

ANITA HOGE PRESENTS:

"TALKING PAPERS"

**A "HANDS ON" TOOL FOR
PARENTS TO UNDERSTAND
OUTCOME BASED EDUCATION**

A DOT TO DOT HISTORICAL PERSPECTIVE

Section 1: Introduction and background information. This section likely discusses the context of the study or the specific problem being addressed.

Section 2: Methodology. This section describes the research methods used, including data collection and analysis techniques.

Section 3: Results. This section presents the findings of the study, often including statistical data and graphical representations.

Section 4: Discussion. This section interprets the results, comparing them to existing literature and discussing their implications.

Section 5: Conclusion. This section summarizes the main findings and provides a final perspective on the research.

Section 6: Acknowledgments. This section thanks individuals or organizations that provided support or resources during the study.

Section 7: References. This section lists the academic sources cited throughout the document.

Section 8: Appendix. This section contains supplementary material that supports the main text but is not essential for understanding the core findings.

Section 9: Additional notes or footnotes. This section provides further details or clarifications on specific points mentioned in the main text.

YOU HAVE A FRIEND IN PENNSYLVANIA

ANITA HOGE PRESENTS:

"TALKING PAPERS" A "HANDS ON" TOOL FOR PARENTS TO UNDERSTAND OUTCOME BASED EDUCATION

A DOT TO DOT HISTORICAL PERSPECTIVE

AN AUDIO TAPE ACCOMPANIED BY A NOTEBOOK OF FACTS

- OBE from Bloom's Taxonomy to Spady's transformational proves that OBE is not new
- Proves that Pennsylvania is "The" model for the Nation
- Presents actual test questions from affective EQA tests and how values are scored
- Proves data banks exist
- Examines NCES coding for data retrieval
- Pinpoints how technology will be used to control in a management by objective system...TQM=OBE
- Exposes the use of business and industry through the Chambers of Commerce linking technology to schools

A Message From Anita Hoge

Dear Friend,

Traveling across the United States speaking on OBE, I have found the most important tool I can give parents is the information I have acquired.

I believe knowledge is power. We, as parents and grandparents, must be informed and well documented to be able to protect our children from the "education elite". But, most often "saying" what the problem was, was NOT enough. Parents needed the documents. You need the proof.

This "Talking Paper", an audio that comes with a notebook of documentation, will "talk" you through the dot to dot process of OBE.

Some documents will include a whole chapter, some will only be a page or two for focus and impact. **BUT THE FACTS ARE HERE.**

If you listen to the tape several times while you read over the documents, you will begin to understand the true impact of OBE.

The notebook, then, can be taken to your legislator, to a friend, or to a group of people. You can make overheads with them. Include your state regulations along with the graduation requirement for your state. Plain and simple...you have the facts. **GOOD LUCK.**

DIRECTIONS

- 1. Please start the tape recorder.**
- 2. There will be a short introduction.**
- 3. The "Talking Paper" begins with Bloom's Taxonomy (chapter included in back of book beginning on page 116).
I will describe this process briefly so that you understand the "PROCESS"**
- 4. Documents will follow as I mention them in the tape.**

GOOD LUCK

**** For Research Only ****

WHAT IS OBE?

BLOOM'S TAXONOMY IS THE PROCESS OF HOW CHILDREN LEARN

Concluding that process with their own opinions and value judgements of what to think or how to think about what they learned.

The Process

Knowledge

Comprehension

Application

Analysis

Synthesis

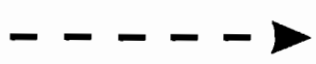
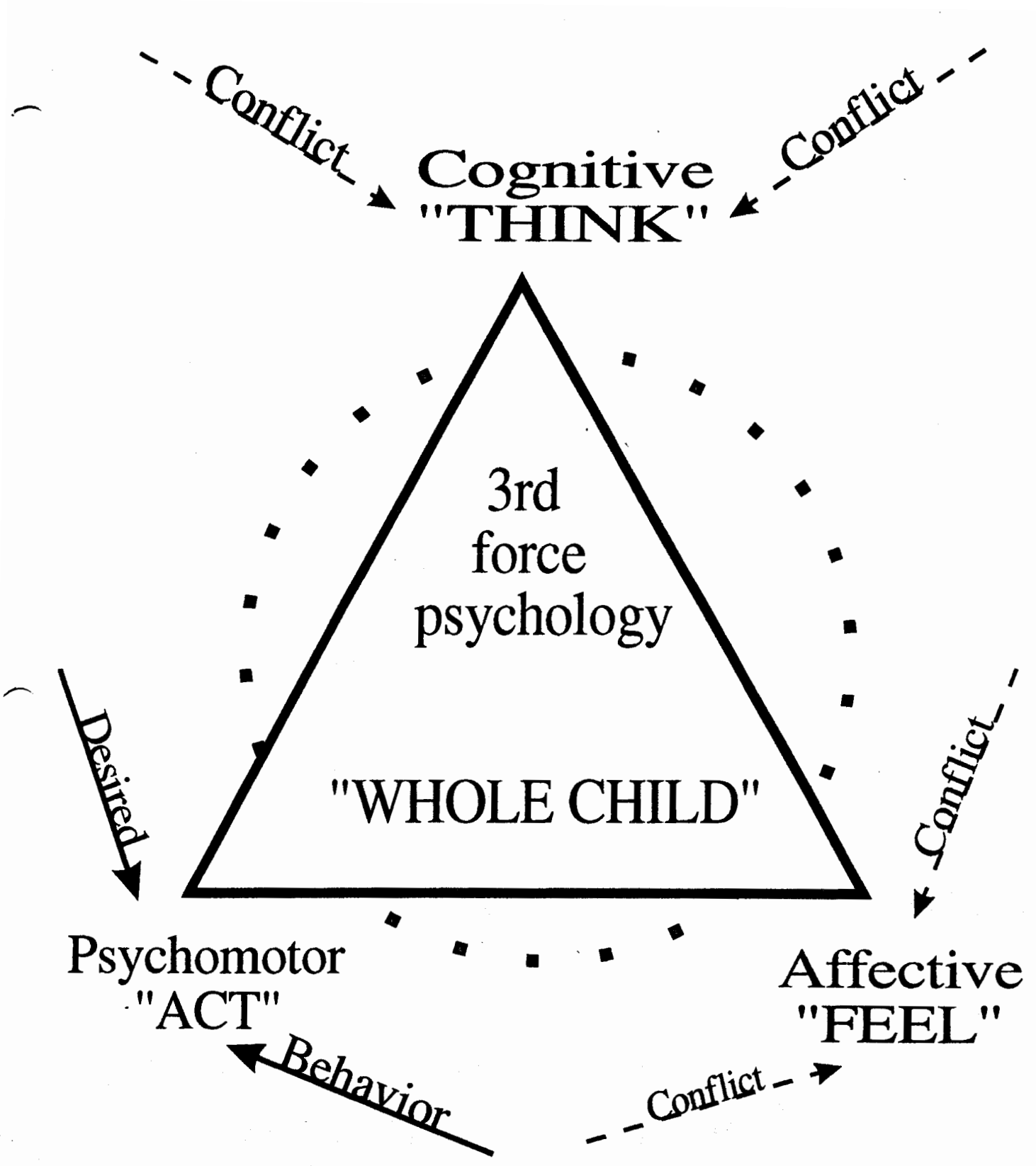
Evaluation

OBE = The outcome of that process

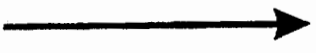
Fact: The process must be controlled to be able to control the outcome or "HOW" to think.

Fact: Outcome based education is the pre-determined outcome of that process.

Fact: The affective domain must be modified in order to teach that process.



Conflict causes change



Create conflict to create desired outcome or behavior

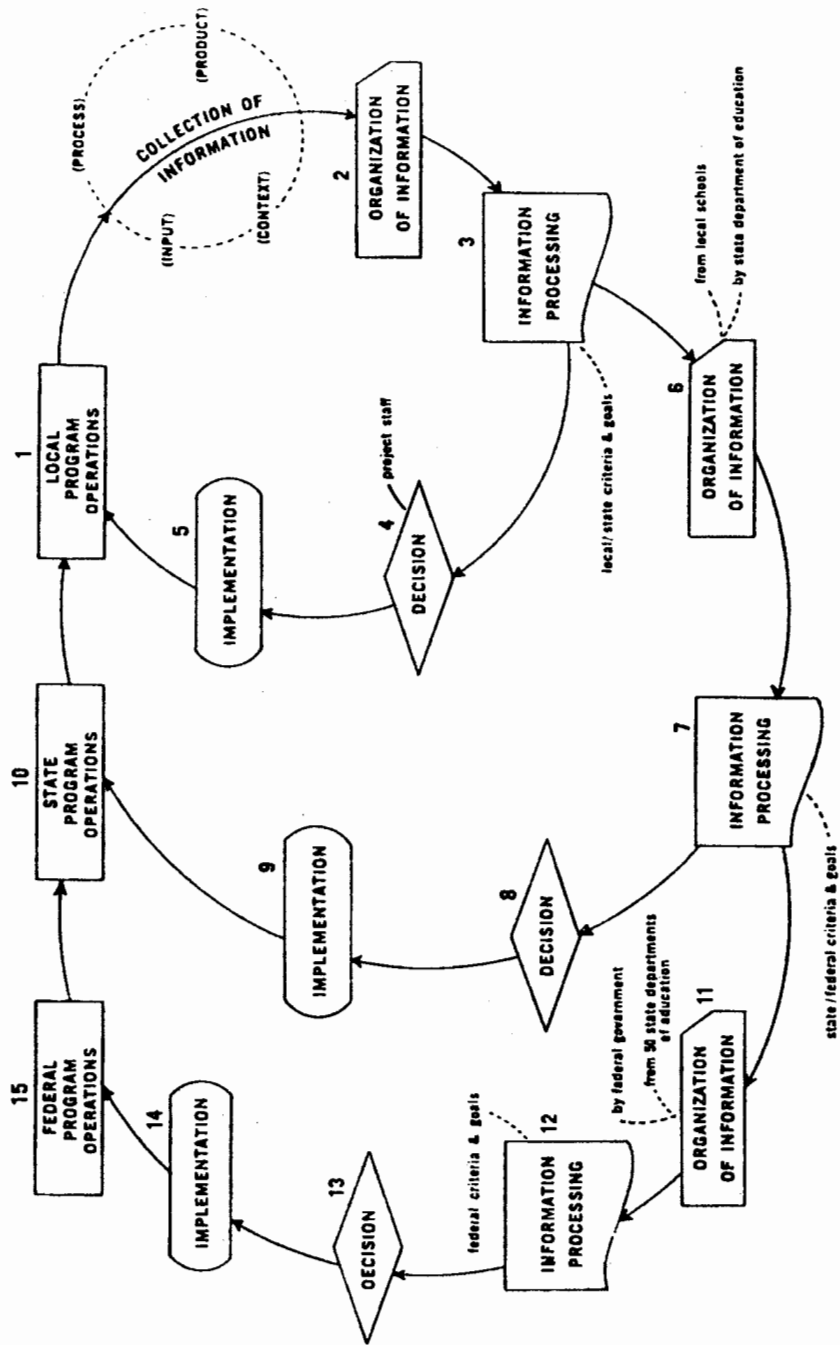


FIGURE 1. Feedback Control Loop: Evaluation in Federally Supported Educational Programs *

* Daniel L. Stufflebeam. "The Use and Abuse of Evaluation in Title III." *Theory Into Practice* 6 (3): 126-33; June 1967.

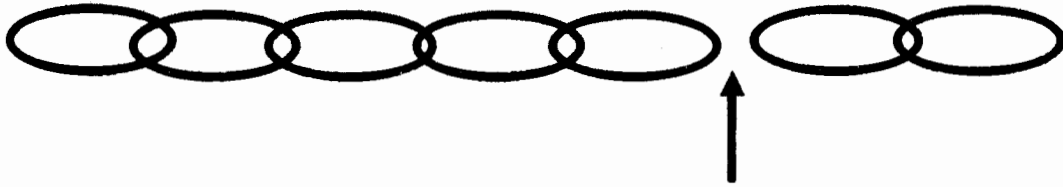
at Block 7 to determine the strengths and weaknesses of the statewide program. The state program officials would use this information to assess the statewide educational needs and problems to make decisions about program emphases and state control at Block 8. Decisions made at Block 8 would be implemented at Block 9, affecting the state program at Block 10, and reactivating the cycle at Block 1.

At Block 7, annual product evaluation reports from 50 states would be sent to the federal agency. This information would then be organized at Block 11, so that major program thrusts could be examined and analyzed on a nationwide basis at Block 12, and so that reports could be prepared for the Associate Commissioner for Elementary and Secondary Education, the Commissioner of Education, the Secretary of Health, Education, and Welfare, the President, and the Congress. Decisions about program emphases and funding would be made at the federal level at Block 13 and implementation of such decisions at Block 14 would affect the federal program at Block 15, the state program at Block 10, and the local school projects at Block 1, thus reactivating the cycle.

Summarized, Figure 1 demonstrates: (a) information for evaluation at federal, state, and local levels will be collected largely at the local level; (b) this information will form the basis for federal, state, and local decisions which will ultimately affect local operations; and (c) evaluation plans must be developed, communicated, and coordinated at federal, state, and local levels if the information schools provide is to be adequate for assisting in the decision process at each of these levels.

Obviously, to develop an appropriate evaluation system for programs such as Title I and Title III, one must first have some knowledge of the decision situations to be served. Optimally, such knowledge of decision situations should answer several questions. First, one should identify the *locus* of decision making, in terms of the level(s) at which authority and responsibility for decision making are vested, i.e., local, state, and/or national. Second, it is desirable to identify the *focus* of the decisions—are they related to goals of research, development, training, diffusion, etc.? Third, one needs knowledge of the *substance* of the decisions (are they related to mathematics, language arts, etc., and what are the alternatives in each decision situation?). Fourth, one needs to know the *function* of the decisions—are they for the planning, programming, implementing, or recycling of activities? Fifth, one needs knowl-

TESTING IS THE



"WEAK LINK"

*** KEY ISSUE: INFORMATION IS NEEDED TO MAKE DECISIONS ABOUT YOUR CHILDREN. WHAT ARE YOU WILLING "TO GIVE" THE GOVERNMENT ON YOU AND YOUR FAMILY?**

TRANSFORMATIONAL OUTCOME-BASED DESIGN & DELIVERY

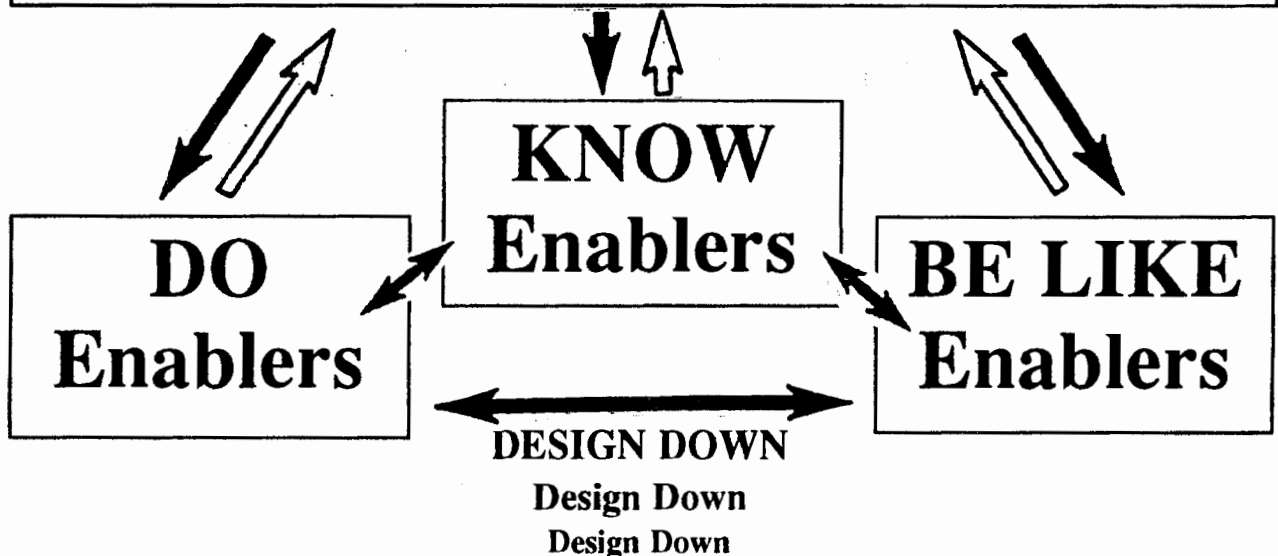
Future context conditions



**Life-Role Performance
Exit Outcomes**



Demonstration Context Factor



**The Most Important
Word
In OBE Is:**



DEMONSTRATE

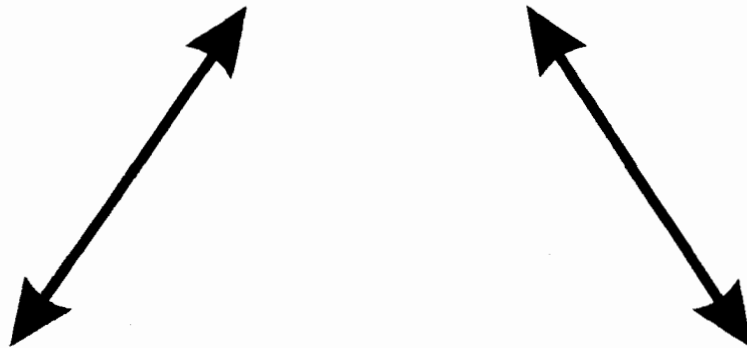
**What does my child have
"TO DO"**

**In order to graduate
under this new education
restructuring called....**

OBE

MAJOR OUTCOME DOMAINS

**(Know)
Knowledge**



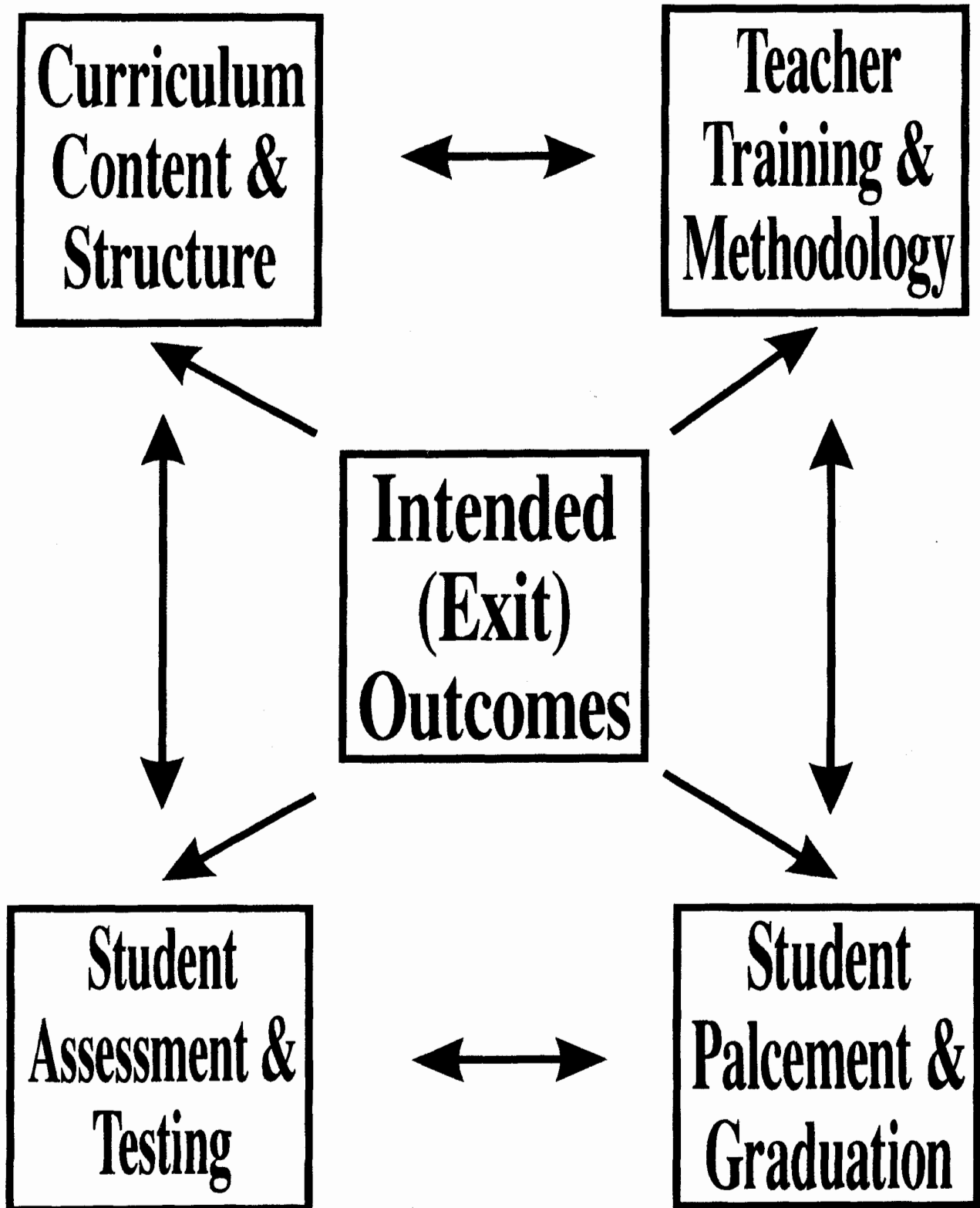
Competence (Do) ↔ Orientations (Be Like)

Four Components of "Orientations"

**Attitudinal
Affective
Motivational
Relational**

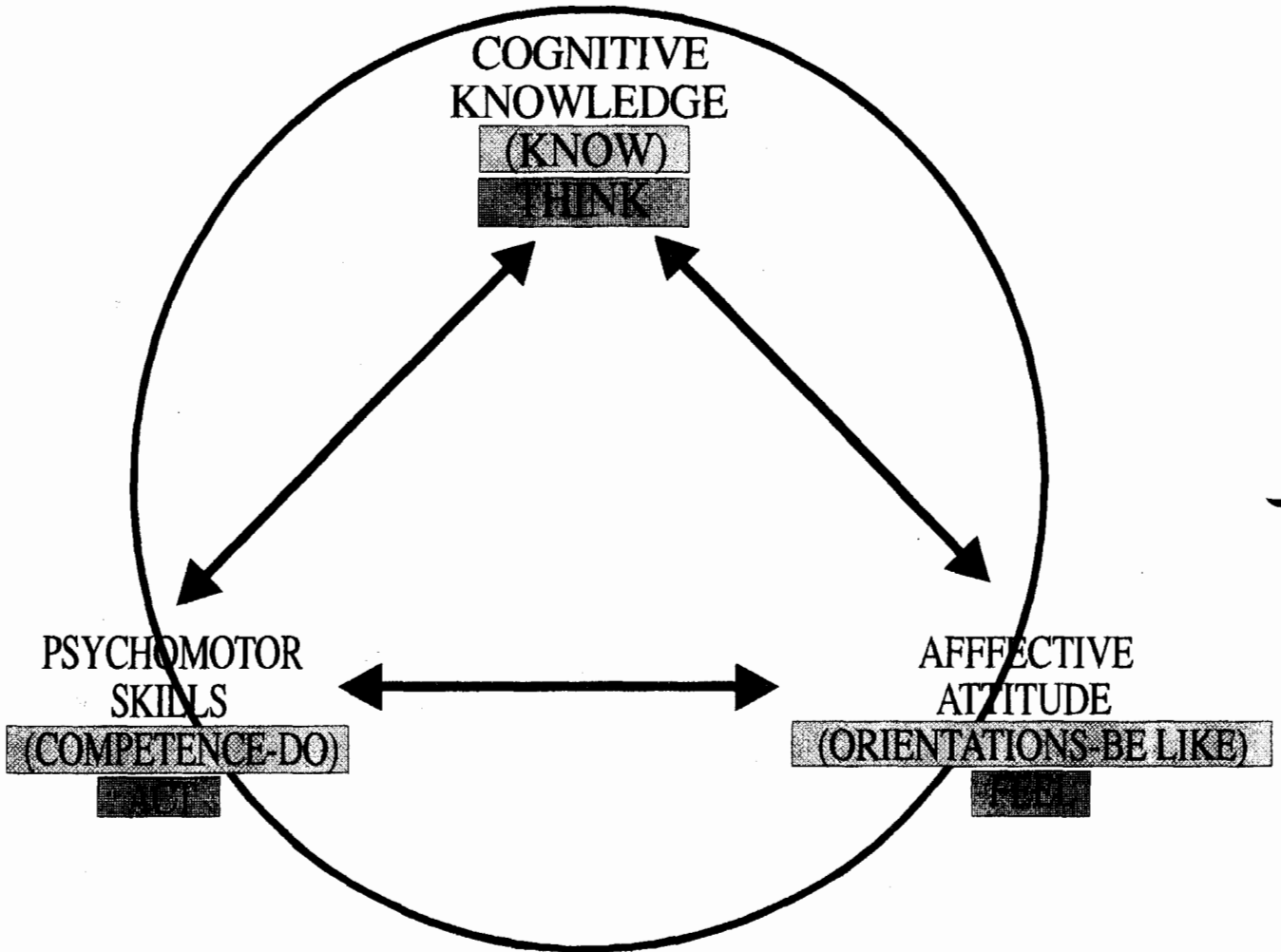
**All are critical in shaping
future success.**

