answers to unit questions and definitions of key terms. We will return these with a written critique and issue your certificate

SAFE KIT: Delivering Predictable Learning Success

SAFE Self-Directed Training Units

- Unit 1 Delivering Predictable Learning Success: Applying A Competency-Based/Mastery Learning Technology
- Unit 2 Assessment of Needs
- Unit 3 The Writing and Critique of Performance Objectives
- Unit 4 Stating the Learning-Centered Curriculum Objective
- Unit 5 The Curriculum Analysis Process: Phase I
- Unit 6 Establishing Learner Characteristics and Prerequisites
- Unit 7 Analyze Major Cognitive/Affective/Psychomotor Requirements
- Unit 8 Deriving and Stating Terminal Performance Objectives (T.P.O.'s)
- Unit 9 Deriving Performance Specifications and Criterion Tests/Measures
- Unit 10 Curriculum Analysis Process: Phase II
- Unit 11 Deriving Intermediate Performance Objectives (I.P.O.'s) and Criterion Measures
- Unit 12 Analysis of Learning Step Requirements
- Unit 13 Deriving and Stating Learning Steps and Criteria
- Unit 14 Analyzing and Deriving Methods/Media Alternatives
- Unit 15 Curriculum Synthesis
- Unit 16 Designing a Functional Learning Path:
A. Sequencing T.P.O.'s, I.P.O.'s and Learning Steps
- Unit 17 Designing a Functional Learning Path:
B. Methods/Media Selections for Predictable Learning
- Unit 18 Produce Field Test Methods/Media
- Unit 19 Implement Learning Centered Program Evaluate and Revise

SAFE KIT: Planning, Managing and Evaluating for Results

SAFE Self-Directed Training Unit Titles

- Unit 1. Organizing to Deliver Maximum Productivity
- Unit 2. Assessment of Needs
- Unit 3. Define Goals and Mission Statement
- Unit 4. State Mission Objective
- Unit 5. Determine Performance Requirements
- Unit 6. Determine Constraints
- Unit 7. Derive Mission Profile
- Unit 8. Perform Function Analysis
- Unit 9. Perform Task Analysis
- Unit 10. Perform Methods/means Analysis
- Unit 11. State Feasibility Go/No Go
- Unit 12. Overview and Introduction to System Synthesis in the PME/R Model: Planning-the-Work and Working-the-Plan
- Unit 13. Planning-The-Work: Designing the Operations Plan (Time Line Schedules, Personnel, Methods, Means Selections, Job Descriptions/Assignments)
- Unit 14. Planning-The-Work: Designing the Management Plan (Personnel, Performance Monitoring, Quality Controls, Evaluation Schedules, Methods/Means Selection)
- Unit 15. Planning-The-Work: Designing the Support Plan
- Unit 16. Planning-The-Work: Establishing the Program Budget
- Unit 17. Working-The-Plan: Installing, Implementing, Evaluating and Revising the Cost-Effective Plan.

Terminal Performance Objectives For Group Tutorials...

Upon completion of each unit, given a comprehensive examination consisting of matching, labeling, completion and multiple choice questions and optional essay questions and/or problems to solve, the student will . . .

Man's Need to Explain

... recall and interpret the concepts of instinct and reasoning as they apply to man and other animals ... define random, purposeful and intellectual curiosity and explain the role of each as it applies to man's learning achievements and to problem solving ... interpret curiosity, fear of the unknown and reasoning as stimuli to man's "need to explain".

How Science Developed

... recall the development of science, relate dates to centuries, and trace the development of writing and recording ... list the periods of history with correct dates for each, matching people and dates to various discoveries and inventions ... recall how man's knowledge has already doubled and will again do so by 1970, thereby causing a great increase in the number of specific science areas.

Problem Solving Methods

... recall nine problem solving steps and differentiate between inductive, deductive and trial and error problem solving methods ... define fact, theory and hypothesis and identify the relationship of each to the problem solving sequence.