The OBE Paradigm



WHOLE CHILD THEORY
BY BLOOM, KRATHWOHL, TYLER

MAJOR OUTCOME DOMAINS
by SPADY



DOCUMENT RESUME

ED 109 199

TM 004 654

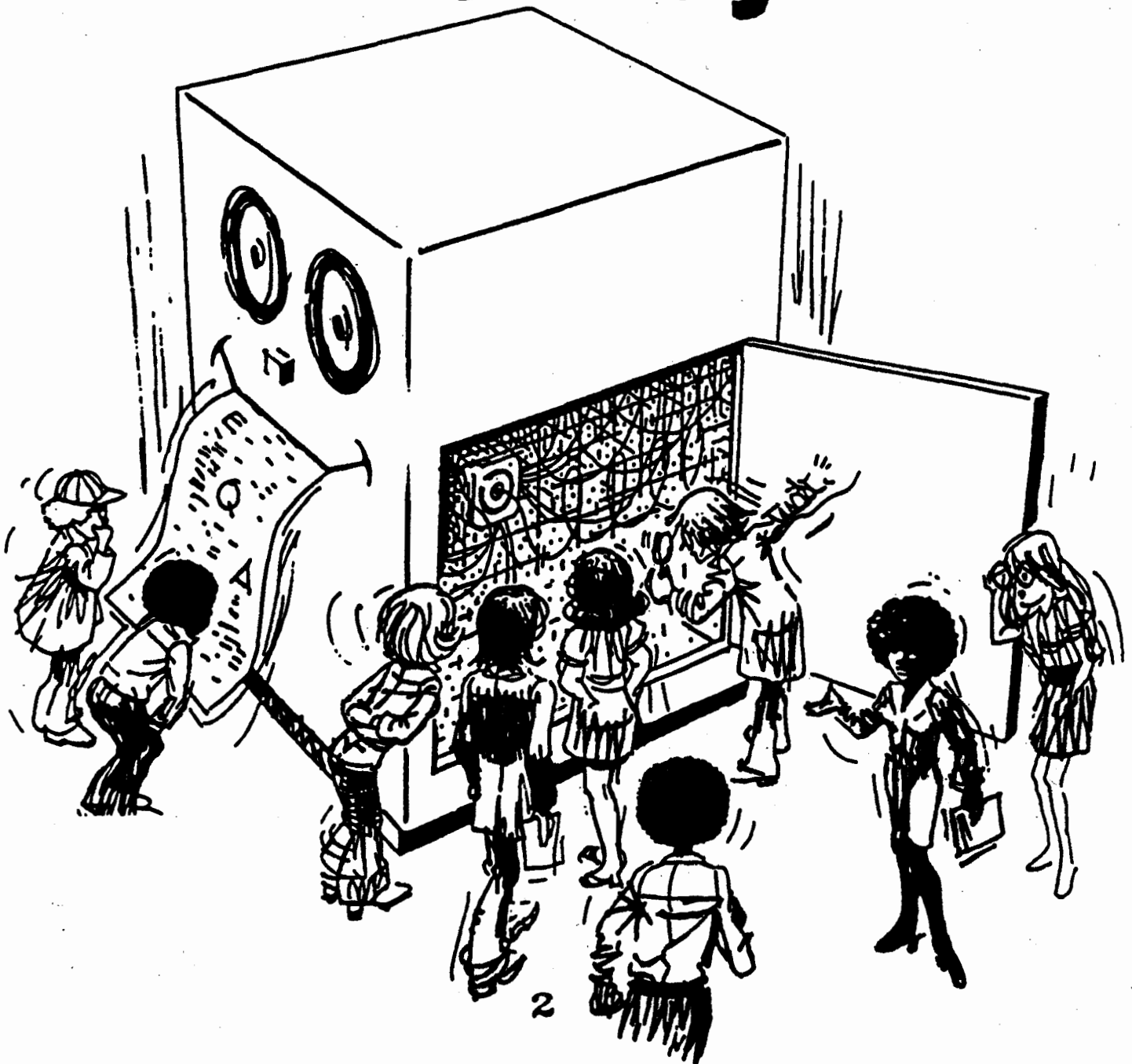
AUTHOR Russell, Nolan F.
TITLE Getting Inside the EQA Inventory: Grade 11.
INSTITUTION Pennsylvania State Dept. of Education, Harrisburg. Bureau of Planning and Evaluation.
PUB DATE 75
NOTE 70p.
EDRS PRICE MF-S0-76 HC-S3.32 PLUS POSTAGE
DESCRIPTORS Adjustment (to Environment); Basic Skills; Confidentiality; Creativity; *Educational Assessment; Educational Objectives; Ethical Values; Grade 11; Health; Measurement Techniques; Scoring; Secondary Education; Self Esteem; *State Programs; State Surveys; Student Attitudes; *Testing; Test Reliability; Tests; Test Validity
IDENTIFIERS *Educational Quality Assessment; Pennsylvania

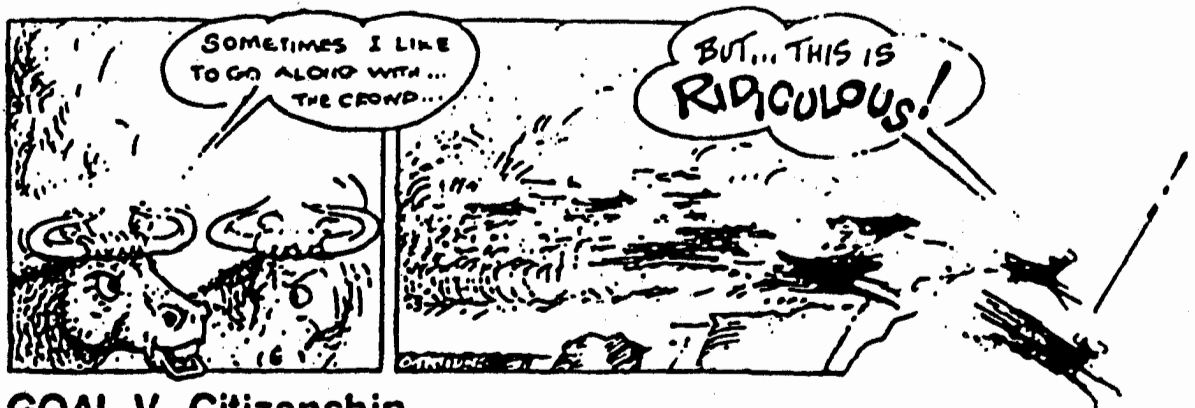
ABSTRACT

The Secondary Form of the Educational Quality Assessment (EQA) Inventory is designed for 11th grade students in Commonwealth public schools. Test scales are designed to measure some facet of state quality assessment goals. Along with basic skills, the various instruments examine: (1) social and health habits, (2) feelings toward self and others, (3) value placed on learning and human accomplishment, (4) interest in creative activities, (5) methods of coping with frustration, and (6) attitudes toward work and career planning. Extensive investigation concerning the consistency of student responses within each scale and the stability of student responses to the scales over time has been conducted. Total scales yielded high internal consistency reliability while shorter subscales were weak. Strong correspondence between ratings made by teachers and student scores was demonstrated for seven of the attitude scales. The unit of analysis of all data received from the EQA was the school. The inventory provided information on: (1) student-body standing on each composite goal test relative to a statewide reference group, (2) student-body standing relative to groups similar in home and school environments, and (3) proportion of student-body who demonstrated minimum positive attitudes. (Author/BJG)

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Getting Inside the EQA Inventory





GOAL V. Citizenship

Quality education should help every child acquire the habits and attitudes associated with responsible citizenship.

GOAL RATIONALE

Responsible citizenship embodies a much more complex concept than commonly expressed in love of country and participation in the democratic processes. Viewed in its broadest sense responsible citizenship implies a respect for law and proper authority, a willingness to assume responsibility for our own actions and for those of the groups to which we belong, respect for the rights of others and overall personal integrity.

Schools should encourage pupils to assume responsibility for their actions as well as the actions of the group. Opportunities should be provided for pupils to cooperate and work toward group goals and to demonstrate integrity in dealing with others. Pupils should be given the chance to take the initiative and assume leadership for group action as well as lend support to group efforts as followers.

MEASUREMENT RATIONALE

The mores, codes, laws and social expectations of society provide the reference points for judging which behaviors reflect *responsible* citizenship and which indicate *poor* citizenship. A review of literature revealed that the National Assessment of Educational Progress developed nine general citizenship objectives. The criterion for inclusion of any one objective was its relative importance to society as agreed upon by a committee of scholars and lay people.

These national objectives were used to provide the frame of reference for what was to be measured. Objectives in the factual domain such as (a) knowing structure of government and (b) understanding problems of international relations were not considered in developing the scale.

Arriving at a satisfactory definition of citizenship was much less complicated than applying the definition to the assessment of students' attitudes and behaviors. The display of responsible citizenship behaviors like *honesty* or *integrity* are most often situational.

A person's display of good citizenship behavior under one set of motivating conditions tells us little about the way he or she can be expected to act if those conditions are altered. The context in which the behavior is elicited therefore becomes at least as important in determining the outcome as the predisposition of the individual involved.

To assess citizenship, a behavior-referenced model incorporating elements related to the psychological notion of threshold is used. In reference to citizenship, threshold refers to that set of conditions necessary to bring about the desirable responses. Thus by varying the situation and introducing conditions of reward and punishment we are able to determine the cutoff levels at which the student will display positive behavior. In this way it is possible to assess not only the students' predisposition to behave in a manner consistent with responsible citizenship but also to provide some measure of the intensity of that predisposition across a wide spectrum of situations.

GENERAL SCALE DESCRIPTION*

Fifty-seven items measure willingness to exhibit good citizenship in many social situations under a variety of motivating conditions. Social contexts are given by 19 situations, each posing a problem and suggesting an action predefined as good or poor citizenship. Each story has three items which list positive or negative consequences resulting from the action. Student are asked to decide whether to take the action for each consequence.

Sample situation (grade 11):

There is a secret club at school called the Midnight Artists. They go out late at night and paint funny sayings and pictures on buildings. A student is asked to join the club. In this situation, I would JOIN THE CLUB when I knew....

Sample item set:

	Yes	Maybe	No
1. My best friend asked me to join.	Y	M	N
2. Most of the popular students were in the club.	Y	M	N
3. My parents would ground me if they found out I joined.	Y	M	N

ACCORDING
to GROUP
GOAL-

SCORING →
ATTITUDES →

The items within the scale are grouped to yield three subscale scores in addition to a total score.

Subscale 1: *Concern for the welfare and dignity of others* contains 18 items (item sets from five situations) designed to measure concern for the feelings of others, willingness to protest unjust treatment of others, and the tendency to accept new people into a group. Also measured is the degree of restraint from teasing or degrading others.

Subscale 2: *Respect for law and authority* has 21 items measuring the willingness to report law-breaking of others, obey authorities during emergencies and prevent classroom disruptions. Also assessed is the degree of restraint from violent actions that could harm others or damage property.

Subscale 3: *Personal responsibility and integrity* has 18 items which tap the willingness to honor self-made commitments to individuals or groups and the willingness to take responsibility for one's own mistakes and to report mistakes made in one's favor.

*Nolan F. Russell from the Division of Educational Quality Assessment is the author of the citizenship scale.

NORM-REFERENCED SCORING

The following item weighting scheme is used for norm-referenced scoring:

Behavior Direction	Response Options		
	Yes	Maybe	No
Positive Citizenship	2	1	0
Negative Citizenship	0	1	2

CRITERION-REFERENCED SCORING

Responses are considered *favorable* when they reflect a willingness to display proper citizenship behaviors or an unwillingness to use poor citizenship behaviors. A student's score on a given scale (total or subscale) is the percentage of items to which a favorable response was given. For the citizenship scale the scoring scheme applied to the items is:

Behavior Direction		Response Options		
		Yes	Maybe	No
Positive Citizenship	SCORED	1	0	0
Negative Citizenship	ATTITUDE	0	0	1

ACCORDING
TO NAEP GOALS

No ———
 Maybe ———
 Yes ———

C. A girl wants to go to the junior prom with a certain boy. Another boy calls a week before the prom and asks her to go. She accepts. Later the boy whom she really wanted to go with asks her to go. If I were this girl, I would **BREAK MY DATE WITH THE FIRST BOY** when I thought . . .

- 7. The first boy probably could get another date. Y M N
- 8. I really liked the second boy. Y M N
- 9. My friends thought I should go with the second boy. Y M N

D. There is a secret club at school called the Midnight Artists. They go out late at night and paint funny sayings and pictures on buildings. A student is asked to join the club. In this situation I would **JOIN THE CLUB** when I knew . . .

- 10. My best friend had asked me to join. Y M N
- 11. Most of the popular students in school were in the club. Y M N
- 12. My parents would "ground" me if they found out I joined. Y M N

E. A student is in a classroom during free time. He sees another student placing a large thumbtack on another student's desk. In this situation I would **REMOVE THE TACK** when I knew . . .

- 13. The joke was being played on a person I didn't like. Y M N
- 14. My friends wanted me to go along with the joke. Y M N
- 15. Only the person's pride would be hurt. Y M N

F. A girl has a term paper due in several days. The book she needs most is not permitted to leave the library. If I were this girl I would **SNEAK THE BOOK OUT OF THE LIBRARY** when I knew . . .

- 16. I would be late with my paper if I couldn't get the book. Y M N
- 17. I could return it without anyone knowing. Y M N
- 18. I didn't have time enough to complete my work in the library. Y M N

G. A student just got his driver's license. While backing out of a parking lot, he accidentally hits a parked car. The student's car is not damaged but the other car is. If I were this student, I would **LEAVE MY NAME AND NUMBER FOR THE OWNER OF THE CAR** when I knew . . .

- 19. The police would give me a ticket for reckless driving if they found out. Y M N
- 20. I didn't have insurance. Y M N
- 21. My parents wouldn't let me drive if they found out. Y M N

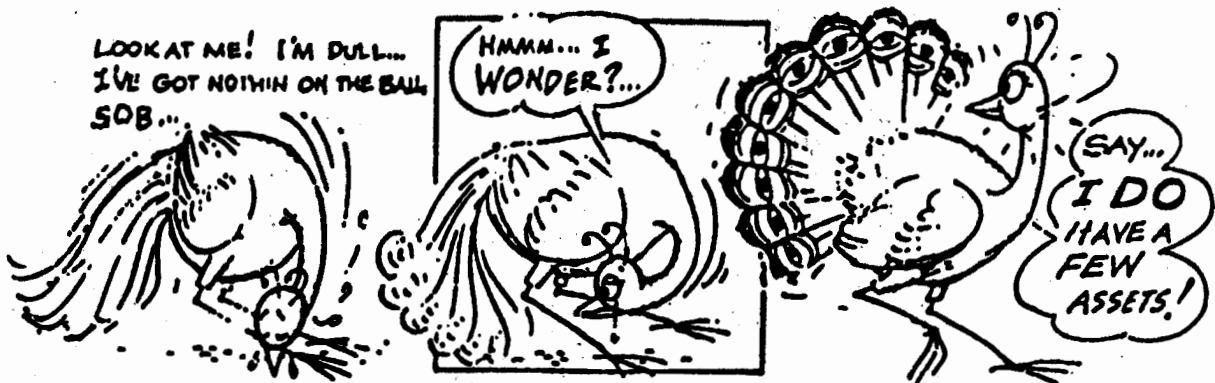
H. A student is in a school club. She is assigned by the club president to work on the field trip committee, even though she asked not to be put in that kind of group. If I were this student, I would **WORK ON THE COMMITTEE** when I knew . . .

- 22. In the future I would be placed in a better group. Y M N
- 23. People didn't care if I worked in the group or not. Y M N
- 24. I didn't like the club president. Y M N

I. The principal invites an unpopular political speaker to the school. The speaker has ideas that most students strongly disagree with. A group of students decide to shout the speaker down. In this situation I would **HELP SHOUT THE SPEAKER DOWN** when I knew . . .

- 25. I didn't agree with the speaker's ideas. Y M N
- 26. The speaker said he didn't respect student ideas. Y M N
- 27. The principal had refused to let the speaker we liked talk to us. Y M N

CONTINUE ON PAGE 20



GOAL I Self-Esteem

Quality education should help every child acquire the greatest possible understanding of himself or herself and appreciation of his or her worthiness as a member of society.

GOAL RATIONALE

It is widely held that self-understanding is significantly associated with personal satisfaction and effective functioning. How students view their adequacies and inadequacies, their values and desires, can strongly influence their performance in school.

No matter what the level and pattern of students' talents, the school experience should strengthen, not damage, their self-esteem. School should operate so that children of all talent levels can appreciate their worth as persons in a society that claims to be equally concerned for all its members.

MEASUREMENT RATIONALE

Self-esteem is a personal judgment of worthiness. It is a subjective experience which the individual conveys to others verbally or by other behavior. Most theories acknowledge that our self-image and feelings of worthiness are determined largely by how well we can live up to our own aspirations and meet expectations of others.

Aspirations become closely associated with personal goal-setting behavior originating in our internalized system of values. Expectations are external in nature and are related to goals set collectively by society or by significant individuals in our lives. Assessment in this area is based on four components believed to be related to the development of positive self-esteem.

The first has to do with locus of control — whether one views personal success as dependent upon one's own efforts or external influences. Externally controlled individuals will tend to be more dependent on others and more willing to ride with the tide, accepting docilely things which happen to them. Internal individuals will more actively attempt to control self-destiny.

The second related concept is self-confidence — the feeling of self-worth and the belief that one is capable of handling things successfully. Those who lack self-confidence are often characterized as being timid, cautious, submissive individuals who feel inadequate, fearful, inferior and expect to be unsuccessful in dealing with new situations.

The third component is image in school settings. Those having favorable self-images are likely to experience subjective success with schoolwork, feel that they are favorably viewed and understood by teachers and enjoy class participation.

The final dimension considers how students feel about the quality of their relationships with others. Individuals who have difficulty in interpersonal relations will tend to believe that others have little confidence in or low regard for them.

GENERAL SCALE DESCRIPTION*

The self-esteem scale is comprised of 40 short, self-description statements. Twenty-one are positively worded—describing the student in a favorable light and 19 are negatively worded—characterizing the student in a negative vein.

Sample positively worded item: *I'm easy to get along with.*

Sample negatively worded item: *Things are all mixed up in my life.*

Response options available to the students are (1) very true of me, (2) mostly true of me, (3) mostly untrue of me and (4) very untrue of me.

The items within the scale are grouped to yield four subscale scores in addition to a total scale score.

Subscale 1: *Self-confidence* contains 10 items measuring feelings of success, self-determination, attractiveness and self-worth. Sample item: *I'm pretty sure of myself.*

Subscale 2: *Feelings of control over environment* contains 10 items tapping belief that success in school and work depend on effort, not luck. Sample item: *My getting good grades in school depends more on how the teacher feels about me than on how well I can do my work.*

Subscale 3: *Relationships with others* contains 10 items assessing the student's perceived ease in making and keeping friends and the student's feelings of acceptance by others. Sample item: *I often feel picked on by other kids.*

Subscale 4: *Self-image in school* comprises 10 items designed to measure feelings of success in school work, class recitation and teacher relationships. Sample item: *In class, I often feel 'put down' by teachers.*

NORM-REFERENCED SCORING

For norm-referenced scoring the item weighting scheme used is:

Item Direction	Response Choices			
	Very True of Me	Mostly True of Me	Mostly Untrue of Me	Very Untrue of Me
Positive	3	2	1	0
Negative	0	1	2	3

*The self-esteem scale is a result of extensive revision of the Goal I instrument which was used for grades 5 and 11. Richard L. Kohr and Nolan F. Russell from the Division of Educational Quality Assessment were responsible for the revisions.

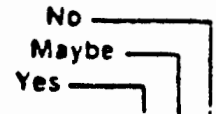
CRITERION-REFERENCED SCORING

Responses are considered *favorable* if they reflect a positive self-image. An individual's score on a given scale (total or subscale) is the percentage of items to which a favorable response was given. For the self-esteem instrument the scoring scheme applied to the items is:

Item Direction	Response Choices			
	Very True of Me	Mostly True of Me	Mostly Untrue of Me	Very Untrue of Me
Positive	1	1	0	0
Negative	0	0	1	1

SCORED ATTITUDES

R. A student comes to school early and finds a new notice on the bulletin board telling about a part-time job. If I were this student, I would REMOVE THE POSTER BEFORE ANYONE ELSE COULD SEE IT when I knew . . .



- 52. I really wanted the job.
- 53. I would not be caught.
- 54. It would increase my chances of getting the job.

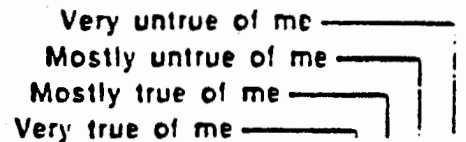
S. One person always does more than is required on school assignments and homework. This makes the other students look bad by comparison. A group of students decides to get everyone to ignore this person. I would GO ALONG WITH THE GROUP AND NOT SPEAK TO THIS PERSON when I knew . . .

- 55. My friends asked me to go along with the idea.
- 56. It would make the person do what we wanted him (or her) to do.
- 57. I did not like the person.

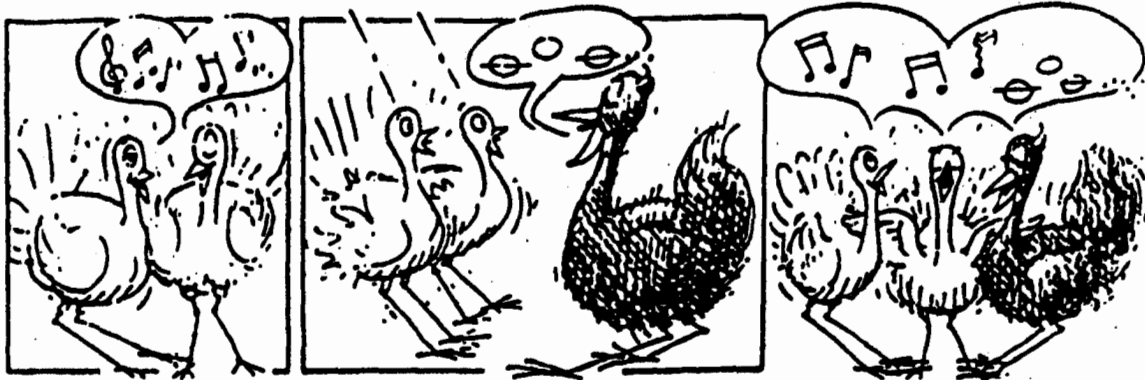
STOP

SECTION I *"Self-Esteem"*

DIRECTIONS: Following is a series of statements. On your answer sheet blacken the circle which best describes your feeling about the statement. Blacken only one circle for each statement.



- 1. I'm pretty sure of myself.
- 2. I'm easy to get along with.
- 3. It is hard for me to talk in front of the class.
- 4. When I make a plan to do something, something usually goes wrong.
- 5. I'm proud of my schoolwork.
- * 6. I feel that I'm popular with kids my own age.
- 7. I'm made to feel "not good enough" by my teachers.
- 8. I have a lot of fun with my parents.
- 9. I get uneasy when I'm called on in class.
- 10. I often wish I were someone else.
- x 11. When things go wrong for me, it is usually someone else's fault.
- 12. Someone often has to tell me what to do.
- 13. I find it hard to get along with others.
- 14. I have the feeling that luck will decide whether I get a good job in the future.
- 15. I often feel "picked on" by other kids.
- 16. I get upset easily at home.
- 17. I do not make friends as easily as most other people.
- 18. My being successful depends on working hard rather than getting the right breaks.
- 19. I feel that my parents like to know how I think about things.
- 20. I don't know whether I like a new outfit of clothes until I find out what my friends think.
- 21. It's pretty tough to be me.
- 22. I enjoy being called on in class.
- 23. My being chosen to take part in an activity depends more on my ability than on luck.