Measurement—Weights and Measures

... recall the four standards of measurement and list length, time and mass (weight) as the three basic properties used to describe physical measurement ... differentiate between the English and metric systems of measurement and identify the six categories of devices used to determine properties of objects ... identify, describe and explain the use of three weighing devices, three instruments used to measure distance or length, three types of devices used to measure volume, and the different instruments used to measure temperature and pressure ... identify and describe the use of the stopwatch, the bunsen burner and the microscope.

Essentials of Physics—Time, Distance and Mass

... compute correctly area or volume of given figures ... identify, specify or define the three dimensions of physical measurement—time, distance and mass; the concepts of gravity, weight, mass and density; and the principles and construction of physics formulas.

Essentials of Physics—Motion

... define and explain the concepts of speed, acceleration, velocity, force, gravity, weight, momentum, impulse and work, and give the appropriate formulas for the measurement of each.

Essentials of Physics—Energy

... define, describe and explain the concepts of potential energy, kinetic energy, energy conservation and energy transformation ... analyze examples of transformation of energy.

Measurement—Force and Motion

... demonstrate understanding of the concept of physical measurement standards, the MKS and cgs systems of measurement, and the specific units used to describe the major concepts within the field of physics ... derive from basic equations the MKS dimensional units for density, velocity, acceleration, force, weight, impulse, momentum, work and energy.

Newton's Laws of Motion

... label bodies, distinguish between those at rest and in motion and between those with rest or motion inertia ... match terms related to laws of motion with their definitions ... complete statements of relationships of inertia, motion, effects of forces, and Newton's Three Laws of Motion.

The Principles of Simple Machines

... list the six types of simple machines, give examples of each, describe the force alteration characteristics of the simple machines, identify the advantages and disadvantages in terms of work input and work output of the lever, wheel and axle, pulley, and inclined plane.

The Characteristics and Operations of Machines

... specify the concepts of force advantage, efficiency and power as related to both simple and compound machines ... on diagrams of gear trains the student will identify the parts and either speed or force advantage of each and their gear ratios ... given a picture the student will identify the machine as a compound or simple machine and identify and label the simple machines, of which the compound machine is made.

Gasoline Engines

... list the major parts of the four cycle gasoline engine, recall and describe each cycle, and describe the operation of the engine.

Forces and Vectors

... recall the concepts of inertia, force, mass, gravity, weight, force, acceleration and friction ... recall that a formula is used in physics and that two common measurement systems are the English and metric systems ... relate how forces can be vector quantities, how these vectors can be combined graphically by the use of vector addition and the parallelogram method ... solve simple problems in vector addition.

The Electron—Source of Electrical Energy

... label correctly the parts and charges of an atom ... match the properties and parts of an atom ... describe and explain the properties and parts of atoms which interact to create free electrons.

Electricity—Static

... define static electricity, potential difference, force field and charged bodies, and recall how a static charge can be induced in neutral bodies through contact or induction.

Appendix B. Group Tutorials: Predictable Mastery Learning in Science

In the following pages you are presented the titles of Group Tutorials. In addition, you are presented the design characteristics of these Group Tutorials to produce significant increased learning results for non-readers and/or low achievers.

In today's crises for science instruction the Tutorials offer a proven capability to assure success for science students (all levels of entry capability). Science literacy can become a reality for all learners since predictable success of science learning objectives are achieved without teachers being required to be science majors.

You may request further information concerning scope and sequence for all major science areas offered through the Tutorials for immediate application.

Earth—Composition and Structure of the Crust

... define, and compare the crust of the earth as differentiated from the interior of the earth; the three classifications of the earth's surface — lithosphere, hydrosphere and atmosphere ... recall the concept of matter and its three states; the transformation cycle of matter as produced by temperature change ... describe the similarities and differences among elements, compounds and mixtures and relate these to earth's composition ... identify the mantle, mantle rock, bedrock and crust.

Earth—Divisions of the Crust

... define hemisphere, continent and ocean ... recall the names and locations of the continents and oceans ... describe three main land forms and the three main submarine forms; the composition of ocean water; the names and locations of the climatic zones; location of parallels and meridians ... label the continents and oceans.

Earth—Breaking Down the Crust

... define and describe the earth's four interior regions and approximate depth, the character of the earth's crust, the major types of erosion produced by moving water, ocean waves, wind, glaciers, weathering and earthquakes; the results of erosion: Valleys, flood plains, glacial lakes, moraines and faults ... label correctly geological features resulting from erosion.

Earth—The Interior

... label the inner and outer cores, mantle and crust regions and approximate thickness, proposed state and composition of each ... specify, define or relate how scientists use direct and indirect methods, seismographs, earthquake tremors and waves to derive theories of composition and characteristics of the earth's interior.

Earth—Rock Formation and Mountain Building

... define and describe the formation of igneous, sedimentary and metamorphic rocks and crystals ... label the parts of a volcano ... describe how erosion, glaciers, volcanic action, faulting and folding and earthquakes cause mountains to be built ... recall the theory of granitization ... describe how geologists have traced earth's history from fossils and records left in rocks.

LIFE SCIENCE SERIES

Human Skeletal System—Anatomy

... specify gross functions of the skeletal system ... identify the axial and appendicular subsystems; name and recall the bones in each ... describe functions of specific subsystems and bones of the human skeleton.

Human Skeletal System—Physiology

... recall the classifications of bones and joints ... specify material composition, growth process of bones and production of red corpuscles ... describe major injuries and diseases of bones.

Human Body as a Machine

... define and describe characteristics of physical machine systems ... specify general functions of machine systems ... classify and compare living and non-living machine systems as to anatomical subsystems and physiological functions and characteristics.

Human Muscles—Kinds and Functions

... identify and label components, points of attachment and types of muscle tissue ... relate structure and classification of muscles to specific function, capability, movement and actions ... recall biochemical, physical and neurological processes associated with muscle contraction in the stimulus-response cycle.

Human Circulatory System

... identify and label major components of the circulatory system ... describe prime functions of the circulatory system, name and locate its various subsystems ... recall functions of arterial, venous, capillary and lymphatic systems and trace the course of circulation of the blood.

Human Nervous System

... label the parts of the central nervous system and the neuron and recall the functions and structure of nerve cells as related to nerves, spinal cord, and brain ... recall and relate the actions of the nervous system to voluntary actions, involuntary actions, body movement, senses and reflex actions ... describe interrelationship and interaction with other body systems.

FIRST AID SERIES

Shock—Signs and Symptoms

... recall functions and interrelationship of body systems ... define shock and specify three major causes and conditions which produce or increase shock ... list eight indications of shock ... identify indications of electric shock.

Shock—Emergency Treatment

... recall procedures for the treatment of shock and general reason for performing such treatment ... specify the exceptions to the general treatment and the reasons for these exceptions ... specify the seven basic steps in the emergency treatment of electric shock.

Bleeding—Types and Symptoms

... identify areas and types of bleeding ... relate types of bleeding and characteristics of each type ... identify indications of internal bleeding which are similar to those of shock and those which are different ... relate characteristics of internal bleeding to affected areas of the body ... describe the process of coagulation.

Bleeding—Emergency Control

... identify six major pressure points and state the area of the body each artery supplies ... identify a compress, hand pressure alone, pressure bandage, pressure bandage with finger pressure, and a tourniquet ... relate general treatment of shock, internal bleeding, external bleeding; methods of applying direct pressure, and how and when to apply a tourniquet.

Artificial Respiration

... specify the causes and indications of respiratory emergencies ... describe the method of performing mouth to mouth artificial respiration and precautions to consider when giving aid to a victim.

Burns—Emergency Treatment

... define a burn ... specify and recall characteristics, emergency treatment and reasons for treatment of first, second and third degree burns.

Poisoning—Types and Symptoms

... define a poison ... recall and specify characteristics and give examples of metallic poisons, corrosive acids and alkalis, depressant drugs, petroleum products, and poisonous spiders, insects and snake bite ... recall general procedures for prevention of poisoning.

Poisoning—Emergency Treatment

... specify signs and symptoms, and describe the procedure in emergency treatment of metallic, corrosive acids, corrosive alkali, depressant drug, petroleum products, spider and snake bite poisoning.

Fractures and Dislocations

... define, identify and describe characteristics of simple and compound fractures ... describe precautions and emergency treatment of fractures ... recognize indications of and explain emergency treatment of sprains ... define a dislocation, recall common joints involved; and describe causes, indications and general treatment procedures for dislocations.