GOAL II Tolerance Toward Others

Quality education should help every child acquire understanding and appreciation of persons belonging to other social, cultural and ethnic groups.

GOAL RATIONALE

Students fulfilling the requirements of Goal II will more likely enjoy easy interaction with *all* people—speaking to and selecting as friends students of different origins and beliefs. They will be more willing to actively seek information or participation in activities which will increase their knowledge about different cultures and social settings.

The school experiences should help students learn to respect and interact easily with children who differ from them in various aspects (e.g., skin color, cultural traditions, economic status, religious beliefs, physical abilities, manner of speech and degree of intellectual competence).

MEASUREMENT RATIONALE

The processes and determinants of interpersonal interaction are complex, involving a myriad of perceptual, feeling and behavior responses.

The notion of tolerance toward others has meant different things to various theorists. Some define tolerance in terms of the *social distance* individuals keep between themselves and differing others. Others use tolerance to describe the tendency of individuals to prejudge or act toward differing others solely on the basis of the differing others' group membership.

The assessment of this goal area is based on still another component of tolerance. This component is the degree of comfort felt by individuals when in contact with differing others.

GENERAL SCALE DESCRIPTION*

Items describe situations where differing others interact with the individual. Differences are in terms of racial, religious and social background or physical and mental attributes. Twenty-nine items suggest an approach toward the student, e.g., *A cripple wants you to become a close friend.* Six items suggest an avoidance of the student, e.g., *A girl with a bad limp avoids you because she thinks you might make fun of her.* Response choices are I would feel (1) very comfortable, (2) comfortable, (3) slightly uncomfortable and (4) very uncomfortable.

*The tolerance-toward-others instrument was developed by Nolan F. Russell and Eugene W. Skiffington, Division of Educational Quality Assessment.

The items within the scale are grouped to yield five subscale scores in addition to a total scale score. Assignment to subscales is based upon the characteristic of the hypothetical target person that makes that person different from the respondent. The five subscales are race, religion, socioeconomic status, intelligence and handicap. All subscales contain seven items.

NORM-REFERENCED SCORING

For norm-referenced scoring, the item weighting scheme is:

Item Direction	Response Options			
	Very Comfortable	Comfortable	Slightly Uncomfortable	Very Uncomfortable
Positive	3	2	1	0
Negative	0	1	2	3

CRITERION-REFERENCED SCORING

Responses are considered *favorable* if they reflect comfort when interacting with differing others or discomfort when being shunned by differing others. An individual's score on a given scale (total or subscale) is the percentage of items to which a favorable response was given. For the tolerance toward others instrument the scoring scheme for items is:

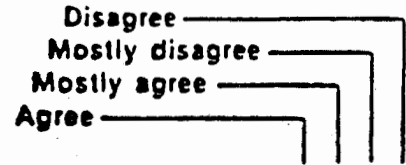
Item Direction	Response Options			
	Very Comfortable	Comfortable	Slightly Uncomfortable	Very Uncomfortable
Positive	1	1	0	0
Negative	0	0	1	1

I would feel very uncomfortable
 I would feel slightly uncomfortable
 I would feel comfortable
 I would feel very comfortable

- 6. The slowest student in class whom you don't know very well wants to study with you for a big test. () () () ()
- 7. You must share a locker with someone who wears leg braces. () () () ()
- 8. Someone whose skin color is different from yours wants to be your close friend..... () () () ()
- 9. A person of a much different religion from yours wants to tell you about his or her beliefs. () () () ()
- 10. Someone poorer than you asks you for help on some homework. () () () ()
- 11. A student who is much smarter than you wants to become your close friend..... () () () ()
- 12. At school you are given the job of guiding a group of blind visitors into the auditorium. () () () ()
- 13. You must share a gym locker with a person of a different race. () () () ()
- 14. Your sister wants to marry a person whose religion is much different from yours and your family. () () () ()
- 15. The school board decides to bus some students of a different race into your school. () () () ()
- 16. A person who is much poorer than you wants you to meet the kids in his or her neighborhood. () () () ()
- 17. A group of retarded students asks you to go on a picnic with them. () () () ()
- 18. A student much richer than you thinks you resent him. () () () ()
- 19. A crippled boy thinks you might make fun of him. () () () ()
- 20. You are invited to dinner in a home where the family's skin color is different from yours. () () () ()
- 21. It is decided that retarded students should be put into your regular classes in school. () () () ()
- 22. A group of people of a much different religion from yours come to your house to talk about their beliefs. () () () ()
- 23. A girl much smarter than you thinks you might dislike her. () () () ()
- 24. Your sister is dating someone whose skin color is different from hers. () () () ()
- 25. Most of your classmates have ideas about God which are very different from your own. () () () ()
- 26. The richest student in the school invites you to see his or her birthday presents. () () () ()
- 27. A girl with a bad limp avoids you because she thinks you might make fun of her. () () () ()
- 28. You are asked to sit at a table with retarded students in the lunchroom. () () () ()
- 29. You go to a movie where most of the audience is of a different race. () () () ()
- 30. A physically handicapped person whom you have just met asks you to come over for dinner. () () () ()
- 31. You discover your best friend has ideas about God which are very different from your own. () () () ()
- 32. Many people much poorer than you move into your neighborhood. () () () ()
- 33. Some students who are much smarter than you get up and leave the library because you sat next to them. () () () ()
- 34. A person of a religion much different from yours gives you some literature about his or her church. () () () ()
- 35. A student who has a problem with stuttering asks for your help when practicing for a speech. () () () ()

STOP

DIRECTIONS: The following statements are about the kind of job or work that you think you will probably be doing when you finish all of your schooling. On your answer sheet darken the answer that best tells how you feel about that statement. Do NOT write in this booklet.



1. The prospect of working most of my adult life depresses me. (A) (B) (C) (D)
2. I am uncertain about which occupation to choose. (A) (B) (C) (D)
3. The only good part of a job is the paycheck. (A) (B) (C) (D)
4. I would not give my best efforts to a job if others at the job refused to do their best. ... (A) (B) (C) (D)

5. I'm not going to worry about choosing an occupation until I'm out of school..... (A) (B) (C) (D)
6. To me, the most important thing about work is the good feeling I get from it..... (A) (B) (C) (D)
7. Doing a job well, day in and day out, is important to me. (A) (B) (C) (D)
8. I often wonder why I should try to decide upon a job when the future is so uncertain. ... (A) (B) (C) (D)

9. Making a definite career choice scares me..... (A) (B) (C) (D)
10. I feel that working will give me a high sense of accomplishment. (A) (B) (C) (D)
11. I really can't find an occupation that has much appeal to me. (A) (B) (C) (D)
12. I know a great deal about the educational requirements of jobs. (A) (B) (C) (D)

13. If the money were not really needed, nobody would work. (A) (B) (C) (D)
14. My planning a career is a waste of time. (A) (B) (C) (D)
15. It doesn't matter which job I choose as long as it pays well. (A) (B) (C) (D)
16. If I could live comfortably on welfare, I would not work. (A) (B) (C) (D)

17. I probably will get into an occupation mostly by chance. (A) (B) (C) (D)
18. If I won a state lottery (\$10,000 a year for life), I would not work at a job. (A) (B) (C) (D)
19. I have not given much thought to a career choice. (A) (B) (C) (D)
20. I believe in working only as hard as I have to. (A) (B) (C) (D)

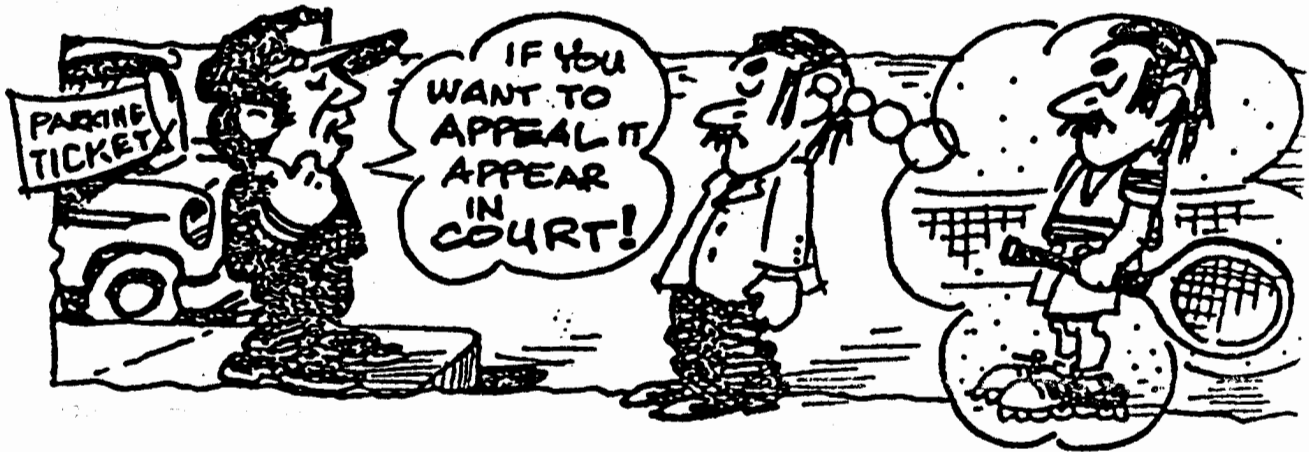
21. I keep changing my occupational choice. (A) (B) (C) (D)
22. I would not want to hold the same job for more than five or ten years. (A) (B) (C) (D)
23. I often don't finish work I start. (A) (B) (C) (D)
24. I doubt that I could keep interested in the same job over several years. (A) (B) (C) (D)

25. There is no need to plan for a career because something will come along sooner or later. (A) (B) (C) (D)
26. I'm known as a good worker, no matter what the job is. (A) (B) (C) (D)
27. I really don't know how to tie together my interests and abilities as they relate to a future job choice. (A) (B) (C) (D)
28. "How much I earn" is my major consideration when I look at possible occupations. ... (A) (B) (C) (D)

STOP

EQA

Resources for Improvement



CITIZENSHIP*

Includes EQA areas Societal Responsibilities
and Knowledge of Law/Government

Compiled by

Leann R. Miller, Basic Education Associate

Edited by

Richard F. Seiverling, Basic Education Associate



PENNSYLVANIA DEPARTMENT OF EDUCATION

Bureau of School Improvement

Division of Educational Quality Assessment

Harrisburg, PA 17108

Revised 1981

PART 2

Validated Projects

The projects listed here have been judged effective through state or national validation efforts and, in addition, appear to have a relationship to improvement in this goal area. They have proven successful in doing what they said they would do for their target population, whether students, teachers, administrators, aides or parents, and they have also produced credible evidence of their cost effectiveness and exportability. A school district can approach these projects with the confidence that the data reported by each project have been reviewed and verified by the Pennsylvania Diffusion Panel (PDP) and/or the Joint Dissemination Review Panel (JDRP) of the USDE and NIE.

The listing is subject to change, especially in regard to availability of individual projects for visitation, consultation or eventual training for adoption. They are part of a state and/or a national diffusion network and may be limited in the number of districts they can assist.

The listing consists only of those projects which have components which may impact on the goal. Therefore, this is not a complete list of validated programs; for example, special education, migrant, bilingual and preschool projects are not cited, and all grade levels may not be covered.

Contact: For information on any of the projects, contact the Diffusion Staff at RISE, 198 Allendale Road, King of Prussia, PA 19406. (215-265-6056)

VALIDATED PROJECTS

JDRP*: Institute for Political and Legal Education (IPLE) - Sewell, NJ

The program prepares high school students for fulfilling their legal and political responsibilities upon reaching age 18, including voting, eligibility for political office and entering into legal contracts. (High school students).

Curriculum for Meeting Modern Problems (The New Model Me) - Lakewood, OH

The program uses a positive, preventive approach to the study of human behavior and aggression. Students and teachers examine the causes and consequences of behavior and select viable alternatives to nonconstructive behavior. (Grades 9-12).

Pollution Control Education Center/Priority One: Environment - Union, NJ

This program develops student interest in the wise use and preservation of the biosphere and it gives them an understanding of the threat that an industrial society poses to the balance of the ecosystem. Values clarification and decision-making activities lead to high student involvement. (Grades 1-12).

Law in a Changing Society - Dallas, TX

A social studies program designed to improve the citizenship skills and attitudes of students by providing them with an operating understanding of the law, the legal process and its institutions. (Grades 5-12).

Positive Alternatives to Student Suspensions (PASS) - St. Petersburg, FL

The purpose of the PASS program is to provide intervention strategies designed to prevent or minimize nonproductive social behavior of secondary students. (Secondary students).

ECOS Training Institute (ETI) - Yorktown Heights, NY

The ECOS Training Institute offers workshops in the process of curriculum design involving environmental and career education. Participants will be actively engaged in curriculum design, stewardship and community-classroom interaction. (Grades K-12).

HOW COULD A PROGRAM
FROM
LAKEWOOD, OHIO...
"THE NEW MODEL ME"

Be Validated Under The
Pennsylvania EQA
Goals.....

.....UNLESS.....

Pennsylvania Had The
National Test Or Every
State Used
Pennsylvania Goals
Validating National
Curriculum?

AN HISTORICAL/EVALUATIVE ANALYSIS OF:

THE LANCASTER, PENNSYLVANIA
STUDENT SKILLS PROJECT

Prepared for:

PENNSYLVANIA DEPARTMENT OF EDUCATION
and
AMERICAN TELEPHONE AND TELEGRAPH COMPANY

June 30, 1975

Rice document # 02545

Submitted by:

Communication Technology Corporation
64 East Main Street
Marlton, New Jersey 08053

INTRODUCTION

The Community-Defined Expectations for school Curriculum Project originated with a research effort sponsored by the American Telephone and Telegraph Company and the Ohio Bell Telephone Company. That effort was further developed and refined during 1971 and 1972 by the Educational Systems Section of Battelle Laboratories, Columbus, Ohio, with the support of Battelle Institute and the cooperation of the Columbus Public Schools. The Project model was then made available by AT & T to all Bell System companies throughout the country for consideration and possible adaptation to meet the educational needs of local companies. The project was designed as a method whereby curriculum-relevant information could be collected from a sizeable cross section of a community in order to learn what knowledge, skills and attitudes it would be reasonable to expect in a person leaving high school. Results of the Columbus implementation of the Project are incomplete: therefore, it was decided to expedite further development of the Project model by using it in other and differing school districts. The first of these districts was Lancaster, Pennsylvania.

A series of contacts between individuals in the educational Relations Section, Public Relations and Employee Information Department of AT & T, and the Pennsylvania State Department of education led eventually to a decision to implement the Project in the School District of Lancaster because of its size and its prior involvement with the Pennsylvania statewide educational Quality Assessment (EQA) and Long Range Planning (LRP) efforts. *These broad-based efforts seemed the natural umbrella under which to place the Community-defined Expectations for School Curriculum Project in order to provide it with an even greater degree of credibility than it might otherwise have commanded at a local level.

Accordingly, school district administrative personnel were assigned the responsibility of reviewing the materials developed and provided by AT & T from the Battelle/Columbus Project to determine the feasibility and advisability of implementing a similar effort in Lancaster. They spent approximately two hundred and forty hours of time in this initial effort to arrive at an overall comprehension of the Project. Upon completion of the review, they recommended to the members of the central administrative staff the implementation of the AT & T model with appropriate modifications tailored to the specific character and needs of the School District of Lancaster. This recommendation was supported at a meeting on June 12, 1974 attended by various representatives of the School District of Lancaster, along with representatives of the Pennsylvania Department of education, the Manheim Township School District, AT & T and the Bell Telephone Company of Pennsylvania. Two days later, on **June 14, 1974**, the Planning and Development Committee of the District's Board of Directors strongly recommended the implementation of the project in Lancaster and on June 18, 1974 the Full Board of Directors gave its formal approval to the Project. Mr. Paul S. Steffy, the Coordinator of Federal Programs and Long Range Planning, and Mr. Regis P. Kirchner, the Director of Pre-School Services, were named Project Director and Assistant Director respectively, and together served as the Project management staff through most of the Project's major task implementations. They would later be assisted by Mr. John Tardibuono, who was appointed in mid December as Assistant to Mr. Steffy in the Federal Programs and Long Range Planning Offices of the School District.

The School District of Lancaster is centrally located in Lancaster County in the Piedmont Plateau physio-graphic region of Pennsylvania. The District has one senior high school, four junior high schools, and fifteen elementary schools. Included within its boundaries are seven(7) non-public schools - 6 elementary and one senior high school.

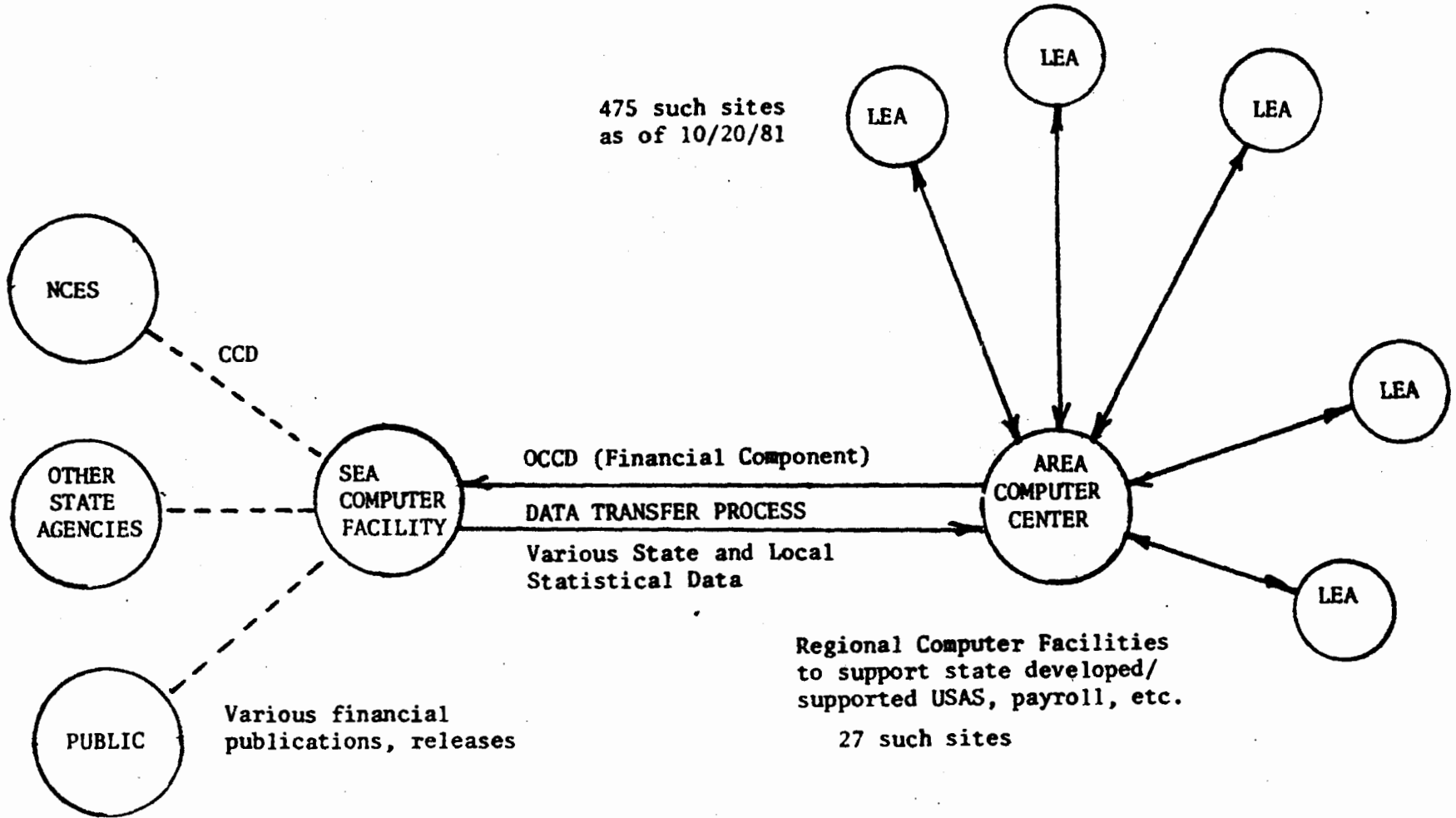
The enrollment figures for the Fall of 1974 indicate that the Lancaster District is the counties largest school district with a total population of 11,099 pupils, spanning grades K through 12. Recent demographic data however, reveal; nine percent (9%) decrease in school enrollment during the last five years.

****** These efforts involved a group of eight men in public education in the Commonwealth of Pennsylvania who joined together under the auspices of the United States Office of Education, the department of Administration, Supervision, and Curriculum of the College of education, University of Maryland and their respective educational agencies to provide a significant solution to a pressing problem in local Schools: the application of systematic planning processes for the improvement of education.

OHIO EDUCATION COMPUTER NETWORK

Daily fiscal management
such as budgeting, accounting, &
inventory by remote terminals.

475 such sites
as of 10/20/81



Legislative modeling, simulations, projections

Various financial publications, releases

Regional Computer Facilities to support state developed/supported USAS, payroll, etc.
27 such sites



STATE OF OHIO
DEPARTMENT OF EDUCATION
COLUMBUS
43215

FRANKLIN B. WALTER
SUPERINTENDENT OF
PUBLIC INSTRUCTION

November 20, 1981

HARRY WOLFORD
Director
DIVISION OF
COMPUTER SERVICES
AND
STATISTICAL REPORTS
180 East Engler Street
Columbus, Ohio 43215
Tele: 614-466-7000

Charlotte T. Iserbyt
Executive Assistant
Assistant Secretary for Educational
Research and Improvement
United States Department of Education
Washington, D. C. 20202

Dear Ms. Iserbyt:

Your letter of November 6, in reference to our Ohio Common Core of Data and the Uniform School Accounting System, has been referred to my attention. This may be a rather lengthy response to your questions. Nevertheless, there are several aspects with which you should be familiar in order to understand the OCCD/USAS concept.

To begin with, the OCCD concept finds origination in our continual desire to reduce the state/federal data burden placed upon LEA's. We have worked for some time to consolidate and streamline our state data acquisition systems and, simultaneously, structure them to interface with the federal hand book series and the federal CCD. It's our opinion that we should be able to aggregate detailed data collected for state use and satisfy federal data collection. Thus, the OCCD/CCD linkage. We feel we've made great progress toward this objective.

Obviously, one component of the OCCD is a fiscal module. This module is built around an accounting standard mandated by the Ohio General Assembly in 1972. Essentially this mandate requires program level accounting. The Uniform School Accounting System is the standard and consists of the chart of accounts, codification, definitions, etc., required to meet that mandate. The USAS was designed to meet Handbook IIR requirements and state law. It became obvious, however, that a district could not benefit fully from USAS without access to computing. With our 700 school entities in the state (many with an ADM of less than 1500) it was equally obvious that not all districts needed or could afford their own computing facility. Thus, in 1979, as the final districts were being required to adopt the new USAS standard, our Division proposed the Ohio Education Computer Network to support USAS and other computer needs for local school districts.

Using a 7.1 million dollar appropriation, we launched a program some 18 months ago to assure interactive computing to any district which desired such. In addition, we were mandated to develop computer software for use in these network sites which would provide user districts with their daily

Page 2

Charlotte T. Iserbyt

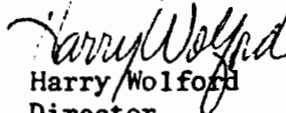
November 20, 1981

accounting and fiscal management needs. In addition, the software was required to support the USAS standard making it capable of generating state and federally compatible reporting data. To date, we have computer centers accessible via interactive terminals to any district desiring such. Schools from all 88 counties use the network. Even though they are not mandated to use the computer network to meet the USAS standard, almost 500 districts do so.

In brief, I guess our objective is and continues to be a computerized information and management capability for all schools (OECN) which, as a by product of their accounting function (USAS), produce in automated form data to satisfy compatible state and federal reporting requirements (OCCD). To support this effort for the current biennium, the state budget enacted last week appropriates \$1.5 million to our Division for the current biennium. So, we do feel we're on the right track.

Rather than send you the massive detailed USAS standard, I've enclosed a xerox copy of overheads we use in discussing the chart of accounts. I've also enclosed other items which might give you a better understanding of what I've attempted to define in this rather long response. Should you have additional questions or wish additional information, please feel free to contact me at 614-466-7003.