Bandaging and Splinting

... identify the general types of bandages, their functions and application ... identify types of splinting, their functions and applications.

Electricity—Direct Current

... identify and define the three types of material classification (as conductors, semi-conductors, and insulators) ... the elements of a basic circuit and the parameters of a basic circuit ... facility with Ohm's Law will be demonstrated and simple power computation of the load will be calculated.

Work, Power and Energy

... recall and differentiate the concepts of energy, work and power, and recall man's application of these concepts ... recall and identify the general classifications of power as nuclear fission, solar, water, wind and organic fuels, and explain briefly the historical development of each ... describe as possible future power sources, nuclear fusion, tides and currents, solar batteries and fuel cells.

The Classification of Matter

... specify, define or explain matter; the classification of matter into three states: solid, liquid, gas; the properties of each (Solid: definite shape, strength, elasticity, hardness, brittleness; Liquids: no definite shape, viscosity, diffusion; Gases: no definite shape, viscosity, diffusion) ... make a comparison between liquids and gases in regard to volume change, viscosity, and diffusion ... compare similarities and differences among the three states of matter.

The Dynamic Molecular Structure of Matter

... label a simple, symbolic drawing of molecular arrangement as solid, liquid or gas ... relate molecular structure to surface tension, adhesion, density and molecular energy according to the various states of matter ... relate the transformation cycle of matter as produced by temperature.

Light—A Form of Radiant Energy

... identify natural light with the sun ... recall and describe the relationship of radiant energy and the atom ... describe the atomic reactions in releasing electromagnetic radiations; and nuclear reactions in producing radiation ... recall the classification of radiant energy into a spectrum and the relationship of visible light to this spectrum.

Light—Characteristics and Behavior

... distinguish between natural and artificial light ... describe vision in relation to light ... explain the wave, corpuscular, and quantum theories ... define and differentiate refraction and reflection, brightness and illumination ... explain the terms opaque, transparent and translucent.

Sound—A Source of Energy

... define sound and relate it to energy ... describe its generation and its characteristics ... explain how sound travels and the mediums through which it travels ... identify sound waves in regard to frequency, pitch and amplitude.

Sound—Properties and Characteristics

... define, apply or explain the characteristics of sound—pitch, loudness, quality; the concept of the fundamental tone and the overtone series; the relationship between amplitude and resonance and between frequency and pitch; the difference between noise and music ... given a diagram, the student will correctly label the vibrating body, fundamental tone, first overtone and frequency.

Heat—Principles of Combustion

... define combustion, radiation, oxidation, convection and conduction ... classify some phenomena according to the above terms ... recall relationships of chemical change, oxidation, and combustion and the related changes at a molecular level ... given a diagram of a burning candle heating a copper rod, identify the regions in which wax is melting, the wax is gaseous, where rapid oxidation is taking place, and describe the process by which heat in the bar is transferred.

Heat—Chemistry and Application

... relate kindling temperature to physical state and chemical nature of the fuel as determined by molecular structure ... describe relative temperatures and phases of combustion occurring in each part of a flame ... specify factors affecting kindling point, products of combustion, and application of the processes of heat transfer to useful applications.

Atomic Energy—Energy From the Nucleus

... name and relate the parts of the atom ... distinguish between stable and unstable nuclei and decide which is radioactive ... describe atomic and nuclear structure ... relate binding and proton repulsive forces to stable and unstable nuclei, radioactivity, and atomic energy.

Atomic Energy—Principle and Theory

... identify the process of fusion; distinguish which particles have less mass, the reactants or the products ... identify both bombardment and fission; the common kind of atomic "bullet"; the nuclear particles ... indicate both fission and fusion as processes producing energy by a mass to energy conversion ... match simple atomic energy terms with their definitions or symbols ... recall what $E=mc^2$ represents, who formulated it, fission and fusion from their definitions, and the weight relationships and energy forms produced by atomic reactions.

EARTH SCIENCE SERIES

The Sun—Our Basic Source of Energy

... specify, define, or explain: The size of the sun as compared to the earth; the sun's distance from and gravitational pull on earth; the composition of the sun; the sun's thermonuclear reactions and their by-products — the five main physical features of the sun; the nature of the sun's rotation and the concept of the sun as the earth's basic source of heat and light.

Solar System—Terrestrial Planets

... define solar system, planet, star, astronomical unit (A.U.), rotation and revolution ... relate rotation and revolution to time ... describe the terrestrial planets, Mercury, Venus, Mars and Earth in relation to size, A.U. from the sun, moon, albedo, rotation and revolution.

Solar System—Planets in the Outer Orbits

... name planets in the outer orbits of the solar system, Jupiter, Saturn, Uranus, Neptune, and Pluto, and describe each as to size, A.U. from the sun, moons, albedo, rotation and revolution.

Earth—Time and Seasons

... specify, define and relate the concepts of time; the basis on which time units were established, time zones, their necessity and their establishment ... describe seasons as caused by earth's revolution, tilt of the earth, position of hemispheres, and amount of daylight in relation to position of the sun.

Atmosphere—Composition

... list the earth's atmospheric layers and describe the composition limits and characteristics of each layer ... define atmospheric pressure and describe the processes by which the atmosphere is heated.

Essentials of Weather

... define condensation and explain the relationship of condensation to saturation and air temperature ... recall the process of cloud formation and name and describe the clouds by kind and altitude range ... define precipitation and describe how it occurs according to the generally accepted theory and specify kinds of clouds that normally bring precipitation.

Dynamics of Weather

... specify the general physical characteristics of the four types of weather fronts and recall what weather conditions usually accompany each type ... recall the spiraling wind direction with high and low pressure areas; describe the characteristics and expected weather conditions of cyclones, hurricanes, typhoons, tornadoes, and thunderstorms.

Dynamics of Atmosphere

... apply the concepts of air pressure and air temperature to winds, air currents and air circulation; define evaporation and specify the relationship between air temperature and humidity.

The second Tutorial, How Science Developed, traced man's development from prehistoric times; introduced the development of writing and recording (cuneiform, hieroglyphics, Hebrew, Roman, Greek, and Arabic numerals); telling time by centuries; Historical ages, major scientific discoveries leading to the expansion of knowledge; and student predictions of what discoveries might affect life in the future.

Although some students had complained that the teacher was "slowing them down" by reading aloud, the majority of the class voted to have the teacher continue to read aloud while they followed using the visual transparencies that are a part of the Tutorial and in their individual student text, also a part of each Tutorial.

During this unit, some students were volunteering to read questions on the transparencies or exercises in the student text and to confirm correct responses. A few of the volunteers had previously been classified as non-readers. The class mean on the post-test of their second consecutive Tutorial was between 70 and 75 (please refer to the third column of the chart on the first page).

At the beginning of the third Tutorial, The Classification of Matter, the class voted to do their own reading. They were reading, defining, explaining and using correctly such concepts as "viscosity, diffusion, elasticity" as well as all other properties and states of matter. The class mean on the post-test rose to between 80 and 84. One boy who had scored 100 on the two previous tests was disgusted with himself this time because "he only scored 98" (please refer to column four of the chart on the front).

The members of the class did their own reading for the rest of the year using the following Tutorials; while remaining at or above the scores they had previously achieved.

- Newton's Laws of Motion
- Energy, Work and Power
- Essentials of Physics-Motion
- Metric I-Weights and Measures
- The Dynamic Molecular Structure of Matter
- Essentials of Physics-Time, Distance, Mass
- Measurement of Force and Motion
- Essentials of Physics-Energy

The Tutorial method of instruction provided these remedial and non-reading learners with the means for not only mastering science concepts, but also improving their reading skills. Because of the model of instruction used in the Tutorials, the learners were continually successful in the learning process. They became excited and satisfied by their continuing success and reading was a necessary part of maintaining that success. Reading became a functional tool to them. They were not just reading for the sake of reading, reading was a necessary part contributing to success.

Their success in the science class generalized to other areas. Several students were moved from remedial to normal classes when they realized that they could perform. The reading teacher reported that many of the students who had worked with the Tutorials asked to start their reading program over because now they knew they could succeed.