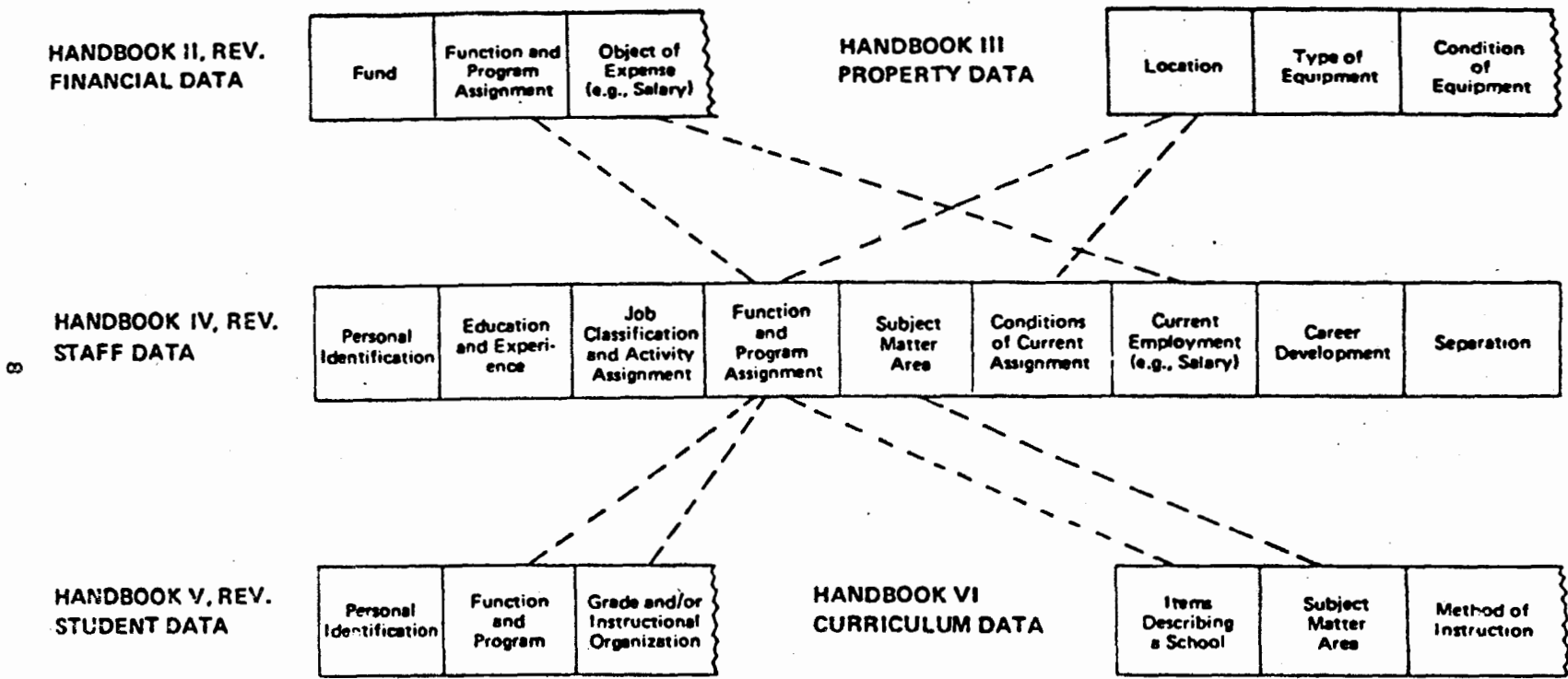
Sincerely,


Harry Wolford
Director

HW/s1

Enclosures

Figure 3.--Interrelationships among the handbooks in the series



STUDENT/PUPIL ACCOUNTING

**Standard Terminology and Guide for Managing
Students Data in Elementary and Secondary
Schools, Community/Junior Colleges,
and Adult Education**

**STATE EDUCATIONAL RECORDS AND REPORTS SERIES:
HANDBOOK V
Revised 1974**

**By
John F. Puttnam
National Center for
Education Statistics
Education Division**

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
David Mathews, Secretary**

Education Division
Virginia Y. Trotter, Assistant Secretary for Education

National Center for Education Statistics
Marie D. Eldridge, Administrator



Draft (9/11/92)

*Council of Chief State School Officers
State Education Assessment Center
Education Data System Implementation Project*

*One Massachusetts Avenue, N.W., Suite 700, Washington, D.C. 20001-1431
(202) 408-3305 Telephone / (202) 408-8072 Facsimile*

Student Data Handbook for Elementary and Secondary Education

**--WORKING DRAFT--
PUBLIC REVIEW COPY
(NOT FOR QUOTATION OR CITATION)**

Developed for:

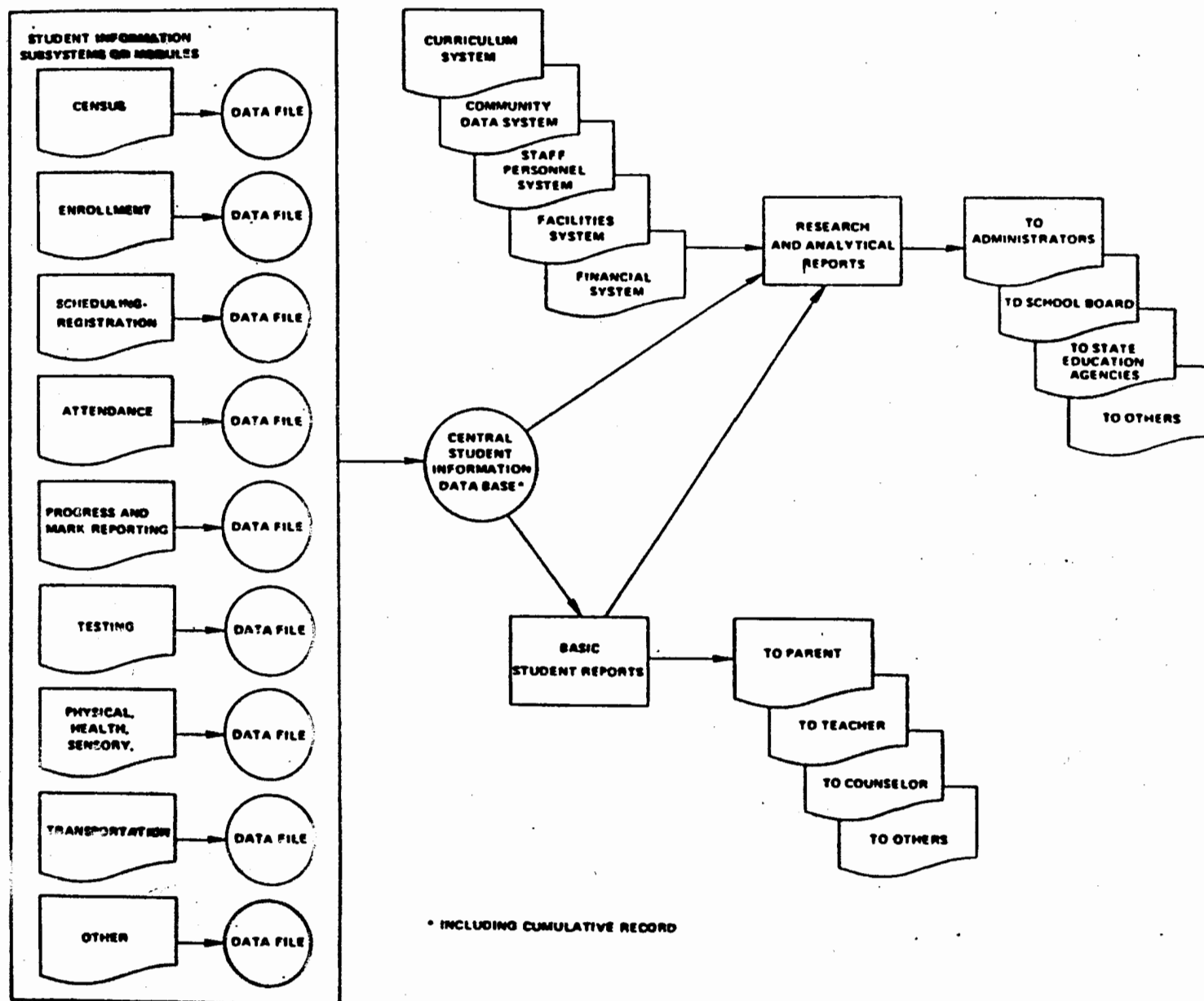
**National Center for Education Statistics
Office of Educational Research and Improvement
U.S. Department of Education**

STUDENT/PUPIL ACCOUNTING

Figure 1b.-Major Categories of Student Information
(FIRST 3 DIGITS ONLY)

1 00	PERSONAL IDENTIFICATION	5 12	Type of Entry
1 01	Name	5 13	Admission Status (Community/Jr. College)
1 02	Student Number	5 14	Former Dropout
1 03	Sex	5 15	School or Other Institution Previously Attended
1 04	Racial/Ethnic Group	5 16	Educational Level Previously Completed by Adult Education Student
1 05	Birth and Age Date	5 17	School Entered
1 06	Minor/Adult Status	5 18	Dual Enrollment
1 07	Family Responsibility	5 19	Type of School or Institution Entered
1 08	Citizenship Status	5 21	Grade Entered or Year in School
1 09	Language Considerations	5 22	Location of Instruction
1 11	Veteran Benefit Status	5 23	Type of Program Entered
2 00	FAMILY AND RESIDENCE	5 24	Type of Class (or Instructional Grouping)
2 10	Parents	5 25	Principal Medium of Instruction
2 11	Male Parent	5 26	Full-Time/Part-Time Status
2 12	Female Parent	5 27	Day/Evening Status (Community/Jr. College)
2 13	Sponsor	5 28	Special Program Modification
2 20	Responsible Adult of Domicile	5 31	Course or Class Assignment
2 30	Brothers and Sisters Living in Household	5 32	Counselor
2 40	Family Economic Information	5 33	Home Room Teacher
2 50	Family Social/Cultural Information	5 40	Membership and Attendance
2 60	Residence Data	5 41	Membership Information
3 00	PHYSICAL, HEALTH, SENSORY, AND RELATED CONDITIONS	5 42	Attendance Information
3 01	Student Medical Record Number	5 50	Withdrawal
3 10	History of Physical Development	5 51	Transfer
3 11	Height	5 52	Completion of Schooling
3 12	Weight	5 53	Discontinuance of School Work (Dropping Out)
3 13	Oral Health	5 54	Death
3 20	Sensory, Physical, and Related Conditions	5 60	Nonattendance Information
3 21	Vision	6 00	PERFORMANCE
3 22	Hearing	6 10	School Performance
3 23	Speech and Language	6 11	Program of Studies
3 24	Orthopedic Condition	6 12	Course Information
3 25	Neurological Condition	6 13	Mark or Report for Student Performance
3 26	Cardiac Condition	6 14	Credits (Units of Value)
3 27	Other Physical Condition	6 15	Mark Value
3 28	Physical and/or Health Handicap	6 16	Mark-Point Average
3 29	Physical Anomalies and Cosmetic Conditions of Potential Emotional Significance	6 17	Cocurricular Activity Information
3 30	Medical History	6 18	Progress Information
3 31	Diseases, Illnesses, and Other Temporary Conditions	6 21	Recognition for Completion
3 32	Immunizations	6 22	Honors Information
3 33	School-Related Injuries and Medical Treatments	6 23	Transcript Requests
3 34	Other Serious Injuries	6 30	Nonschool Performance
3 35	Surgery	6 31	Employment Information
3 36	Drug Abuse	6 32	Other Nonschool Performance Information
3 37	Medical Laboratory Tests and Procedures	6 33	Nonschool Activity Interests
3 40	Referrals for Physical, Health, Sensory, and Related Conditions	6 40	Postschool Performance
3 50	Physical Examinations	6 41	Postschool Interests and Plans
3 60	Physical, Health, and Sensory Impairments	6 42	Postschool Education and Training Information
3 70	Limitation on School Activities	6 43	Postschool Occupation and Employment Information
3 80	Emergency Information	6 44	Other Postschool Activities
4 00	MENTAL, PSYCHOLOGICAL, AND PROFICIENCY TEST RESULTS AND RELATED STUDENT CHARACTERISTICS	7 00	TRANSPORTATION
4 10	Mental, Psychological, and Proficiency Tests and Inventories	7 01	Transportation Status of Student
4 11	Test Identification	7 02	Distance from Home to School
4 12	Form of Test Administration	7 03	Eligibility of Student for Transportation at Public Expense
4 13	Test Scoring	7 04	Vehicle on which Transported
4 20	Referrals for School Work or for Intellectual, Social, or Emotional Reasons	7 05	Distance Transported
4 30	Specific Mental and Psychological Characteristics	7 06	Length of Time Transported
4 40	Most Effective Styles of Learning	7 07	Qualification for State Transportation Aid
5 00	ENROLLMENT	7 08	Schoolbus Number
5 10	Entrance (Admission)	7 09	Schoolbus Route Number
5 11	Date of Entry or Admission	7 11	Schoolbus Run Number
		7 12	Bus Stop Identification
		8 00	SPECIAL ASSISTANCE AND TUITION
		8 01	Students with Special Characteristics
		8 02	Federal Educational Program Eligibility
		8 03	State Educational Program Eligibility
		8 04	Other Special Educational Program Eligibility
		8 05	Welfare Eligibility
		8 06	Tuition and Fee Information

Figure A-1.—Conceptual Flow Chart of A Student Information System



EDUCATION EVALUATION AND ASSESSMENT IN THE UNITED STATES

Position Paper and Recommendations for Action

Adopted by the

Council of Chief State School Officers

at their

1984 Annual Meeting

November 13, 1984

Wilmington, Delaware

Council of Chief State School Officers

400 North Capitol Street

Suite 379

Washington, D.C. 20001

(202) 393-8161

2. Over the short-run, in cooperation with the CCSSO, revise "State Education Statistics: State Performance Outcomes, Resource Inputs, and Population Characteristics, 1972, and 1982" prepared by the U.S. Department of Education, and released in January 1984 (popularly known as the Secretary's "Wall Chart") so that it: a) focuses on nationwide indices and trends; b) represents any state performance or outcome through trends or net change for the state itself rather than by rank order of states; c) includes Scholastic Aptitude Test (SAT) or American College Entrance Examination (ACT) scores only if reported along with the state percentages of twelfth graders represented by the SAT/ACT scores; d) includes student retention rates only if adjusted by net in/out migration and if data from different states are comparable; and e) includes the number of GED's awarded in the state and the change over the years. (It is important to recognize that post hoc analyses can never adequately adjust measures to ensure comparability. If comparisons are desired, they must be carefully planned in advance so that the indicators can be defined and weighted according to the questions they are being asked to answer.)

3. Integrate education assessment and evaluation results and other pertinent information from other federal agencies such as the Department of Defense (i.e., entrance test results), Department of Labor, National Science Foundation, and Census Bureau into the Education Department assessment and evaluation program.

! *
Provide financial aid to states to stimulate new state assessment programs and strengthen existing state assessment efforts. Federal aid might also be used to relate state programs to the National Assessment of Educational Progress (NAEP) or other nationwide testing programs.

To the CCSSO and U.S. Department of Education Together

1. Continue joint federal/state/local planning efforts on assessment and evaluation. The efforts should include indicator model design and identification and use of joint opportunities for data gathering, analysis, and reporting. This includes examination of indices in other fields such as health, economics (CPI, Dow Jones Average), and welfare; and the development of indices for student achievement and for the relative challenge presented by differing groups of students (e.g., different socio-economic groupings) to meet the same achievement levels.
2. Establish a long-term commitment to develop a core set of education indicators and an accompanying analytical model which accurately portrays the educational system and effectively measures educational effectiveness. This effort will require two or three years, at least.
3. Educate the public, policy-makers, educators, and the media on the appropriate uses of data, assessment results, and education indicators, and the inferences that may legitimately be drawn from them.

FINANCIAL ACCOUNTING Classifications and Standard Terminology for Local and State School Systems

Compiled and Edited in the
OFFICE OF EDUCATION

by

Charles T. Roberts
Specialist in
Educational Records and Reports

and

Allan R. Lichtenberger
Chief,
Educational Data Standards Branch

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Caspar W. Weinberger, *Secretary*

Education Division
S.P. Marland, Jr., *Assistant Secretary for Education*

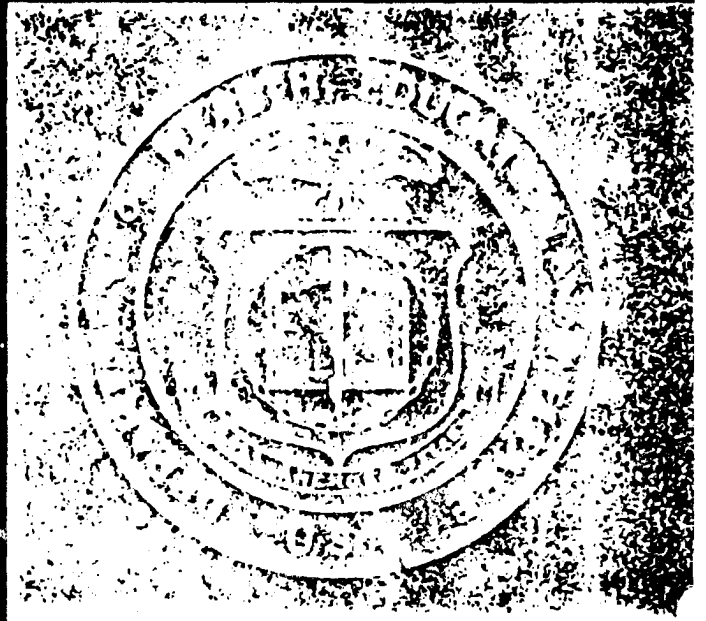
Office of Education
John R. Ottina, *Acting Commissioner*

National Center for Educational Statistics
Dorothy M. Gilford, *Assistant Commissioner for Educational Statistics*

STAFF ACCOUNTING

Classifications and Standard Terminology for Local and State School Systems 1974

State Educational Records
and Reports Series:
Handbook IV, Revised





**PENNSYLVANIA GUIDELINES
AND APPLICATION
FOR THE
DRUG-FREE SCHOOL
AND COMMUNITIES ACT OF 1986**

- 2123 APPRAISAL SERVICES
Activities, having as their purpose an assessment of student characteristics, which are used in administration, instruction, and guidance, and which assist the student in assessing his/her purpose and progress in career development and personality development.
Test records and materials used for student appraisal are usually included in each student's cumulative record.
- 2143 PSYCHOLOGICAL COUNSELING SERVICES
Activities that take place between a school psychologist or other qualified person as counselor and one or more students as counselees in which the students are helped to perceive, solve, and resolve problems of adjustment and interpersonal relationships.
- 2144 PSYCHOTHERAPY SERVICES
Activities that provide a therapeutic relationship between a qualified mental health professional and one or more students, in which the students are helped to perceive, clarify, solve, and resolve emotional problems or disorders.
- 2149 OTHER PSYCHOLOGICAL SERVICES
Other activities associated with psychological services not classified elsewhere in the 2140 series of functions.
- 2260 INSTRUCTION AND CURRICULUM DEVELOPMENT SERVICES
Activities designed to provide specialized curriculum assistance to teachers and/or LEAs in developing the curriculum, preparing and utilizing special curriculum materials, and understanding and appreciating the various techniques which stimulate and motivate students.
- 2270 INSTRUCTIONAL STAFF DEVELOPMENT SERVICES
Activities of an instructional staff development service designed to contribute to the professional or occupational growth and competence of members of the LEA instructional staff. These activities include workshops, demonstrations, and in-service courses. Included are costs for development staff members' salaries and benefits.
- 2290 OTHER INSTRUCTIONAL STAFF SERVICES
Supporting services to the instructional staff not properly classified elsewhere in the 2200 series of functions.
- 2420 MEDICAL SERVICES
Activities concerned with the physical and mental health of students, such as health appraisal, including screening for vision, communicable diseases, and hearing deficiencies; screening for psychiatric services, periodic health examinations; emergency injury and illness care; and communications with parents and medical officials.

National
Center for
Education
Statistics

A CLASSIFICATION
OF EDUCATIONAL SUBJECT MATTER

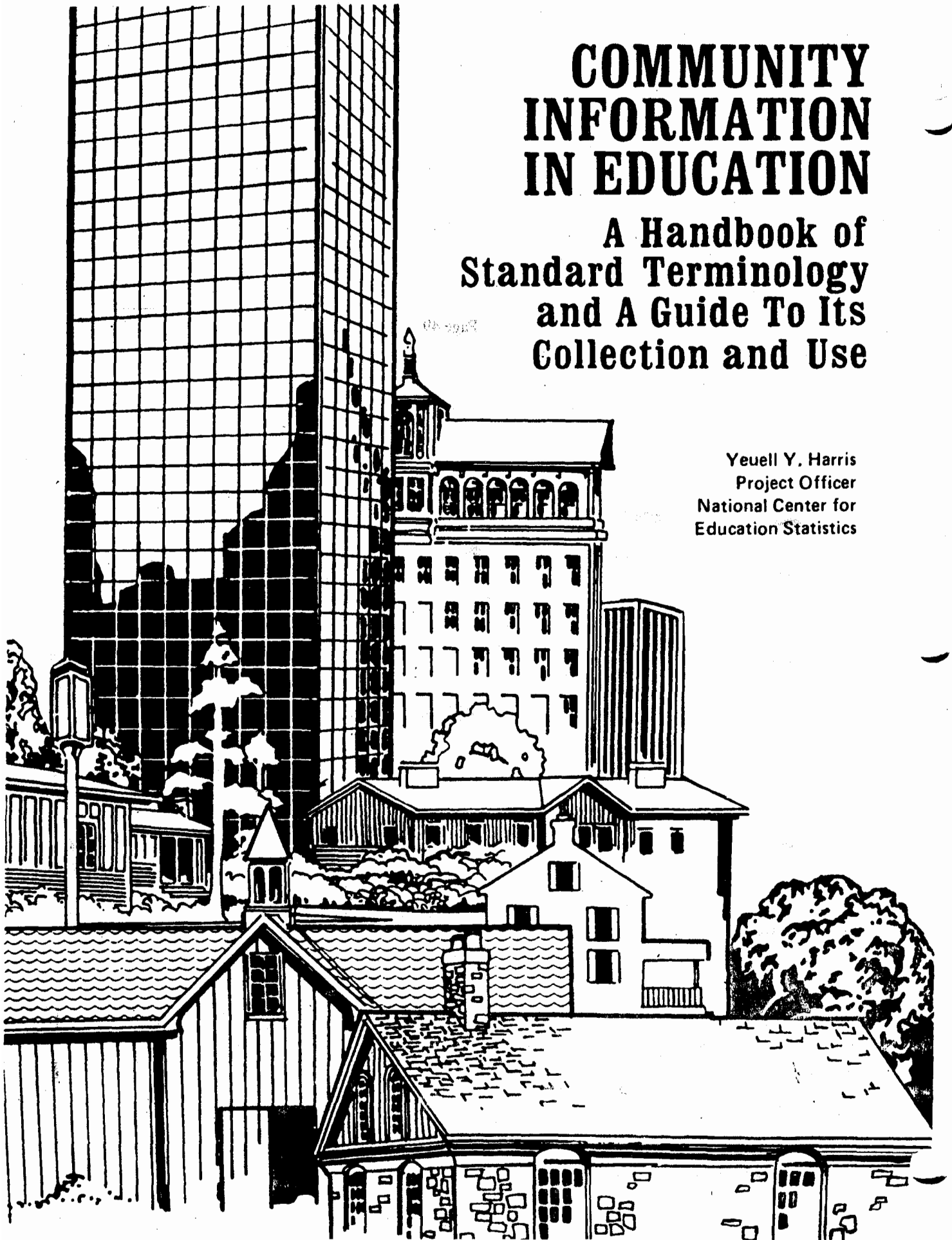


STATE EDUCATIONAL RECORDS AND REPORTS SERIES: HANDBOOK XI

COMMUNITY INFORMATION IN EDUCATION

A Handbook of
Standard Terminology
and A Guide To Its
Collection and Use

Yeuell Y. Harris
Project Officer
National Center for
Education Statistics

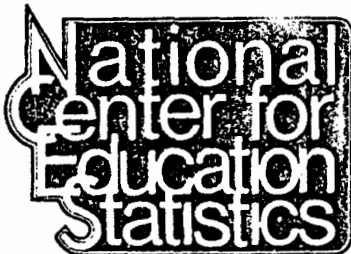


elementary and secondary education
PROPERTY ACCOUNTING

**A HANDBOOK OF STANDARD
TERMINOLOGY AND A GUIDE
FOR CLASSIFYING INFORMATION
ABOUT EDUCATION PROPERTY**

State Educational Records and Reports Series:
Handbook III, Revised

1977



recorded (e.g., paper forms, computer cards, computer tapes).