These results can be duplicated with your learners, but only if a series of Tutorials are used, rather than just one or two. It was the continual success experienced by the learners that increased their confidence to a point where they were excited by and willing to get involved in the learning process.

TUTORIALS

READING IMPROVED THROUGH SCIENCE . . .

Remedial and non-readers began reading and achieving a mean of 80-84% after 3 Tutorials . . .

95-100				
90-94				
85-89				
80-84				(MEAN)
75-79				
70-74			(MEAN)	
65-69		(MEAN)		
60-64				
55-59				
50-54				
45-49				
40-44	(MEAN)			
35-39				
30-34				
25-29				

CONVENTIONAL LESSON 1st TUTORIAL 2nd TUTORIAL 3rd TUTORIAL



This is a report of a class of remedial and "non-readers" succeeding in science like they never had before and telling their teacher... "Please stop reading to us, you're slowing us down...we'll do our own reading."

As part of the learner verification of our science mini courses, the Tutorials, a group of 30-35 7th and 8th graders from the remedial reading class were put into one group to learn the same science everyone else in the school was learning. The reading teacher reported their reading ability at the 3rd to 5th grade levels, but noted that this might be decreased by one grade level since science terminology was not within the general reading vocabulary.

The first unit of the semester was teacher prepared. The unit dealt with science research methods, recording data and observations, note taking and experimental design. For this unit the mean score for the remedial readers was 40-44 out of 100 possible points (please refer to the left column of the chart above).

The remedial readers were reluctant to attempt any reading. On introducing the Tutorials the teacher made an agreement with the class to read aloud the pre-test and those portions of the unit requiring reading if each student would perform all activities and exercises and answer all criterion questions. (It may be of interest that the teacher was not a reading specialist. This was her first exposure to a class made up solely of students with severe reading problems)

The first Tutorial, Man's Need To Explain, dealt with the differences between man and animal, instinct and reasoning, types of curiosity, and " learning how to learn " by asking questions. The class was read to by the teacher but each learner performed all activities under the teachers direction. The class mean on the post-test was between 65-69 out of a possible 100 points. (Please refer to the second column of the chart). One student scored 100, and 5 scored between 80 and 95. Learning gains ranged between 30 to 100 percent with all students showing positive gain between the pre and the post-test.

- He hears the word (auditory stimulus)
- * in the tutorial instruction
 - * in the confirmation of correct answers
 - * - of Criterion Questions
 - of Concept Integration Exercises (C.I.E.)
 - of Student Text Exercises
 - of Glossary Construction
 - * in Inquiry discussion
 - * in teacher demonstrations
- He writes and uses the word (Kinesthetic response and Cognitive response)
- * in glossary construction
 - * in answering
 - Criterion Questions
 - C.I.E. (Group)
 - C.I.E. (Student)
 - Text Exercises
 - * in group discussion of
 - Inquiry Questions
 - Demonstrations and experiments
 - * on Terminal Achievement Examination
 - * on Extra Credit Questions

Thus, the student is stimulated through varied sensory modalities and is given repetition, practice, reinforcement, and confirmation of correct usage which will build recognition, recall, and comprehension for use in application, analysis and synthesis.

Methods in the Tutorials
which Promote Functional Reading Skills

Tutorial materials and methods are learner-oriented and the design of learning activities within the method are based on psychological principles and applications of learning theory. For the sake of brevity, we will trace a student's activities in the acquisition and application of a one technical word necessary to a conceptual development. The teacher may then transfer this process in tracing the activities within a Tutorial which sponsor recognition, recall, comprehension, application, analysis and synthesis of concepts, principles, etc.

Student's task: to correctly define and spell a technical word, and to recognize, recall and use the word correctly in the explanation, application, or analysis of a science concept.

Student activities in acquisition:

- He sees the word * on pictorial visuals
(visual stimulus) * on Criterion Question visuals
* on Concept Integration Exercise visuals
* in the Student Self-Constructed Test in
- Short items
 - Discourse Exercises
 - Individualized Concept Integration Exercises
 - Activity and Experiment Instructions
 - Glossary
- * on the Pre-Post-Test.