Forms and records that permit easy deletion of outdated data and easy addition of new data are preferable to forms and records that must be replaced or reorganized each time a change in data is necessary.

- Specific responsibility should be assigned for maintenance of the property files, and a fairly rigid schedule of file maintenance should be established.

The best incentive for an organization to maintain its property files adequately is when the data contained therein are essential for successful completion of the LEA's responsibilities (as described in 1 above). Proper design regarding the ease of updates (as described in 3 above) also contributes to good file maintenance. However, the key that ties these incentives together is to have specific people identified as responsible for keeping the files current and accurate. A predetermined file maintenance schedule (periodic deadlines for adding new data and deleting old data) is helpful in many situations.

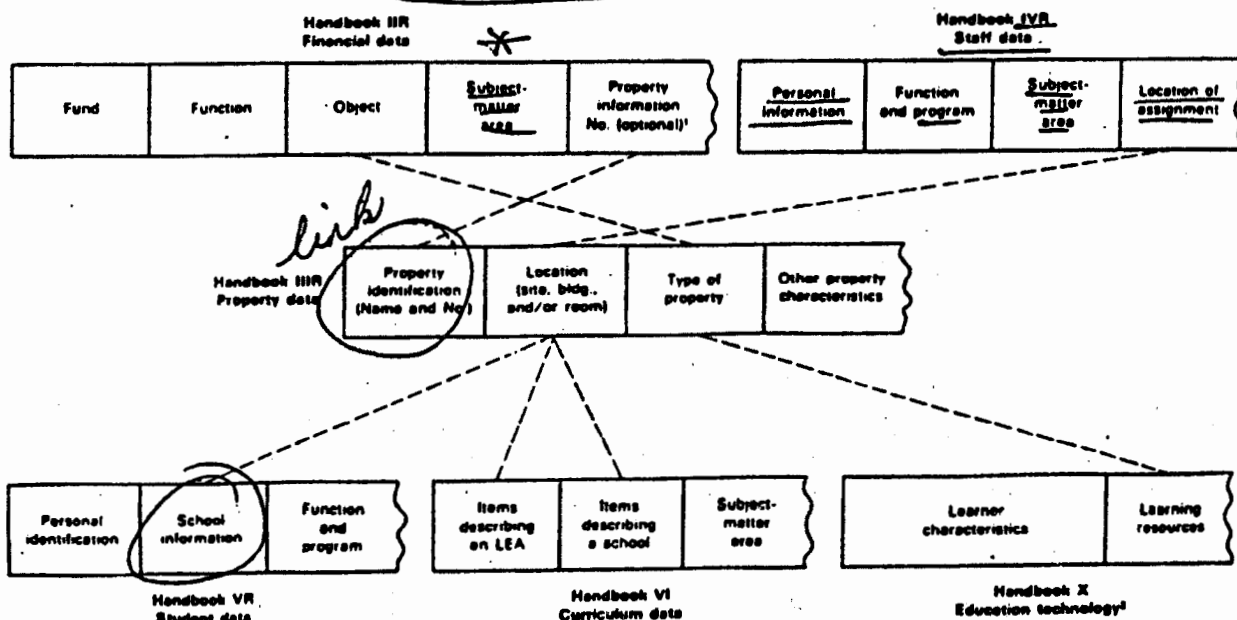
HANDBOOK LINKAGES: USING DATA FROM OTHER FILES

The act of relating information from different files or accounting systems is referred to in the handbook series as linking. The following paragraphs describe some basic considerations for designing linkages into a property accounting system.

Information about education can be divided into a number of distinct categories, such as financial, property, staff, and student. The handbooks in the NCES handbook series (State Educational Records and Reports Series) have been designed to address such categories. For example, Handbook IV¹ addresses staff information, Handbook VR¹ covers student information, Handbook VI¹ pertains to curriculum and instruction, and Handbook X¹ covers educational technology. Figure 1 illustrates how these handbooks relate to one another. All LEA's have records that deal with information from one or more of these categories.

¹See appendix E for full bibliographic information on each handbook.

Figure 1.—Interrelationships among SERRS handbooks



¹One of the best ways to link financial and property files is through the property identification number. This dimension (data item) is not shown in HBIIR, but may be added when desirable.

²Handbook X does not relate directly to an education information file as do the other handbooks shown here. It offers terminology that is very useful in classifying data within property files.

~So What, If My
Government Is
Collecting Information
On Me And My Family.....

**IT'S NOT GOING TO HURT
ME....IS IT?**

~
Understanding Cross
Matching Or Linking
Files In Order To "Make
Decisions" About You.

**HOW "DATA TRAFFICKING
~CAN HURT YOU?**

**ALTERNATIVES FOR A NATIONAL DATA SYSTEM
ON ELEMENTARY AND SECONDARY EDUCATION**

**GEORGE HALL
RICHARD M. JAEGER
C. PHILIP KEARNEY
DAVID E. WILEY**

**A report prepared for:
The Office of Educational Research and Improvement
U.S. Department of Education**

December 20, 1985

of delivering information that is representative of each of the fifty states.

While such a requirement dictates attention to how information gets into the data base, e.g., the sampling designs which will be employed, also dictates—along with the previously identified requirements of comprehensiveness, integration, and micro record formats—what types of reports must be available to users of the system. Users, with the possible exception of researchers, generally will not be interested in micro records per se but rather reports developed from the processing—e.g., tabulation, aggregation, and analyses—of micro records. Thus, while micro records represent the form in which information flows into the data base, reports based on processing of the micro records generally represent the form in which information flows out of the data base. Yet, a simple proliferation of reports will not meet the needs of the broad array of local, state, and national decision makers which we have identified in previous chapters. A national educational information system must be capable of carefully tailoring its reporting formats and mechanisms if it is to serve the particular needs of this broad array of decision makers. Certain decision makers, for example governors, have needs for only certain kinds of information and not for other kinds; the system must be capable of meeting these needs. In short, the system must be capable of screening and matching its reporting formats with the needs of particular users. In addition to questions of content, the screening and matching require attention to establishing the mechanisms necessary to actually get the reports to decision makers and decision makers to the reports, and in the case of researchers, to the relevant portions of the data base itself.

Finally, the process for getting information out of the system has to pay serious attention to timing. Unless the information is available when needed, the content and form of the reporting mechanism makes little difference. Timing involves setting priorities for reporting different sets of information to different users, as well as priorities for providing different users access to different sets of information. In summary, a national educational information system must be capable of delivering periodic and differentiated reports on the status and progress of schooling to a broad array of local, state, and national decision makers, as well as making available to different users, including researchers, special reports on and public use samples relevant to particular aspects of elementary and secondary schooling in the United States and in the several states.

By what criteria should we judge national educational information system? In Part I above, we described in broad terms our views of what a national educational information system must be. In our description, we identified a number of requirements that such a system must meet. In this part, we briefly reiterate those requirements, as well as certain additional requirements, and identify them as the basic criteria that we believe should be used in judging any system, present or future, that purports to be a national educational information system. Our basic criteria are as follows:

1. **COMPREHENSIVENESS**—the system must have a data base capable of providing information on all pertinent aspects of elementary and secondary schooling including

the school setting, the schooling process itself, and the outcomes of schooling.

2. **INTEGRATION**-- the elements, files, and records in the data base must be linked; all data sets must be capable of being related to one another.
3. **micro record FORMAT**--all data must be collected and stored in micro record format, with a micro record being defined as a datum on an individual person or an individual entity.
4. **REPRESENTATIVENESS**-- in addition to being nationally representative, the information in the data base must be representative of each of the fifty states, as well as representative of other important variables such as sex, racial-ethnic composition, urbanization, and so on.
5. **ACCURACY**--all data must be verifiably accurate ; they must be subjected to rigorous quality control procedures including audits, reinterviews as a routine part of data collection, controls on data entry and data processing, consistency and completeness edits, and regular and routine calculation of measures of variance.
6. **COMPARABILITY**--data from different jurisdictions must reflect the same concepts and definitions; common units of reporting and common definitions are necessary precursors of useful data aggregations.
7. **TIMELINESS**--in general, data must be limited to that which can be collected, stored, and analyzed within three months and reported to policy makers within the year.
8. **PRIVACY AND SECURITY**-- because some of the elements, records, and files contain information about individuals, e.g., personal identifiers necessary for longitudinal studies, strict confidentiality and security measures must be in force.
9. **PROCESSING AND ANALYSIS**--a specific schema must be available for processing the micro records in a manner designed to optimize the analytic capacity of the system.
10. **INFORMATION FLOWS**--the system must be capable of screening and matching its reports to meet the particular needs of particular users; a wide array of reporting formats and access mechanisms must be available to serve the different users; specific priorities must be set for meeting the different timelines imposed by the needs of different users.
11. **COSTS OF TRANSMISSION/ACCESS**-- a pattern of shared user costs should characterize the system; rather than rely exclusively on federal support for transmitting information to users and/or providing them access to information, a national educational data system should also draw support from a program of user fees and thereby increase its capacity to serve the differing needs of its users; equally important, transmission/access modes should incorporate the latest developments in electronic communications technology.

How does the existing system stand up against these criteria? In this section, we assess current NCES data-collection activities against the criteria identified above. In Chapter 2, we discussed these activities at some length, describing them as an unarticulated set of projects rather

kinds of entities as the focal unit.

Thus, an accounting system is a collection of records of transactions. An employee file contains records for each employee. A district level school file contains records on each school in the district. A high school catalogue or student handbook contains "records" on each course offered. And a transcript file contains records for each pupil in the school. We term these "basic" files: micro records.

Up to this point in time, the statistical information in the Common Core of Data has not included micro records for pupils, for educational personnel, or for school programs or activities. Other data bases do include micro records. Examples are the pupil records of High School and Beyond and the National Assessment of Educational Progress. The Common Core of Data consists primarily of summary or aggregate records. Thus school districts count pupil and employee records to create enrollment figures and personnel distributions and these new summary records are further summarized by the states. Similarly, accounting transactions are summarized into ledgers and financial reports which are transferred to summary records for transmittal to state and federal data bases. Thus, for example, the school district records in the Common Core of Data contain some school district level micro data--e.g., identification number, address, fiscal and control status, type code, etc.--but the primary data contained in these records are summaries of pupil, employee, and school micro records maintained at the school or district site.

One primary recommendation of this report is that the federal data base contain micro records for pupils, personnel and material resources, and educational activities. It is not advocated that the federal collection of these micro records constitute censuses of pupils, personnel, and activities. Although, within the data collection alternatives outlined below, some states may wish to explore this option in the reconfiguration of their own management and policy information systems. Thus, the structure of the data base being proposed is an integrated collection of sampled micro records.

Such a data base structure is mandatory if the process of conversion of resources into experiences outlined in the previous subsection is to be traced. The critical policy decisions now being made at the state level are specifically intended to influence and constrain the critical decisions in this conversion chain. It is this chain of decisions which is the key to the improvement of educational quality and which constitutes the focus of the new educational reforms. Only micro records for personnel, pupils, and activities can produce the kinds of analyses and reports necessary to inform and evaluate these new policy initiatives.

For example, linkage of course taking to achievement--in the sense of tabulating the achievement test results for students with different patterns of course taking--is impossible without student micro records containing both course taking and achievement data. Separate school, district or state aggregates of course taking and achievement do not permit such reports. Similarly, tabulation of the qualifications of the teachers who teach specific kinds of courses is impossible

resources which are not school based as well as creating school-linked records from central district files. Of special importance to these latter records are equipment and educational materials.

Feasible tabulations, analyses, and reports. Two categories of analyses and reports are feasible with a data base of this kind. First, there are counts, summarizations and aggregations of data elements. Thus, enrollments, achievement test averages, course taking patterns, and home environmental characteristics are available by processing individual pupil records to the level of the school, the district, the state, and nationally. Similar summarizations are possible for educational personnel, other purchased resources, educational offerings and resource inflows. At this level of analysis, the current information in the Common Core of Data would be reproduced from the new data base. However, substantial additional information would also be available which is currently unavailable. This includes not only characterizations of pupil background, special needs and difficulties, program and course participation and achievement, but also teacher characteristics and qualifications, and characterizations of the programs, experiences, and courses offered by the school or district.

Second, the micro data files are linked. This allows relational tabulations and reports to be created. In addition to tabulations such as course-taking linked to achievement-- a cross-pupil data element tabulation referred to above--cross-file tabulations are possible. For example, teacher characteristics can be linked--via course taking-- to pupil performance. Thus, a three way tabulation could be produced from linked micro records of teacher characteristics by course type by achievement. Such tabulations would form important information for consideration of certification or graduation requirements policies.

D. Access to and Use of the Data Base.

Conceptually, in order for the information contained in a data base to be used, it must be extracted and transmitted to the person who has use for it. When more than one person has use for the information in the data base, the provisions for access can be thought of as a network of channels linking potential users to each other and to the data base. Such a network is complex and ought not to be thought of solely as the collection of channels emanating directly from the data base itself.

For example, the wide-spread use of copying machines has resulted in information flows of statistical as well as text information to and from potential users who might not have easy or inexpensive access under other circumstances. The current rapid expansion of microcomputers and telecommun hardware and software foretells future changes of similar importance in such

without integrated micro records linking teachers and their qualifications to the particular courses they teach.

File structure and content. In the rest of this section we outline the kinds of files we envision constituting the national data base. These files fall into three categories.

First, there are within-school micro records. At the minimum, we recommend that these micro records constitute a collection of such records in each of a sample of schools. An open issue is whether such collections should be censuses in some or all sampled schools. We also recommend that such records be contained in at least three linked files: pupil, personnel, and educational activity.

Second and third, there are school and district-level records. Currently, such records are maintained in the Common Core of Data. Under some of the data collection alternatives discussed later in this report, these records might consist of samples rather than censuses as at present. Also, within district micro records are necessary. At the minimum, samples of personnel records for non-school based district personnel are required for a sample of districts so that summary estimates of personnel figures do not omit personnel who are not assigned to schools. Financial records may also be collected within districts--with coverage of sampled schools--so that human and material resource files can be constructed. To keep records of manageable size and acceptable accuracy, we also recommend that many of the currently collected school- and district-level aggregate counts be calculated by aggregating the within-school micro records in the central data base rather than continuing the collection of the aggregates themselves at the school- and district-site levels. This procedure would allow standardization of data definitions at the micro record level which, in turn, will assure the validity of aggregate comparisons. As we discussed earlier, a central problem for state-level comparisons currently is the lack of commonality in the definitions of particular data elements by districts and states.

1. Within-school micro records.

a. Pupil files. These files should be extracted from the various pupil level records maintained at the school site. We envision records for pupils with the following categories of data elements:

- (i) family background and home environment,
- (ii) special needs and educative difficulties presented to the school.
- (iii) educational outcomes: achievements, graduation, dropout, honors, etc.
- (iv) educational participation: attendance, activities, pursuits, experiences, e.g., grade level, courses, program participation, etc.: these will be linked to the activity files, below.

- b. Personnel files. These files will include records on the educational personnel attached to the school. They would include information on: position held, responsibilities, compensation, credentials, academic and employment history, participation in educational activities mounted by the district. These latter elements will be linked to the activity files, below.
- c. Activity files. These files will include records on the educational activities mounted by the school. These activities might be defined at different levels of aggregation, e.g., Chapter 1 participation, grade level, semester-class or course, counseling services, special activity, program or course of study. The records in this file will be linked to both the personnel records of employees who participate in their provision and the pupil records of participants.

We note here that the number of data elements in each of these files could be quite modest. We estimate that the physical personnel micro record file required to reproduce the current Common Core of Data aggregates need contain no more than five data elements each.

2. School files. These files will contain records for each school in the data base. These records will include characteristics of the community served by the school as well as organizational and structural characteristics of the school which are not aggregates of pupil, personnel, or activity records and which are not selections of district records. Examples of data elements are those currently included in the Common Core of Data, however, we envision additional information, such as information concerning the community served by the school.
3. District files. These files will contain records for each district in the data base. Data elements will include characteristics of the community served and organizational and structural characteristics of the district which are not aggregates of within-school micro records or school records. In addition, categories, sources, and amounts of in-kind and fiscal resources flowing into the district will be recorded, together with Source-Imposed constraints on their expenditure. Expenditures will also be included in three ways: district-wide amounts in expenditure categories will be recorded at a finer level of detail than currently, micro expenditure data will be collected for district-wide expenditures, and micro expenditure data will be collected for sampled schools in the district. To supplement these kinds of expenditure data, it is possible to construct parallel files on resources purchased. Thus, for example, district level personnel files can be constructed for non-school based personnel and facilities, equipment, and materials files can also be created. Again, it is important to create these files for

THE NATION'S REPORT CARD

Improving the Assessment of Student Achievement

**Report of the Study Group
Lamar Alexander, Governor of Tennessee,
Chairman**

**H. Thomas James,
Vice-Chairman and Study Director**

**With a review of the report by a
Committee of the National Academy of Education**

**Robert Glaser, University of Pittsburgh,
Chairman**

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Appendix D

A CHRONOLOGY OF THE NATIONAL ASSESSMENT

- 1963 U.S. Commissioner of Education Francis Keppel requests Ralph Tyler to develop an assessment program
- 1964-68 Assessment is designed and pretested
- 1969 First assessment conducted: writing, science, and citizenship assessed
- 1971 Reading and literature assessed
- 1972 Social studies and music assessed
- 1973 Mathematics and science assessed
- 1974 Writing and career and occupational development assessed
- 1975 Reading and art assessed
- 1976 Citizenship and social studies assessed
- 1977 Science assessed
- 1979 Writing, art, and music assessed
- 1980 Reading and literature assessed
- 1982 Mathematics, citizenship, and social studies assessed
- 1984 Reading and writing assessed
- 1986 Reading, mathematics, science, and computer competence assessed
- 1988 Proposed that reading, writing, citizenship, history, and geography be assessed

For all of the content areas given above, information on nine-, thirteen-, and seventeen-year-olds across the nation has been collected. It should be noted that some assessments were conducted during a school year and thus spanned two calendar years. For convenience, the above listing shows only the second year of the two

Appendix E

THE ELEMENTARY/SECONDARY INFORMATION DATA SYSTEM

The federal Center for Education Statistics is charged with the statutory responsibility of collecting data on the state of education in the United States. The center meets that responsibility for elementary and secondary education by its management of the Elementary/Secondary Information Data System (ESIDS), a data bank with national access. The center has recently redesigned the system and is currently enlarging it with new survey data. When completed, ESIDS will form one integrated system consisting of two types of components:

UNIVERSE DATA

- Public School Districts*: A school district census (identification and type)
- Public and Private Schools*: A census of all public and private schools (identification, enrollment, staffing, and type)
- State Aggregate Fiscal Data*: Revenues, expenditures, and average daily attendance (ADA)
- State Aggregate Nonfiscal Data*: High school graduates, enrollment by grade, instructional and noninstructional staff
- Early Estimates*: Universe component (new to the system)

SAMPLE DATA

Sample data illustrate characteristics of each of the following:

- Public School Districts*
- Public and Private Schools*
- Public and Private School Teachers*
- Public and Private School Libraries*
- Public and Private School Administrators* (new to system)
- Parents of NAEP Students* (new to system)
- Student Performance* (NAEP)
- Student Progress over Time* (Longitudinal Studies)
- Public School Finance* (under development)

EDUCATION DATA SYSTEM IMPLEMENTATION PROJECT

Council of Chief State School Officers
State Education Assessment Center
One Massachusetts Avenue, N.W., Suite 700
Washington, D.C. 20001-1431
(202) 408-5505 Telephone/(202) 408-8072 Facsimile

The six National Education Goals developed by the nation's governors and the Administration in 1989 set targets and expectations that implied a greater need for comparable and reliable education data to measure their status and progress. Even before the establishment of the Goals and the subsequent America 2000 strategy, the National Cooperative Education Statistics Systems was established by the Hawkins-Stafford Education Improvement Amendments of 1988 (P.L. 100-297) to involve state and federal governments in a mutual effort to produce state-comparable and nationally-uniform data on public and private school systems. This System has been guided by the National Forum on Education Statistics which provides the leadership in anticipating data needs and developing ways to help state education agencies to provide the needed data. To achieve these, the Forum needs to implement an organizational infrastructure at both the state and national levels which can flexibly produce, add, edit, transmit, and utilize education data.

The National Center for Education Statistics (NCES) has been overseeing the progress of the above efforts toward the improvement of education data. In September 1991, NCES awarded a three-year contract to the Council of Chief State School Officers (CCSSO) to facilitate the implementation of a national education data system. During the course of this three-year project, titled Education Data System Implementation Project (EDSIP), the following distinct, but interrelated, activities will be conducted:

- 1) **Continue to improve data elements on elementary and secondary education.**
Project staff will assist NCES in determining the extent to which states can provide new data elements proposed to be added to NCES's Common Core of Data surveys for the purpose of making the database more comprehensive and useful. Working with state education agency staff and others knowledgeable in the field, project staff will summarize current state activities and make recommendations for definitions and procedures for collecting new data. In addition, a model for future revisions to NCES data collection activities will be developed and pilot-tested.
- 2) **Enhance state and local capability to electronically transfer student data.**
The project will administer an interstate student records transfer system, currently called ExPRESS--Exchange of Permanent Records Electronically for Students and Schools--the development of which has been funded by NCES for two years prior to EDSIP. This activity has included the development of standard data elements for inclusion in an electronic student transcript and a pilot exchange of student records across school districts and from districts to institutions of higher education. The system is now ready for further development, including the appointment of a Governing Board, making formal arrangements with a communications network for exchanging the records, and expansion to more sites. Project staff will provide training, as well as technical and administrative support for these activities.

- 3) **Implement Personnel Exchange System for sharing state expertise in solving education data problems.** The project will continue to operate a Personnel Exchange System to enable state education agency staff to consult with staff from other states on various areas of concern. These may include: administrative management issues such as administration of state or local education agencies, finance, and teacher supply and demand; instructional management issues such as monitoring of pupil coursework, testing, and attendance; and geographic management issues such as student transfer and dropout information within and across school systems.
- 4) **Develop Information Referral System for sharing information to improve data systems across states.** The project will develop and maintain an electronic database of education data and directory information about state education agency staff involved in data collection activities. This database also will include information about education data collection activities conducted by federal agencies as well as other organizations. The system will provide information on ways to improve states' data collection, analysis, and dissemination. This consolidated database about education will be easily accessed by state agency personnel for their information and use.
- 5) **Develop student and staff data handbooks.** The project will develop two handbooks—one on student information and one on staff information. These handbooks will include an extensive and comprehensive description of an administrative record system and data element terms and definitions. Project staff will work closely with experts as well as federal, state, and local education agency personnel during the process.

The EDSIP builds upon two previous CCSSO projects also funded by NCES. These projects focused primarily on data elements related to the Common Core of Data. The Education Data Improvement Project (1985-1988) described state collection of data elements and analyzed each state's capacity to provide standard, comparable, and timely data to NCES on public elementary and secondary school and school district, staff, students, revenues, and expenditures. The project also recommended to the states and NCES ways to overcome observed deficiencies in the states' ability to produce the data requested on the Common Core of Data surveys. Last, but not least, the project established agreement across states on standard definitions of the data elements reported to NCES and prepared for successful negotiation of data plan agreements between NCES and each state.

The second project, also funded by NCES, was the New Education Data Improvement Project (1988-1991). Project staff facilitated the establishment of technical assistance plans for each state, which addressed the state's problems in responding to Common Core of Data requirements and recommended strategies and resources to remedy these problems. The plans addressed issues in all fiscal and nonfiscal data. Project staff negotiated changes in the state's data responses through various means. These included the chief state school officer's approval of the plan, consultation among state education agencies, and on-site technical assistance to states.

For more information about the newly-funded Education Data System Implementation Project and ExPRESS, please contact Barbara S. Clements, Project Director. EDSIP project staff also provide information about specific tasks. Lisa Solomon coordinates the tasks on improving the Common Core of Data surveys; Kathleen Fortney assists on the management of ExPRESS; Tom Tobin manages the Personnel Exchange System; and Oona Cheung coordinates both the Information Referral System and the development of student and staff data handbooks.



MIGRANT STUDENT RECORD TRANSFER SYSTEM

TARGET AUDIENCE: Migrant children

AWARD: Contract 300-76-0090 10/01/1983 to 9/30/1984 Cost: \$4.9 million

This system is a computerized educational and health system for migrant students in preschool through 12th grade. The system has approximately 200 telecommunication devices located in 44 States serving all 50 States, Puerto Rico, and the District of Columbia area. Terminals submit student data on migrant children on a daily basis. Curriculum being taught to migrant children is established by each State through application submitted to the U.S. Department of Education. The curriculum varies according to the established needs of migrant children at the various levels. Through the Migrant Student Record Transfer System teachers have at their disposal special programs, test, special interest, health, criterion, and skills data that enables them to place the child immediately. This allows teachers to formulate ideas on what the student has mastered and what program should be developed around each of the State programs. Presently the computer is programmed to provide all skill based information on all children in the areas of reading, math, oral language and early childhood skills. This information is part of the total history of every children in the development of his or her profile.

MAJOR PRODUCTS:

1. Skills in reading, math, early childhood and oral languages.
2. Credit exchange for secondary migrant students.
3. Student education and health data.
4. Management report for State Directors and the U.S. Department of Education.

PROJECTS DIRECTOR:

Winford "Joe" Miller
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ANNOUNCING...

A WORKSHOP ON THE
 EXCHANGE OF PERMANENT RECORDS ELECTRONICALLY
 STUDENTS AND SCHOOLS (EXPRESS) SYSTEM

Delta Orlando Resort, Orlando, Florida
 February 18, 1991

Under development since 1989, the Exchange of Permanent Records Electronically of Students and Schools (EXPRESS) system is rapidly becoming a reality. This system, developed under the sponsorship of the National Center for Education Statistics and now staffed by the Council of Chief State School Officers, provides the mechanism for electronic exchange of essential and standard information about a student's academic progress, participation in special programs and services, test performance and health status which are necessary to make appropriate and timely decisions about educational placement. A more complete description of the system is attached.

The workshop is sponsored by the Council of Chief State School Officers and the National Center for Education Statistics. Presenters will include the participants in the task force which has developed the system, including school district and state education agency personnel from the states of Florida, California, New York, Texas and Washington as well as staff from the National Center for Education Statistics, the Council of Chief State School Officers and the Migrant Student Records Transfer System. The workshop designed primarily for school district and state agency personnel, will provide you with information about EXPRESS, Electronic Data Interchange, mapping data elements to the standard format, and how to become a part of the system.

Each participant in the workshop will receive a copy of the first official draft of the Guide to the Implementation of the EXPRESS System. This publication gives all the data transaction sets, sample formats, and code tables for the EXPRESS standard electronic record.

Date/Time

The workshop will be held on Tuesday, February 18, 1992, at the Delta Orlando Resort in Orlando, Florida. It will be held just prior to the February 19-21, 1992 Conference on Elementary-Secondary Education Management Information Systems: State and Local Models for Excellence, sponsored by the U.S. Department of Education's National Center for Education Statistics and the Florida Department of Education - Division of Public Schools. Registration for the workshop will be on February 18 from 8:00 - 8:30 a.m., and the session will begin at 8:30. The workshop will end at 5:00 p.m.

**EXCHANGE OF PERMANENT RECORDS ELECTRONICALLY OF
STUDENTS AND SCHOOLS (EXPRESS) SYSTEM**

In 1989, a task force sponsored by the National Center for Education Statistics began meeting to examine the feasibility and benefits of a nationwide electronic records transfer system. The Center took this step in the belief that such a system would provide a practical tool benefitting school practitioners. In addition, it was hoped that the system would promote State/local information system capacity and comparability in support of the National Cooperative Education Statistics System. Participants in the task force include school district and state education agency personnel from the states of Florida, California, New York, Texas and Washington as well as staff from the National Center for Education Statistics and the Council of Chief State School Officers.

The anticipated benefits of the proposed national system include:

- * promotion of greater compatibility and standardization of student information across state and local information systems;
- * more timely request and receipt of student records through an electronic network as opposed to mail;
- * more timely availability of data for use in determining the educational placement and the initiation of support services required for enrolling students;
- * increased reliability and consistency in the interpretation of student records;
- * greater efficiency for districts with automated student information systems, by enabling them to receive machine-readable records which eliminate key-entry;
- * increased protection of student records which will be less subject to tampering when transferred through a network containing security procedures;
- * reduced total cost to transfer records; and
- * the availability to educational agencies of a multi-function network which can be used for other purposes such as reporting data from districts to other districts or the state, reporting data from the state to the federal government, and for sending transcripts to postsecondary institutions and employers.

Project activities included the development of a set of data elements and definitions in American National Standards Institute

format to be used in the pilot electronic transfer of student records between districts and from districts to postsecondary institutions. These data elements include both required and recommended information to be included in the student's record.

→ Data elements are included for five different areas:

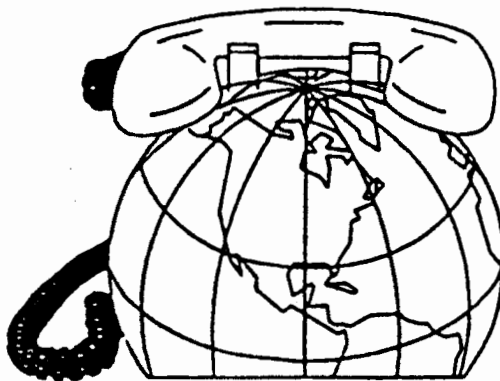
1. Demographics (student name, residential data, grade level, race/ethnicity, home language, guardian's name)
2. Academic History (previous school, course work, grades and credits awarded, grade point average, rank in class, attendance)
3. Special Programs and Services (program type, funding source, placement dates, placement criteria, eligibility determination/status)
4. Health (immunization, health condition, screening, medical treatment)
5. Test Information (test identity, test date, norming period, subject area, test scores)

The data element definitions, wherever possible, are standard definitions established by NCES, CCSSO, or other national organizations.

Administration of the system, its governance structure, and sponsorship of task force activities is now a part of the Education Data System Implementation Project at the Council of Chief State School Officers. Information about the project may be obtained from the Project Director, Barbara Clements at (202) 624-7700.

A GUIDE TO THE IMPLEMENTATION OF THE SPEEDE/EXPRESS ELECTRONIC TRANSCRIPT

Version 1



Developed by the

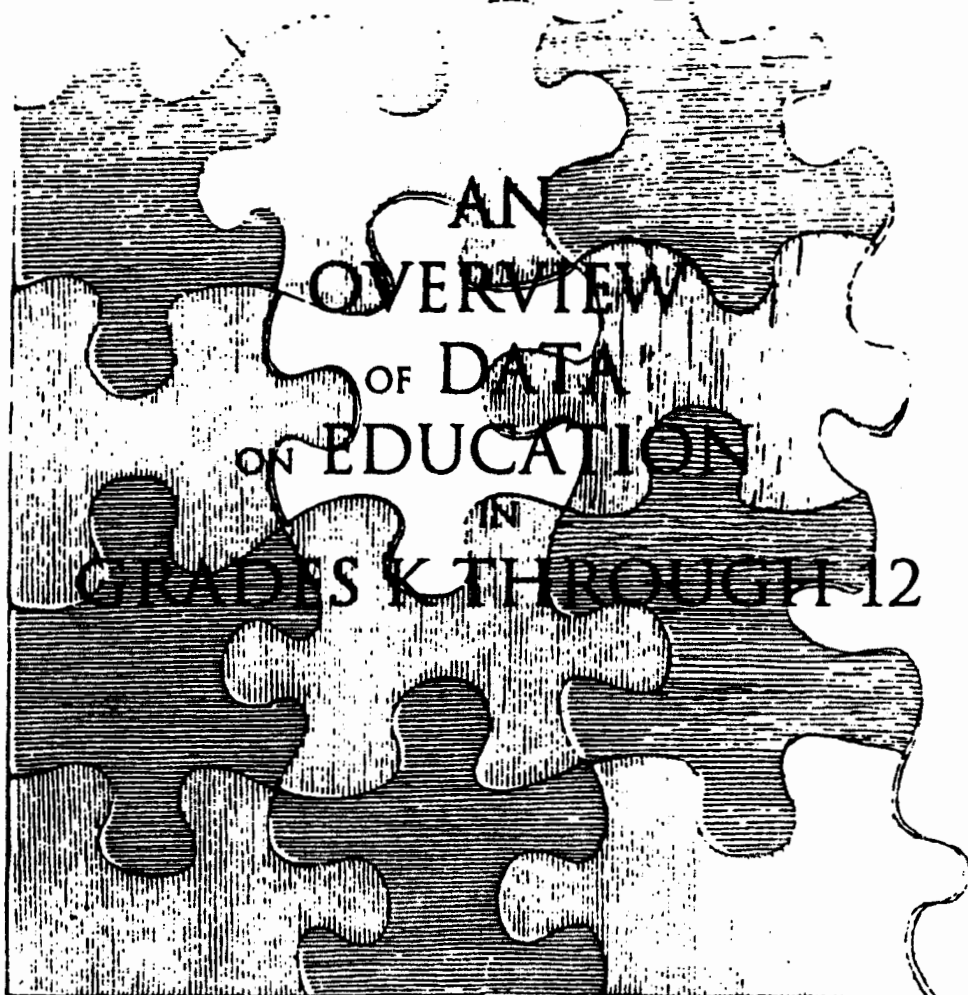
**COMMITTEE ON THE STANDARDIZATION OF
POSTSECONDARY EDUCATION ELECTRONIC DATA EXCHANGE (SPEEDE)
AMERICAN ASSOCIATION OF COLLEGIATE REGISTRARS
AND ADMISSIONS OFFICERS**

**EXCHANGE OF PERMANENT RECORDS ELECTRONICALLY
FOR STUDENTS AND SCHOOLS (EXPRESS)
NATIONAL CENTER FOR EDUCATION STATISTICS
COUNCIL OF CHIEF STATE SCHOOL OFFICERS**

March 31, 1992

NATIONAL CENTER FOR EDUCATION STATISTICS

FILLING THE GAPS



U.S. Department of Education
Office of Educational Research and Improvement

NCES 92-132

FILLING THE GAPS: An Overview of Data on Education in Grades K through 12

Overview

The elementary/secondary education data collection system has undergone a major transformation over the course of the past decade. From a very limited universe data collection supplemented with irregular and noncomparable sample surveys, it has developed into a coordinated, cohesive system with 1) State, district, and public and private school universe components; 2) a regularly collected sample survey component with linkable data from districts, schools, principals, and teachers; 3) a student-based longitudinal studies component designed to explore the effects of school processes on student outcome; 4) a household-based survey component, to address those issues such as early childhood and adult education which are difficult to assess through institution-based surveys; 5) a "fast response" survey component, designed to provide timely data to inform current policy concerns; and 6) an assessment component in selected subjects at grades 4, 8 and 12.

Several recent reports have highlighted the ongoing importance of obtaining good data on elementary and secondary education in the United States. In 1991, the national Education Statistics Agenda Committee (NESAC) of the National Forum on Education Statistics made recommendations for improving the national education data system.¹ In the reports of their technical planning subgroups, the National Education Goals Panel addressed data needed for indicators measuring the National Goals.² And a Special Study Panel on Education Indicators convened by NCES produced a report that describes a comprehensive education indicator information system capable of monitoring American education.³

The Indicators Panel suggested that "six issue areas (are) a starting point for national discussion and reflection about what matters in American education. They reflect what is important in American education and, hence, what is important in monitoring the health of the enterprise."⁴ The issue areas defined by the panel are: 1) learner outcomes: acquisition of knowledge, skills, and dispositions; 2) quality of educational institutions; 3) readiness for school; 4) societal support for learning; 5)

¹ A Guide To Improving the National Education Data System, National Forum on Education Statistics, October 1990.

² Potential Strategies for Long-term Indicator Development, National Education Goals Panel, September 1991.

³ Education Counts: An Indicator System to Monitor the Nation's Educational Health, Special Study Panel on Educational Indicators, September 1991.

⁴ Ibid., p. 27.

1992, however, and may be included in the 1994 SASS. Data on curricular offerings also be collected by the proposed Early Childhood Longitudinal Study (ECLS).

Two new efforts funded by NCES may help to make our measurement of curricular offerings much more feasible. One effort will create a common coding classification system for courses in elementary and secondary education. This "student handbook" will enable schools, school districts, and states to report course offerings using consistent definitions. A second effort is a computerized student record system which will allow transfer of student transcripts both between school districts and between schools and postsecondary institutions. This system, if broadly implemented, would make data collection on student course taking patterns much more comparable and timely.

Teachers

Beginning in the 1980s, NCES collected detailed information on the characteristics and qualifications of teachers. Information collected includes years of full- and part-time teaching experience in public and private schools, major and minor degree fields for all earned degrees (from associate degree to Ph.D), type of certification in teaching assignment fields, college coursework in mathematics and science, and, to a limited extent, participation in in-service education. The inclusion of these measures in SASS allows for an assessment of the qualifications of the current teaching force.

But the term "qualifications" is not synonymous with "quality." The characteristics that contribute to good teaching are many, and no single configuration of traits, qualifications, or behaviors unvaryingly produces optimal student outcomes in all situations. NCES teacher surveys have concentrated on collecting data on "qualifications," rather than trying to define "quality." In order to define and measure "quality," characteristics and qualifications of teachers must be related to growth in student achievement.

The qualifications measures that NCES does collect cannot currently be related to measures of student achievement except in certain grades covered by the longitudinal studies such as NELS:88. Development of a measure of "teacher quality" would be hastened by obtaining student outcome measures that could be linked to the rich nationally representative data on teacher qualifications available in SASS. In 1991, NCES field tested a student survey form that collects data on a sample of students for each SASS teacher. These data are collected from the information available in school records, and not directly from the student. In 1994, the student records form will be applied on a larger scale with a sample of students in schools with high concentrations of Native Americans. This student records form, if found to be feasible, could provide the data necessary to improve our understanding and measurement of "teacher quality."

NATIONAL EDUCATION GOALS PANEL

STATEWIDE STUDENT
RECORD SYSTEMS:
CURRENT STATUS AND
FUTURE TRENDS

Aaron M. Pallas, Ph.D.
Michigan State University

March 26, 1992

92-02

- There is a substantial variation across states in the extent to which the development of statewide student record systems has been supported by new financial or staff resources.
- Successful systems gain the early support of program staff as well as MIS and data processing staff.
- The critical step in system design in most States is the development of a data "dictionary" or handbook specifying clear definitions of data elements and formats that can be consistently applied across local districts.
- Many States attempt to give local districts a sense of ownership of the system by giving district representatives joint responsibility for determining the definition of data elements and system design.
- Few States bring all districts and all data elements on line at once; rather, the process typically is incremental, adding districts and/or data subsystems over time.

Content

- Data needs at the State level are largely determined by State and Federal reporting requirements.
- The perceived need for various types of data differs substantially from one State to the next.
- The size of the State -- the numbers of students and school districts in its borders -- strongly influences how statewide student record systems are organized.
- In some States, the student record system is part of an integrated management system; in such cases, it does not make sense to consider student records independent of staff or financial information.
- Relatively few States rely on a single software/hardware configuration at the district level; but those states with regional processing centers are likely to use standardized systems at these regional sites.
- An identification number that uniquely identifies each child in a State is an essential aspect of a student-level record system.

Outcomes

- The implementation of comprehensive student record systems in those States that currently have them is so recent that few States have had the opportunity to fully exploit the potential of these systems to inform state-level educational policy.
- Local school districts do not use State systems extensively, especially small districts that lack large research and evaluation staffs.

The fourth section reports on the results of the interviews in three parts:

- (a) System initiation, including the State's readiness for change, and change strategy (incentives, obstacles, and process)
- (b) System content, including the determinants of system content and operational features
- (c) Outcomes

It is important to note that these categories emerged through an analysis of the interview data.

Appendix A of this report presents a State-by-State summary of system development, status, composition, and problems for ten State student record systems. These summaries were derived from transcriptions of telephone interviews and notes from face-to-face and telephone interviews, as well as from supporting documentation where available. The interviewees, who were promised anonymity, were invited to comment on and/or amend these State situation summaries.

FINDINGS FROM THE NATIONAL SURVEY

General progress in system development

A student record system, as defined in the survey fielded by the CCSSO, is a data collection system that has as its primary unit of input an individual student. For example, a collection of data that contains records on individual students (e.g., John Doe, 577-24-9384, 1/1/1976, male, white) is a student record system. But a collection of data that summarizes the experiences or characteristics of groups of students in a way that does not permit describing individual students is not a student record system, according to this definition. For example, a data collection that reports the number of students in each grade in a school who are members of a particular racial or ethnic group is not a student record system because the primary unit of input is the school, not the individual student. It would not be possible to characterize any particular individual student on the basis of a school-level data collection. Conversely, a student record system containing information about the grade level and racial/ethnic group membership of individual students *would* be able to generate the number of students in each grade who are members of various racial/ethnic groups. In a student record system, the information characterizes attributes of individual students, and data remain available for individual students.

Figure 1 reports on the current status of State-level student record systems. The left part of this figure shows the number and proportion of States reporting that they have a comprehensive State-level student record system which includes all students in the State and contains various descriptive data elements for individual students. Seven out of 47 States responding, or 15% of the States, reported that they currently have a comprehensive State-level student record system. The remaining 40 States, comprising 85% of the respondents, indicated that they do not have a comprehensive State-level student record system at this time.

NATIONAL EDUCATION GOALS PANEL

GOAL 2 TECHNICAL PLANNING
SUBGROUP ON CORE DATA ELEMENTS

Speede/Express

Report to the
National Education Goals Panel

✓
April 21, 1993

93-03

The development of automated student and staff record systems is not without controversy, however. People tend to equate automation with access. There are laws concerning access to student records, and particularly to sensitive information, however the laws are behind the times concerning automated records. While the Goals Panel has taken the position that the development of student recordkeeping systems is essential to assessing accomplishment of the Goals and that standard data should be available from the systems, it is up to the state and local jurisdictions to ensure that access, security and confidentiality concerns are addressed. The Subgroup noted that state and local laws/regulations and federal laws such as the 1974 Family Educational Rights and Privacy Act (FERPA) may need to be revised to reflect these changes in how individual records are maintained.

The identification of essential data elements to be maintained at the local level has traditionally been done by local decision makers, such as school district staff and school board members. (In some instances, software vendors have made de facto decisions by providing what they perceive to be the necessary data elements in an automated system purchased by the school district.) States have sometimes prescribed specific data to be collected based on state and federal reporting requirements. To date, no national effort has been made to identify what specific data elements should be maintained in all student record systems for effective school management, nor what definitions should be used to define the data elements, although there is a high level of interest in this area.

The Subgroup agreed that a logical and feasible first step in obtaining comparable data from school to school is to focus on the data needed to monitor progress toward the Goals. This information would then be incorporated into the broader discussion about what data are essential for the school management and reporting functions of student, staff, and school record systems. Before determining what are the essential data elements, the Subgroup agreed to the two following principles to guide the discussion.

- First and foremost, record systems must meet school and local education agency needs for managing the educational enterprise. This means that the system must provide information useful for making decisions about schools, staff, resources, and groups of students. In addition, however, the Subgroup believed that student record systems should provide essential information for making decisions about individual students. Whereas teachers should receive summary information about the students in their classes to use in planning instruction, individual student information may also prove useful in special situations. For example, if a student continually comes to school late, or bursts into tears off and on during the day, or falls asleep during a stimulating activity, there may be health or background information in the student's record that could help the teacher make adjustments to meet the student's individual needs.

• Second, record systems should be developed to monitor the progress of both individual and groups of students. This requires that data be maintained in a longitudinal format with updated information added as it becomes available. Many school systems update files by replacing information as it changes. This makes longitudinal analyses and individual monitoring impossible. For example, a child's English proficiency may change after receiving language assistance services. If the proficiency status is changed permanently on the student record (that is, there is no record that the student had once been classified limited English proficient), and the child later has trouble which could be due to lack of English language skills, school staff may not realize that additional language assistance services are needed. While replacement of data seems more efficient from a data processing viewpoint, it is not effective for working with individual students whose historical records could provide insight into the provision of appropriate services for the child.

To summarize the discussion about student record systems, the Subgroup stressed that student record systems must be designed to meet school management requirements as well as monitoring needs. This is best accomplished through the use of a longitudinal student database with updated information being added to, not replacing, existing data.

Using the *Student Data Handbook* draft and *A Guide to the Implementation of the SPEEDE/ExPRESS Electronic Transcript* (described in Appendix C) as resources, the Subgroup identified data elements that could be used to create indicators monitoring progress toward meeting the goal outcomes. While the original charge was to identify only student data elements, the Subgroup also identified data elements that could be obtained from other databases, most notably staff and school databases. The selection process involved consideration of the following issues:

Necessity – The Subgroup discussed all data elements that might be useful before deciding what were the most essential data elements to be collected on a universe basis.

Availability – Certain kinds of data are kept about all students, whether in paper files or in automated record systems. Other data elements are not generally collected.

Feasibility – The Subgroup considered whether data elements that are not generally available at this time could be collected in a consistent and reliable way, taking into consideration cost as well.

Level – Data elements which cover preschool children, school-age children, and postsecondary students were included.

NATIONAL EDUCATION GOALS PANEL

CORE DATA ELEMENTS FOR
ADMINISTRATIVE RECORD SYSTEMS

RESOLUTION

April 21, 1993

TABLE 1

Recommended Set of Data Elements and Corresponding Indicators for Monitoring Progress Toward the Goals

INDICATOR	DATA ELEMENTS	EXISTENCE OF DATA ELEMENT(S) IN MOST K-12 RECORD SYSTEMS?
GOAL 1		
Number of Entering Students with Appropriate Immunizations	Type of Immunization, Date of Immunization, Status of Immunization	Yes
Developmental Well-Being of Students Entering Kindergarten in terms of Five Dimensions: Physical Well-Being; Social and Emotional Development; <u>Language Usage;</u> <u>Approaches to Learning;</u> Cognitive Development.	Developmental Observation and Documentation, Date of Developmental Observation and Documentation	No
Developmental Well-Being of Students Entering First Grade in terms of Five Dimensions: Physical Well-Being; Social and Emotional Development; Language Usage; Approaches to Learning; Cognitive Development.	Developmental Observation and Documentation, Date of Developmental Observation and Documentation	No
Number of Disadvantaged, Disabled, and Other Entering Students Who Participated in National Association for the Education of Young Children (NAEYC) Accredited Preschool Programs (<i>Measures Objective 1</i>)	Name of Preschool Program, Type of Preschool Program, Number of Years in Each Preschool Program, Disability Status, Poverty Status	No

NATIONAL EDUCATION GOALS PANEL

ASSESSING CITIZENSHIP

**THE GOAL 3
TECHNICAL PLANNING SUBGROUP
ON CITIZENSHIP**

**Report to the
National Education Goals Panel**

July 31, 1992

92-06

Recommendations:

- *Descriptive Data from the National Assessment of Educational Progress.* NAEP should include in its data collection supportive information for evidence of voter registration and the extent to which it is linked to the curriculum or encouraged as separate school-based activities.
- The National Education Goals Panel should ask the governors to identify how many 18-year-olds in their states are registered to vote. If they presently have no way of reporting this figure, they should be asked to develop a mechanism for collecting this information. Perhaps these data can be collected through the schools.

IV. Setting Standards for Citizenship

The report of the National Council on Education Standards and Testing listed three basic reasons for national standards: to promote educational equity; to preserve democracy and enhance the civic culture; and to improve economic competitiveness. The report also proposed that the standard-setting process be extended from the five core subjects to citizenship education, foreign languages, and the arts. In making their recommendations, the Council recognized the essential character of citizenship learning in both America's schools and in its future.

The Panel should encourage an effort to establish national standards in citizenship much as standards in history, geography and science are being developed. Such an effort should be an occasion to bring together the different constituencies in the areas of civics knowledge and service learning in order to articulate what the nation's youth should both know and demonstrate to give meaning to the ideal of responsible citizenship.

Recommendation:

- Support should be given for the development of standards for knowledge of citizenship commensurate with the standard-setting efforts in other academic subjects. Furthermore, much as performance assessment in the other academic subjects is being developed, so should performance standards for citizenship knowledge ultimately include an action component -- community service learning.

SCANS

LEARNING A LIVING:

A BLUEPRINT FOR
HIGH PERFORMANCE



A SCANS REPORT FOR
AMERICA 2000

THE SECRETARY'S COMMISSION ON ACHIEVING NECESSARY SKILLS
U.S. DEPARTMENT OF LABOR
APRIL 1992



The Secretary's Commission on Achieving Necessary Skills

The basic skills are:

- Reading, writing, arithmetic, listening and speaking.
- Creative thinking, decision making, problem solving and reasoning.
- Responsibility, self-esteem, sociability, self-management and integrity.

The five competencies are:

- Identifies, organizes, plans and allocates resources.
- Participates as a member of a team, teaches others new skills, serves clients, exercises leadership, negotiates and works with diversity.
- Acquires and evaluates information, organizes and maintains information, interprets and communicates information and uses computers to process information.
- Understands complex inter-relationships.
- Works with a variety of technologies.



EXHIBIT K

HYPOTHETICAL RÉSUMÉ

Jane Smith
 19 Main Street
 Anytown
 Home Phone: (817) 777-3333

Date of Report: 5/1/92
 Soc. Sec.: 599-46-1234
 Date of Birth: 3/7/73
 Age: 19

SCANS Workplace Competency	Date	Proficiency Level
Resources	10/91	1
Interpersonal Skills	12/91	2
Information	11/92	3
Technology	1/92	2
Systems	4/92	3

Core Academic and Elective Courses	Date	Proficiency Level
English	11/91	3
Mathematics	12/91	3
Science	2/91	3
History	4/91	2
Geography	8/91	1
Fine Arts	11/91	4
Vocational/Industrial Education	4/92	2

SCANS Personal Qualities	Average Rating	No. of Ratings
Responsibility	Excellent	10
Self-Esteem	Excellent	10
Sociability	Excellent	8
Self-Management	Excellent	7
Integrity/Honesty	Good	6

Portfolios and Other Materials Available	Reference
1. Report on Grounds Keeping (Chemistry)	Mr. Kent
2. Video on Architectural Styles (Social Studies)	Ms. Jones
3. Newspaper Article Written	Ms. French

Extracurricular Activities	Role	Date	Reference
Newspaper	Reporter	9/89-1/90	Frank Jones (Adviser)
Basketball Varsity	Center	9/90-6/91	Dean Smith (Coach)

Awards and Honors	Date	Source	Reference
Teen Volunteer of the Year	6/91	Rotary Club	John Grove
Class Secretary	9/91-1/92	Lincoln High School	Emma Rice

(continued)

THE BIG 5

The

Five

Magic

Questions

**GUARANTEED TO WIN
THE DEBATE ON VAGUE
OUTCOMES.**

The 5 magic questions that parents can use to win the debate when outcomes reflect subjective or vague areas:

1. How do you measure that outcome?

For example: If an outcome states that, "all children must have ethical judgment, honesty, or integrity", what exactly is going to be measured? How do you measure a bias in a child in order to graduate? Must children be diagnosed? Will they be graded by observation or pencil and paper test? How will performance or behavior be assessed?

2. How is that outcome scored or what is the standard?

What behavior is "appropriate" and to what degree? For example, how much self-esteem is too much or not enough to graduate? Can government score the attitudes and values of it's citizens?

3. Who decides what that standard will be?

The state has extended their mandated graduation requirement or exit outcomes, down to the individual child. This by-passes all local autonomy. What about locally elected school directors, will they become obsolete? Are we talking about a state or government diploma?

4. How will my child be remediated?

What are you going to do to my child to change them from here to here in their attitudes and values in order to graduate? How do you remediate ethical judgment, decision making, interpersonal skills, environmental attitudes? What techniques will be used? What risks are involved? What justification does the state have to change my child's attitudes?

5. What if parent and state disagree on the standard or how it is measured in the classroom? Who has the ultimate authority over the child...parents or the state?

What about privacy? Can parents opt out of a graduation requirement mandated by the state?

The key is, what is the purpose of the school? Communities must answer that question for themselves all across the country. Not all outcomes are equal. Some are based on curriculum or content. That is NOT advanced OBE. Those outcomes are results oriented. Clairvoyant Spady in his futuristic, transformational OBE will eliminate competition, eliminate comparing students to each other, and eliminate distinguishing ability levels or aptitude. All children meet the same **FIXED STANDARD** of "FUTURE CITIZEN" by eliminating the bell curve, or that natural phenomena of random distribution. Spady blames "seat time" and not the different ability and intellectual levels of people as the problem.

PAST.....TIME FIXED...ABILITY LEVELS VARY

FUTURE.....ABILITY LEVELS FIXED...TIME VARIES

★

SIDEBAR F

PIECES OF THE STANDARDS AND ASSESSMENT PUZZLE

Several groups, organizations, and states are already at work on major elements of a new assessment system. Among the projects in progress are the following:

New Standards Project. This effort, based at the University of Pittsburgh and the National Center on Education and the Economy in Rochester, New York, is funded by the John D. and Catherine T. MacArthur Foundation and the Pew Charitable Trust. It serves as a model for much of the national standard-setting and assessment activity. The project has begun work with 17 states and local school districts around the country to show how students can be helped to achieve high standards by setting clear targets for instruction and by providing the extra help and resources to those who need them to achieve the standards.

College Entrance Examination Board. The College Board is developing Pacesetter, an array of secondary-school syllabi, related assessments, and professional development activities for teachers. The syllabi spell out for all students standards to raise student expectations and improve performance. The program is being developed in cooperation with leading disciplinary associations and educational practitioners at all levels. The initial offering in mathematics is projected for 1993, to be followed by English, world history, science, and foreign languages.

Educational Testing Service. ETS is developing WORKLINK, an electronic information system linking local schools and employers. WORKLINK is an "employer friendly" record to make school performance count in the workplace. It provides to employers (1) a reformatted high school transcript that is easy to interpret; (2) work-skills assessment covering such aptitudes as reading and using manuals, everyday math, and writing skills; (3) information on job-related behavior; including punctuality, timely work completion, and willingness to follow directions; and (4) information on work experience and out-of-school training. Students will be able to use their records as a résumé, and employers will be able to locate potential employees from a computerized WORKLINK data base managed locally. (The résumé shown in Exhibit K is based, in part, on WORKLINK.)

American College Testing Service. ACT is developing Work Keys, a system for profiling, assessing, and teaching employability skills. The system includes a series of work-related assessments covering reading, writing, computation, problem solving, and reasoning; and SCANS-like interpersonal skills (e.g., negotiation, motivation, and oral communication). Employers will profile their jobs, individuals will be profiled on skills, and instruction will be provided, all based on a Work Keys skills matrix. Work Keys is being developed in cooperation with the American Association of Community and Junior Colleges, the National Association of Community and Junior Colleges, the National Association of State Directors of Vocational/Technical Education Consortium, the National Association of Secondary School Principals, and advisory panels from five participating states.

American Council on Education. ACE, which sponsors the GED tests that permit more than 400,000 adults each year to earn a high school diploma, is developing a new, competency-based, performance-driven, assessment effort to award diplomas, the national external diploma program (EDP). Expected to be available in 1992, EDP will permit adults to demonstrate skills acquired in work and life, including many of the SCANS foundation skills and competencies: communication; problem solving; teamwork; entry-level job skills; awareness of social, public, and scientific issues; technological competence; and the ability to manipulate, synthesize, and use data in context.

State and Local Initiatives. Along with these national efforts, many states and localities are developing their own standards and replacing statewide programs of testing with assessment systems. California is one of the leading states in these efforts, along with Connecticut, Kentucky, Maryland, New York, and others. The Council of Chief State School Officers has made the "School-to-Work Transition" a top priority for the next three years and established a national consortium of states to develop new assessment systems. One group is working on work readiness. Efforts are also proceeding in local districts. The Pittsburgh Public Schools, for example, have adopted a framework of Career/Life Skill Competencies similar to SCANS, and Los Angeles will warranty that all of its graduates are proficient in the SCANS know-how.



are expected to show up in the knowledge and skills of the students. These outcomes become, in effect, standards for all. A useful assessment not merely indicates success or failure in meeting the standards but identifies the degree of progress made in meeting them.

2. It assures that students are being taught what the system calls for, and that teachers are significantly involved in determining educational standards, outcomes, and goals.
3. It permits comparison of local performance to national benchmarks.
4. It protects students against sorting and labeling by moving away from distinguishing between "good" and "bad" to measuring performance against standards of what students should know and be able to do.
5. It is dynamic, meaning it can be improved on the basis of experience and of advances in knowledge.
6. It motivates students who believe that the assessment will count in the world beyond high school because they see that employers make decisions based upon the assessment.

The Commission supports these criteria and believes it is possible to move beyond the puzzle that frustrates most assessments: how to design an assessment system that has the credibility of absolute standards built into it without penalizing students who fail to reach the standards.

DESIGNING A SYSTEM

Moving from the six criteria just listed to a fair and equitable system of standard setting and assessment requires going beyond

simply creating new forms of tests. It also involves developing varied instructional opportunities and providing appropriate resources for students with special needs. (See Sidebar G for one special case, persons with limited English proficiency.) The problem is to design a system that establishes students' rights to an education up to a recognized, absolute standard of performance without putting the burden of failure on the backs of students. Here is the Commission's solution:

- Establish for all students, beginning in middle school, a cumulative résumé. The résumé will contain information about courses taken, projects completed, and proficiency level attained in each competency. When a student reaches the performance standard for certification in a SCANS competency, that certification will be noted on the résumé. When the student has accomplished enough to meet an overall standard, the résumé will show that he or she has been awarded a certificate of initial mastery (CIM). The CIM establishes the level of achievement to which the student is entitled. It is society's obligation to provide each student with multiple opportunities to achieve the CIM in school or other settings such as youth centers or on the job. Society and student are responsible, together, for reaching the standard.
- Students will be free to use their résumé in seeking employment or further education at any time. Employers can be expected to demand from students the highest level of certification that the job demands (e.g., high-performance workplaces can demand high skills, including—but not limited to—those required for the CIM).
- In the near future, while only a minority of jobs are in high-performance work-

State of New Jersey. VITAL LINK activities are being implemented both on a Statewide level and through a business-education partnership in Somerset and Hunterdon Counties.

At the Statewide level, large professional associations are being encouraged to participate in VITAL LINK concepts and activities. For example, in fall 1992 the Educational Testing Service, in conjunction with the State Department of Education, launched WORKLINK, a Statewide computer-resume program for students to use when applying for jobs. The program was introduced to business communities by Private Industry Councils (PICs), and will be maintained through PICs and local Chambers of Commerce. Additionally, the State Department of Vocational Education is developing competency standards for specific occupations.

VITAL LINK activities in Somerset and Hunterdon Counties are coordinated by the Somerset/Hunterdon Business and Education Partnership. Local businesses, many of which have actively participated in educational outreach, are now coordinating their efforts through VITAL LINK activities. The Partnership is encouraging long-term changes in curriculum and a focus on communications and work-related skills.

CONTACTS:

The national contact is Mary Lou McDonald, Manager, Communications, American Business Conference, 1730 K Street N.W., Suite 1200, Washington DC 20006, (202) 822-9300.

For Fort Worth, the contacts are Dr. C. Gary Standridge, Director, Research, Evaluation, and Development, Fort Worth Independent School District, 3210 West Lancaster, Fort Worth, TX 76107; and Donna Parker, Vice President-Urban Development, Fort Worth Chamber of Commerce, 777 Taylor Street, Suite 900, Fort Worth, TX 76102-4997, (817) 336-2491.

For New Jersey, the contacts are Mary Ann Grumelli-Boychuck, Program Administrator, Educational Initiatives, State Department of Education, 225 West State St., CN 500, Trenton, NJ 08625-0500, (609) 292-9865; and Ms. Dana Egreczky, Executive Director, Somerset/Hunterdon Business and Education Partnership, 64 West End Avenue, P.O. Box 833, Somerville, NJ 08876-0833, (908) 725-6032.

For Orange County, the contact is Kathleen T. Jones, Vice Chancellor, University Advancement, University of California-Irvine, Administration 555, Irvine, CA 92717-5600, (714) 856-7915.

114 Walnut Street,
P.O. Box 969,
Harrisburg, PA 17108-0969
717-232-4121



October 27, 1992

Dear Chamber Member:

You are invited to participate in an exciting new program that will help you recruit better qualified employees. Our Chamber is launching here in the Harrisburg area this new program called "WORKLINK™", offered by the National Association of Secondary School Principals and the Educational Testing Service.

WORKLINK™ is an electronic record/resume for high school students that will go beyond existing transcripts to include business skills, work performance ratings, work experience, honors, awards, etc. Employers can directly access the regional database of WORKLINK™ records.

The WORKLINK™ program was developed especially to help employers in hiring entry level employees. Your interest in WORKLINK™ can also make an immediate difference to young people in our community by increasing their incentives to work hard in school. WORKLINK™ gives the message to young people that what they do in school counts in the workplace.

Help us deliver the message! Please join us in the WORKLINK™ program. Please fill out the attached card in the brochure and return it to . . .

CAPITAL REGION CHAMBER OF COMMERCE
PO BOX 969
HARRISBURG, PA 17108-0969

A handwritten signature in cursive script that reads "Barbara Y. Groce".

Barbara Y. Groce
Vice President

YVG/bab

Enclosure: WORKLINK Brochure

How WORKLINK™ works for you.)

The more information you have about an applicant's real skills, the better your hiring decisions, and the less your employee turnover will be. Each WORKLINK™ record saves you time and money on your recruitment efforts by providing:

- ✓ A standard summary high-school transcript that is easy to read and interpret
- ✓ Teachers' confidential ratings of a student's work-related behavior, including effective communications, punctuality, attendance, and the completion of assigned work
- ✓ Assessments of work skills covering such aptitudes as math, reading, and writing
- ✓ Information on work experience — and work-related or out-of-school training — with references so that the information can be easily verified

→ WORKLINK™ has all this information on an electronic database which you can search for a list of names that match your job needs.



WORKLINK

The school-to-work record system that means business

The information you need to make sound hiring decisions

Developed in cooperation with Chambers of Commerce and Private Industry Councils

AFFIX
STAMP

Capital Region Chamber of Commerce
PO Box 969
Harrisburg, PA 17108-0969

What is WORKLINK™?

WORKLINK™ saves you time and money on recruitment and helps you make sound hiring decisions.

WORKLINK™ is a computer-based student record system to assist employers in hiring entry-level employees. At the heart of the system is a database of individual records of students' high school performance.

How do the student records differ from transcripts? They provide job-related information for employers in an "employer-friendly" format that can be accessed directly.

How WORKLINK™ improves your applicant pool.

WORKLINK™ gives high-school students an incentive to study and earn good grades by showing that employers care about their high school grades and other activities.

The WORKLINK™ record encourages students to develop good working habits by including assessments of work habits important to employers.

The WORKLINK™ record helps students organize and report their accomplishments in a structured format — making it easier for them, and for you, to engage in interviews.

Who is developing WORKLINK™

WORKLINK™ is being developed by Educational Testing Service in partnership with the National Association of Secondary Principals. Other organizations who support WORKLINK™ include the National League, the National Alliance of Business, and the American Business Conference.

How does WORKLINK™ work?

WORKLINK™ involves the high schools, the business community, and the students. High school staff recruit students and help them develop their WORKLINK™ records. Business organizations recruit employers and explain how to use the records. Students use their WORKLINK™ records to find a job.

Student WORKLINK™ records are put in a regional database which employers can search for potential hires who meet the criteria they specify. Students can get printouts of their records to take to interviews. Employers can also use the system to verify the authenticity of WORKLINK™ records presented by job applicants.

Employers can get information from the WORKLINK™ database either by modem, by telephone, or by FAX.

The local business organization maintaining the WORKLINK™ database determines any fees charged for the service.

PERSONAL WORKLINK™ RECORD

Just Johnson
10 Main Street
Mechanicsville, PA 17108
Home Phone: (717) 228-1111

Date of Report: 2/28/91
Sec. No.: 301-294728
Date of Birth: 01/06/72
Age: 12
Sex: Female

Gender and race/ethnicity
data will be submitted only
for affirmative action use.

Workplace Skills Assessment		Basic Knowledge/Skill Level (T-test, R-teacher rating)	
Reading	1000	Qualified	7
Business Address	1000	Qualified	7
Business Writing	1000	Qualified	8
Spelling Skills	1000	Qualified	8

Subject Field	Grades 9-10		Grades 11-12	
	No. of Courses	GPA	No. of Courses	GPA
English Composition	0	0.0	2	2.7
Mathematics	0	0.0	1	0.0
Science and Technology	0	0.0	1	2.0
Foreign Language	0	0.0	2	2.7
Social Studies	0	0.0	0	0.0
Business Education	2	3.0	2	3.0
Health, Physical Education	2	2.0	0	0.0
Computer Science	2	3.0	0	0.0

Job Related Course Concentration - Business			
	GPA	Year	Portfolio (Y/N)
Introduction to Accounting	2.0	000	N
Work in Business	3.0	000	N
Office Math/Word	2.0	000	N
Practical Concepts of Business	2.0	000	N
Business Writing	3.0	001	Y
Accounting and Marketing	3.0	001	Y
Computer Graphics	3.0	001	Y

Rating of Work-related Performance		
	Average Rating	No. of Ratings
Attendance	Excellent	10
Punctuality	Excellent	10
Work Completion	Excellent	10
Initiative/Job Involvement	Good	10
Cooperation in Class	Good	10
Following Directions	Good	10
Communicating Effectively	Good	10
Problem Solving	Good	10
Working Independently	Excellent	10
Working without Supervision	Good	10

Education and Training	Place	Reference
College (Undergrad)	YCA	Phone: (717) 427-4201
Training		
Work-related Training	Central High School	400 Pine St. (717) 427-4201

Work Experience	Place	Reference
Retail Sales/Clipping	1. Action Plus	1017 Montgomery (717) 427-4201
Restaurant/Waitress	2. Best Place Cafe	1017 Montgomery (717) 427-4201
Volunteer Work	3. Home Depot	1017 Montgomery (717) 427-4201

Awards, Honors	Source	Reference
Community Service Award	Home Depot	1017 Montgomery (717) 427-4201
Class Valedictorian	Central High School	400 Pine St. (717) 427-4201

LEHIGH VALLEY 2000:
A BUSINESS-EDUCATION PARTNERSHIP

September 25, 1992

RECEIVE

OCT - 7 1992

PA CLIN

THE PENNSYLVANIA COMMUNITY LEARNING AND INFORMATION NETWORK:
A HIGHWAY TO PENNSYLVANIA'S FUTURE

Lehigh Valley 2000 (A Business-Education Partnership), Bell of Pennsylvania and the Bell Atlantic Corporation cordially invite you to a demonstration of how technology and telecommunications can dramatically enrich Pennsylvania. On October 22, 1992 we will describe plans to establish a statewide learning and information network that will serve the educational, business, government, and professional sectors. On that day, we will link video rooms in Bethlehem, Harrisburg, Philadelphia and Pittsburgh to demonstrate the effectiveness and cost efficiency of distance learning.

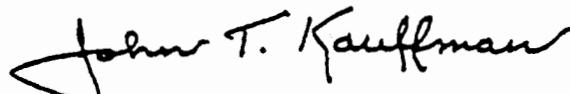
During the presentations on October 22, you will hear and see how available and relatively inexpensive technology can bring the finest teaching and training programs to any part of the state, with people at distant sites able to see and hear each other. You will learn how through State Senator James Rhoades' leadership State Public School Building Authority funds have been made available as low-cost loans to school districts that want to join the network.

You will also learn why Community is stressed in PA CLIN. Most sites will be at public high schools. Outside of regular school hours, the distance learning rooms will be available for computer-assisted instruction and interactive video conferencing to businesses, government agencies and other groups for their training and informational programs. The revenues generated by these after-hour activities could underwrite the initial capital and ongoing operational costs of the network.

PA CLIN will be an affiliate of The National Community Learning and Information Network or CLIN, Inc., a newly created not-for-profit corporation formed by leaders representing education, the United States Chamber of Commerce, the Defense Advanced Research Projects Agency, industry and academia.

October 22 is your opportunity to see the future. Since requests for reservations are already high, please return the enclosed form promptly.

Sincerely,



John T. Kauffman
Chairman, Lehigh Valley 2000:
A Business-Education Partnership

PA - CLIN

THE PENNSYLVANIA COMMUNITY LEARNING AND INFORMATION NETWORK

WHAT WILL IT DO?

The prototype PA CLIN will strengthen education, training, and information programs in approximately twenty Pennsylvania communities. It will be the first of the elements that will eventually form a statewide PA CLIN.

In education, the Network will

- ♦ Provide demonstrably effective in-service programs for teachers. The initial emphasis will be on strengthening mathematics and science education in the early and middle grades.
- ♦ Extend scarce or special resources so that a number of schools can share one course and teacher may be shared simultaneously by many schools. This will address the equity issue by making honors and advanced placement courses available to districts that cannot offer them now. For example, every high school in the Network will have access to courses in calculus, intermediate physics, organic chemistry, language and other courses taught by master teachers.
- ♦ Allow administrators and school boards from different districts to meet by interactive videoconference.
- ♦ Where cable or wireless technologies permit, link school programs directly to home television sets.

In business and industry, the Network will

- ♦ Provide high quality, low-cost employee and staff training programs. These may be offered by individual companies for their own employees and by the United States Chamber of Commerce, the American Management Associations, and other national organizations.
- ♦ Provide access to potential customers through special interactive videoconference demonstrations.

In the professions, The Network will

- ♦ Provide interactive videoconferencing for professional development and updating programs.

- Provide interactive videoconferencing for time saving regional meetings.

In local, state, and national government, the Network will

- Provide high-quality, low-cost, time-saving training programs, including programs for military personnel.
- Provide training and updating programs for emergency management personnel.

WHAT TECHNOLOGY WILL IT USE ?

Each PA CLIN site will have a 25-station fully interactive (video, audio, and graphics) room that can be linked during a program to other rooms in the Network. Transmission will be by compressed video, a cost-effective method that uses T-1 telephone lines.

Eventually each site will also have a 25-station computer room with PC's on-line to a wide variety of self-instructional and other software programs, and to data bases in the public domain.

PA CLIN will have the capacity to uplink its programs to locations outside the Network and to downlink satellite programs originating elsewhere.

HOW WILL IT BE ORGANIZED ?

PA CLIN will be the first regional affiliate of CLIN, Inc., the non-profit national network corporation created by leaders representing the U.S. Chamber of Commerce, Department of Defense, Industry, Education and Academia.

PA CLIN will be a non-profit entity incorporated in the Commonwealth of Pennsylvania. Its board of directors will represent educational, business, professional, government, and civic interests.

→ PA CLIN will be responsible for maintaining and scheduling the network. It will coordinate and develop programming for K-12 institutions. It will coordinate and market programming for presentation outside of normal school hours.

HOW WILL IT BE FINANCED ?

Low-cost loans from the State Public School Building Authority or favorable lease arrangements from Bell Atlantic can underwrite school districts' initial capital expenditures.

PA CLIN

THE PENNSYLVANIA COMMUNITY LEARNING AND INFORMATION NETWORK, INC.

WHAT IS PA CLIN?

PA CLIN is a not-for-profit Pennsylvania corporation created to apply telecommunications technology

- to strengthen and expand K-12 education throughout the Commonwealth;
- to make highly-effective, low-cost training programs available to the business, industry, government, and professional sectors; and
- to place Pennsylvania in the vanguard of distance learning development.

PA CLIN reflects the design a group of Lehigh Valley educators submitted to the United States Chamber of Commerce to begin a national community learning and information network. The details of PA CLIN have been discussed with State Senators Rhoades and Reibman, with Pennsylvania government officials, with Lt. Gen. (Ret.) Clarence McKnight and Samuel Wyman at CLIN, Inc., with Jeffrey Josephs at the United States Chamber of Commerce, and with educators throughout the State.

PA CLIN's founding incorporators are

Edward Donley, retired chairman of Air Products and Chemicals, Inc. A vigorous proponent of strengthening American education at all levels, Mr. Donley is chairman of the board of the AMERICA 2000 COALITION, co-chair with Governor Robert Casey of Pennsylvania 2000, and director of Lehigh Valley 2000: A business-Education Partnership.

In addition to PA CLIN, Mr. Donley's board memberships include American Standard, Inc., (Chairman) , Pennsylvania Power & Light Company, Mellon Bank, and the National Endowment for Democracy. He served as chairman of the United States Chamber of Commerce in 1986/87.

John T. Kauffman, Chairman and Chief Executive Officer of Pennsylvania Power & Light Company. He is chairman of the Edison Electric Institute CEO Steering Committee on Education and chairman of Lehigh Valley 2000: A Business-Education Partnership.

In addition to PA CLIN, Mr. Kauffman's board memberships include the U.S. Council for Energy Awareness, the American Nuclear Energy Council, the US Chamber's Center for Workforce Preparation and Quality Education, and the AMERICA 2000 COALITION.

J. Jackson Eaton, III, A Partner in the law firm of Gross, McGinley, LaBarre & Eaton (Allentown, Pa.). Mr. Eaton's firm is active in media law and represents newspapers, television stations, magazine publishers, and television production and syndication companies.

Mr. Eaton is general counsel for a multi-state not-for-profit health care corporation. He also served as an attorney in the office of general counsel for the Secretary of Defense.

PA CLIN's corporate officers and other principals are:

Howard Graeffe, President. Mr. Graeffe is a principal in Graeffe & Associates. The company, formed in 1985, is an investment and consulting firm specializing in financial planning, investment analysis, and the development and implementation of financial strategies for commercial clients. Graeffe & Associates is a principal in various investments.

Mr. Graeffe serves on Pennsylvania State Senator James Rhoades' Distance Learning Task Force as a committee chair, on the Lehigh Valley 2000 Business Education Partnership, and on the Southern Lehigh School Board. He has lectured at the University of Pennsylvania's Wharton School Evening Division, at Temple University's School of Continuing Education, and at the Main Line Evening School.

Henry Acres, Vice President and Secretary. Mr. Acres wrote the original proposal for the United State Chamber of Commerce CLIN Program. Shortly after that, he was program chairman and general chairman of the seven-state coalition that developed the 1992 I-2000 Star Schools proposal.

Mr. Acres was president of the Great Lakes Colleges Association, a consortium of 12 independent liberal arts colleges Indiana, Michigan, and Ohio. At GLCA Acres developed and coordinated domestic programs in New York City, Philadelphia, Oak Ridge, and Washington, D.C. He was responsible for overseas programs in Beirut, Bogota, Madurai (South India), and Tokyo.

Mr. Acres was also chancellor of Educational Ventures, Inc., a corporation created to help Cedar Crest and Muhlenberg Colleges share resources creatively. He is senior consultant at Cedar Crest College.

Terry Christman, Treasurer. A certified public accountant, Mr. Christman is the principal in the accounting firm of Christman and Company. Previously, he was a partner at Miller, Miller, and Christman.

Mr. Christman has served clients in the manufacturing, construction, professional practice, and not-for-profit sectors. He is a specialist in financial reporting.

Mr. Christman is an active volunteer in various community organizations.

Susan Mullins, Senior Planner. Ms. Mullins is Director of Bergen County ITV, a fiber optics network of eighteen public high schools and colleges. Her roles include research and development, planning and financing, market development, technical assistance, operations and maintenance, and administrative oversight.

Ms. Mullins has lectured extensively and given workshops and teacher training seminars on distance learning. She was Chief Writer/Editor on the 1992 Star Schools I-2000 Project.

Dr. Harold Basseches, Senior Planner. Dr. Basseches had a long, distinguished career at AT&T's Bell Laboratories, where he contributed to many developments in microelectronics. He has been active for more than thirty years on Bell's education programs concerned with technical obsolescence of scientists and engineers. He has served on the Education Subcommittee of the Semiconductor Research Corporation. From 1982-87, he was Chairman of the Pennsylvania Bell Laboratories Education Committee. He also serves on Pennsylvania State Senator James Rhoades' Distance Learning Task Force.

Dr. Basseches was Project Manager for an interactive Lehigh University-Bell Laboratories' network and worked closely with Lehigh Valley educators in preparing their LVIVEN submission to the 1990 Star Schools Program. He was a principal contributor to I-2000.

AMERICA 2000 COALITION MEMBERS

Akron Oxygen & Supply Co., Inc.
Air Products and Chemicals, Inc.
Allstate Insurance Company
The Aluminum Association, Inc.
American Association for Adult and
Continuing Education
American College Testing
American Gas Association
American Red Cross
American Standard Inc.
American Trucking Associations
Association for Women's Health,
Obstetrical, and Neonatal Nurses
BLS, Inc.
Binney & Smith, inc. makers of Crayola
brand products
Bravo Network
Business & Education Foundation
The Business Roundtable
Can Manufacturers Institute
Carnegie Mellon University
Child Welfare League of America
Citizen's Scholarship Foundation of
America, Inc.
Cities In Schools, Inc.
Edison Electric Institute
The Educational Publishing Group, Inc.
Entergy Corporation
Family Service America, Inc.
Girl Scouts of the U.S.A.
Hewlett-Packard Company
IBM Corporation, Southern Region
Independent Bankers Association of
America
Jobs for America's Graduates, Inc.

KidsPeace Corporation
Kroger Company
Laubach Literacy Action
Literacy Volunteers of America, Inc.
3M
Motorola
National Alliance of Business
National Association of Partners in
Education, Inc.
National Association of Temporary
Services
National Center for Family Literacy
National Community Education
Association
National Council of La Raza
National Electrical Manufacturers
Association
National Energy Foundation
National Executive Service Corps
National Institute of Former Governors
National Science Resources Center
National Urban League
Pennsylvania Power & Light Company
Points of Light Foundation
Rohm and Haas Company
SER - Jobs for Progress, Inc.
The Salvation Army
Siemens Corporation
The J.M. Smucker Company
United States Space Foundation
University Support Services
Vanderbilt University
Very Special Arts
Wal-Mart Stores, Inc.
YWCA of the U.S.A.

Funding for the AMERICA 2000 Coalition has been provided by the Richard King Mellon Foundation, Merrill Lynch and Company, Inc., and Siemens Corporation.



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President, Cities In Schools, Inc.

Richard F. Schubert
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Individualized Curriculum for Cost-Effective Education

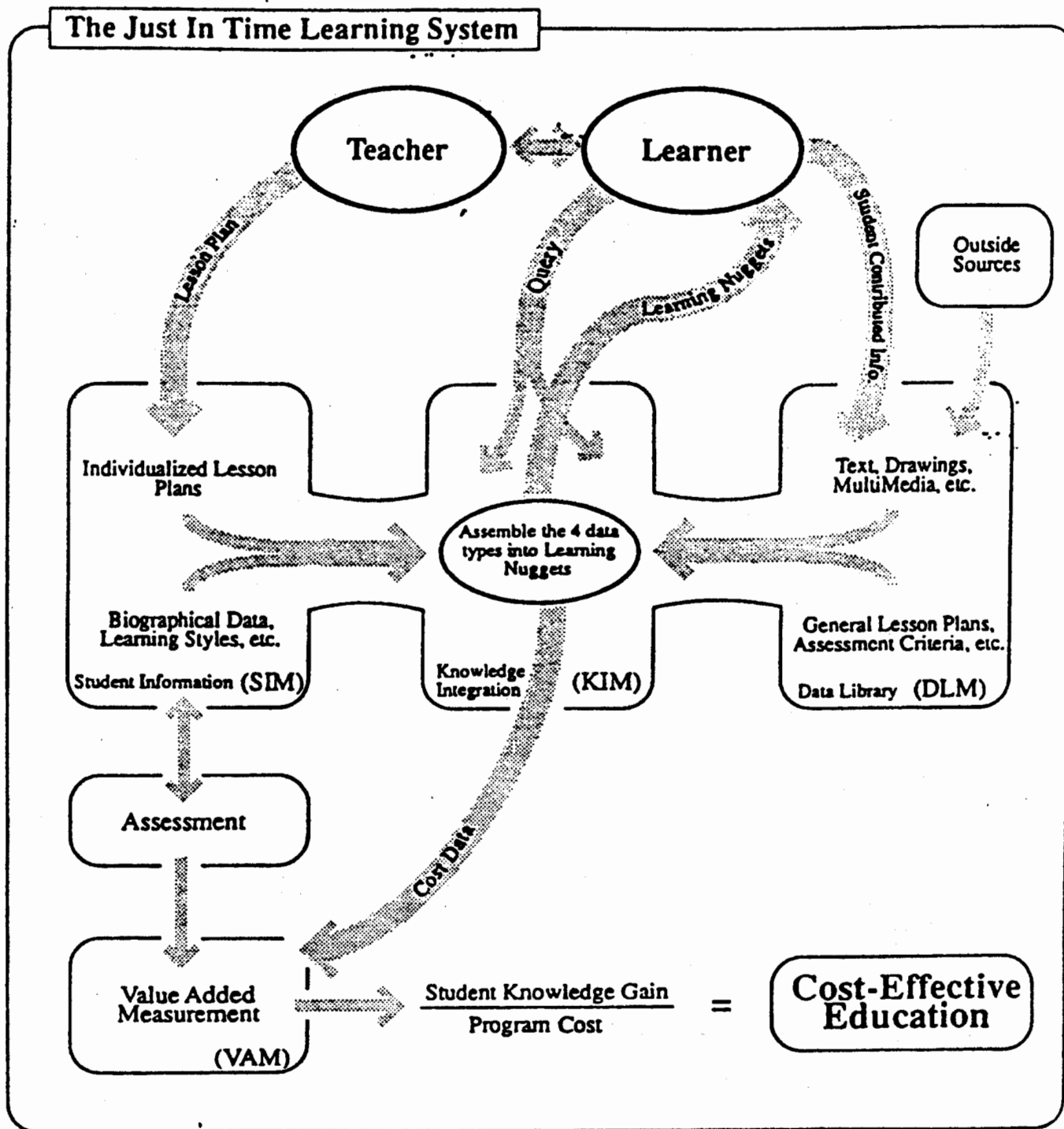


Figure 1



EDUCATIONAL TECHNOLOGY

A Handbook of Standard Terminology and a Guide for Recording and Reporting Information About Educational Technology

**State Educational Records and Reports Series:
Handbook X**

Ivan N. Seibert
Project Officer
National Center for
Education Statistics

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
David Mathews, *Secretary*
Education Division
Virginia Y. Trotter, *Assistant Secretary for Education*
National Center for Education Statistics
Francis C. Nassetta, *Acting Administrator*

TEACHING THE SCANS COMPETENCIES



THE SECRETARY'S COMMISSION ON ACHIEVING NECESSARY SKILLS
U.S. DEPARTMENT OF LABOR

1993



teachers to print out curriculum materials, homework assignments, notes to parents, and many other items. Students can print out papers and other classroom assignments.

Integrated Learning Systems (ILS) Labs

ILS labs can provide high-quality instruction and a sophisticated individualized capability for virtually all students--low-achieving, average, gifted, English-as-a-second-language, etc. These labs consist of a teacher presentation system linked to computer workstations for 25-30 students each. Computer-assisted courseware combines new techniques for presenting information with extensive use of graphics, color, learning environments, and interactive learning tools.

Teachers can choose to provide whole-class instruction, or run exercises that allow students to receive specialized, individualized attention. Many respondents suggested purchasing at least one (and possibly more) of these systems to augment the teacher and student workstations already in each classroom.

Entire classes are able to sign up for a lab session, allowing every student to have a computer station. Teachers are able to use their lab-presentation system to monitor each student's performance individually and collectively. This way, students get more hands-on experience with computers, and teachers are able to assess students' progress quickly and effectively.

Compact-Disk (CD-ROM) Players

CD-ROM is a technology that is not only affordable but, if used properly, has the potential to revolutionize the way students learn. CD-ROM players should be considered for almost every classroom, as well as for a school's resource center. Classroom workstations linked with these players are transformed into resource centers enabling teachers and students to access video, audio, computerized graphics, text, and animation, and to interact with their computer screens about virtually any subject.

CD disks can store an amazing amount of information--depending on manufacture and type, more than 250,000 typed pages of text, 7,000 photographic quality images, 72 minutes of full-screen animation, and 19 hours of speech. CD-ROM players themselves will play regular CD-audio disks and computer graphics-CD disks, and are full-motion video-ready (which means that information in video form can be seen and manipulated on-screen through the use of the CD-ROM player).

Computer File Servers

Computer file servers are machines that link computers into Local Area Networks (LANs). Within each LAN, separate computer workstations

CLIENT ORIENTATION

OVERVIEW
 Assessment Process
 Designed Curriculum

PHASE I

BASIC LITERACY CAREER SEARCH
 TABE ABE *COMPUTER LITERACY COMPARATIVE
 MAPS GED CAREER
 MESA BSA INVENTORY

CHOICES
 GIS

**LEARNING STYLE INVENTORY

Employability Skills PHASE II

LIFE "SURVIVAL" SKILLS
 Budgeting
 Credit
 Parenting
 Stress/Coping
 Pre-Employment

BEHAVIORAL SKILLS
 Self-Esteem
 Values
 Attitudes
 Motivation

INTERPERSONAL/"THINKING" SKILLS
 Interpersonal Relations
 Critical Thinking
 Problem Solving
 Communications

B.F. Pre/Post Assessments

Myers-Briggs Type Indicator
 Gordon Personalities
 Profiles

Kolb Inventories
 Learning Style
 Creative Style

Curriculum

Budgeting - 3 hour block
 Credit - 3 hour block
 Parenting - 4 hour block
 Stress - 3 hour block
 Pre-Employ. - 4 hour block

Curriculum

Self-Esteem - 3 hour block
 Values Clarification - 3 hour block
 Attitude - Behavior - 4 hour block
 Motivation - 4 hour block

Exercises/Simulations

Stuck Truck
 (Experiential Learning Model)
 Cardiotronics
 (Problem Management Model)
 Influencing Strategies

Interpersonal/Thinking Curriculum

Interpersonal Relations - 4 hour block
 Critical Thinking - 4 hour block
 Problem Solving - 4 hour block
 Communications - 6 hour block

PHASE III

INSTITUTIONAL OCCUPATIONAL
 TRAINING

Vocational
 Advance Technologies

O. J. T.

"Learn by doing"

EMPLOYER TRAINING

Task Specific

WHO IS.....

"AT RISK"?

.....OR

How Will My Child Be
Remediated To Meet
Exit Outcomes In Order
To Graduate?

AT RISK STRATEGIES



Self-concept

(Shyness, chip on the shoulder)

Identification of feelings

(Children from dysfunctional families cannot identify feelings)

Communication of feelings

(Children sometimes don't have the words to express how they feel)

Social interaction skills

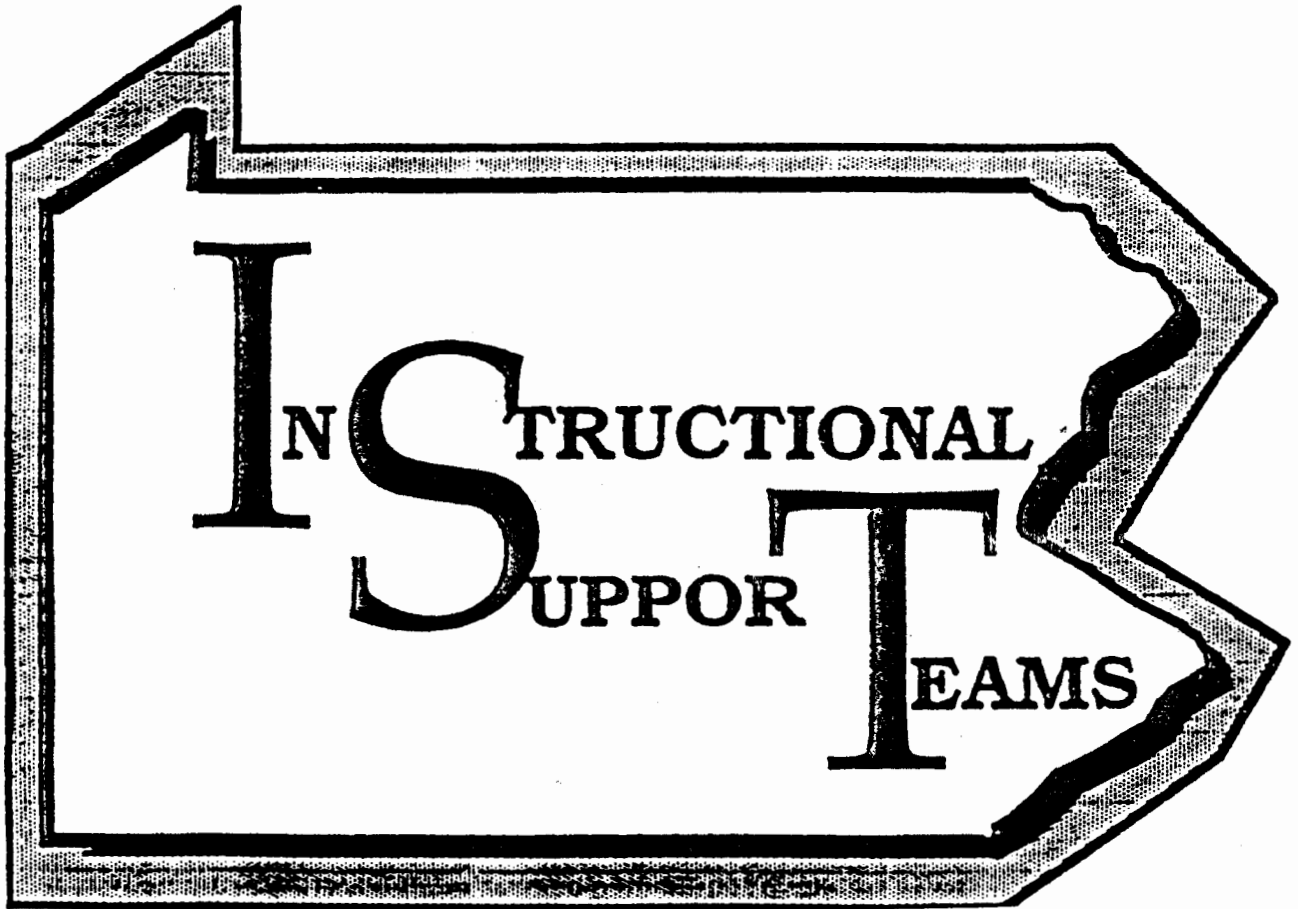
(Aggressive/withdrawn (lost) child)

Decision making skills

Life Skills Area + Life Stressors Area = Behavior/Performance Indicators

Examples of life stressors: starting school, divorce, death, drugs, neglect, moving, retention, disease, new parent, abuse, family

Examples of behavior/performance indicators: class clown, steals, cheats, absent, withdrawn, distracted, sick, inattentive, abusive



Independence Middle School

November 2, 1992

**A Pennsylvania Department of Education
program for grades K-6**

Presenter: Mr. James Mangino

**INSTRUCTIONAL
SUPPORT**

PLANNING GUIDE

**for Phase III Districts
1992-93 School Year**



**Pennsylvania Department of Education
Bureau of Special Education**

INTRODUCTION

The purpose of this publication is to provide basic information concerning Instructional Support and address questions the Department of Education (PDE) has received. This information should assist school districts in planning and submitting local applications. This document reflects PDE's plans for the implementation of the Instructional Support Initiative. As further information and/or any change in plans becomes available school districts will be notified.

General information regarding the Instructional Support Initiative and local school district implementation is available through the newsletter *Instructional Support Update*. Specific questions should be directed to the PDE personnel listed in the Directory of this publication.

WHAT IS THE IST?

The revised Special Education Regulations and Standards stipulate that each elementary aged student who experiences academic difficulty will have access to instructional support. This requirement is to be phased-in over a five-year period as described in this document. School districts are required to institute the IST process by 1995, however, only districts which have volunteered are currently participating.

The instructional support process is composed of assessment and intervention procedures that are used to assure that students receive an effective instructional program, as well as other school services, that will meet their learning needs. The hub of the instructional support process is the Instructional Support Team (IST), which meets on a regular basis to assist classroom teachers in planning and implementing strategies that are designed to produce success for the identified students. Each IST is aided by an instructional support teacher, specially trained to assist other teachers in meeting the goals set by the team. It is the responsibility of the IST to implement a screening process which includes the recommendation of specific instructional support services to meet the needs of the students, and the assessment of the degree of need of students whom IST assistance is requested.

The major components of instructional support are:

- Collaborative consultation/team building
- Curriculum-based assessment
- Instructional adaptation
- Behavior management
- Student assistance/Life skills

The IST process represents an incorporation of a number of best practices piloted throughout the state over the past several years. Particular efforts have been made to include critical elements of the Elementary Student Assistance Team process. Dr. Gary Ledebur, Director of the Bureau of Basic Education Support Services, and Dr. James A. Tucker, Director of the Bureau of Special Education, described the merger of these two efforts in the September 5, 1990 memo. Therefore, districts participating in IST training will receive Student Assistance training at the elementary level. It is expected that approximately 100 school districts will receive this training each year throughout the five year phase-in period.

TEAMING

Benchmarks of Effective Practice

In the process of providing instructional support to identified students, the IST engages in a collaborative problem solving process that incorporates the following actions. The IST precisely identifies the problem based on assessment information and sets measurable goals for student success. The IST uses brainstorming to generate alternative solutions and classroom strategies, and discuss possible outcomes for each idea. After a consensual decision is reached on recommendations to implement, involved staff are assigned to support the intervention and to monitor its effects. The IST decides on how to ascertain that their recommended course of action has been operationalized and monitored as specified, and how to evaluate the effectiveness of the intervention. After the completion of the classroom-based intervention, the IST analyzes the student's progress and makes appropriate decisions.

The IST periodically examines its own effectiveness and efficiency in completing its mission through team maintenance techniques.

Is there evidence that these features are in place?

Strengths

Areas for Improvement

Comments/Commendations

Rank as minimal effective model

STUDENT ASSESSMENT

Benchmarks of Effective Practice

The IST identifies student's instructional levels using curriculum based assessment techniques. For each student displaying academic problems, the student is assessed on material from the instructional curriculum and the level of difficulty of the material is checked. The assessment includes an appraisal of the student's mechanics and comprehension/understanding in the area(s) of concern. The assessment yields the students' strengths and weakness and allows the assessor(s) to compare this with what the teacher's expectations are as they begin to consider interventions.

For each student exhibiting behavioral/affective problems, the IST identifies the student's inappropriate behaviors in the classroom, life stressors and coping skills (i.e., self-concept, decision-making, social interaction and identification/communications with the student, and plans for helping the student behave appropriately. Parents are included whenever possible.

The classroom-based assessment in both academic and behavioral/affective areas is sufficient to provide information regarding the development of appropriate classroom interventions. Once the intervention is initiated, continuous monitoring of student progress on the targeted skill(s) is conducted during the instruction support period. The IST determines the student's rate of acquisition and retention in the area(s) of concern throughout the intervention period, and student's degree of need at the end of the intervention period.

Is there evidence that these features are in place?

Strengths

DESIGN AND IMPLEMENTATION OF CLASSROOM INTERVENTIONS

Benchmarks of Effective Practice

The interventions implemented during the instructional support period are based on the initial assessment of the student receiving instructional support in academic, behavioral, affective, and/or classroom discipline areas. During the intervention period, direct instructional services are provided to identified students in the regular classroom in order to determine the instructional level, to establish the intervention, and to search systematically for strategies that produce successful classroom performance and/or personal adjustment. These activities are conducted by the support teacher or other members of the IST for that student, in support of the regular classroom instruction. As the intervention period progresses, the classroom teacher incorporates the intervention into the regular classroom routine, as supported by the continuum of regular education services. In using the continuum of services, the school provides services to students in an ordered priority fashion from least intensive to most intensive levels.

If there is an academic skill deficit, the student is systematically taught at the instructional level in areas of concern throughout the intervention period. Instructional materials are adapted to accommodate student learning needs. Teachers also may adapt testing, homework, and grading procedures to accommodate identified students. In any adapted activity, teachers adjust the difficulty level to conform to the margin of challenge necessary to motivate students to learn.

If the student has a behavioral/affective need, the IST identifies and puts into practice strategies to build self-concept, decision-making skills, social interaction skills, and/or skills for identification/communication of feelings. For classroom discipline problems, precise definitions of appropriate and inappropriate behavior are defined at the school and classroom levels. A structured discipline plan includes direct communication about what to do, when to do it, and the degree of accuracy required. Parent responsibility and accountability for student behavior is promoted.

OUTCOMES -***Benchmarks of Effective Practice***

The school reports required data to the Department of Education on an annual basis, including numbers of students served by IST, numbers of students referred for multidisciplinary evaluations, numbers of students placed in special education, and numbers of students retained in grade.

In addition, the school maintains data on the effectiveness of IST for individual students receiving IST services. Examples in reading include changes in work identification, word fluency, and comprehension; in math computational and problem solving skills; in discipline, changes in rates of inappropriate behavior.

The school maintains data on the effects of IST on the school in general. Examples include standardized test scores, reports of behavioral incidents, disciplinary referrals, suspensions, numbers of eligible students served in regular and itinerant programs, student hours spent in special education, and numbers of eligible students served by IST.

Is there evidence that these features are in place?
Strengths

Area for Improvement

Comments/Commendations

Rank as minimal effective model

Taxonomy of Educational Objectives

Book 1 Cognitive Domain

Benjamin S Bloom EDITOR



Longman

TAXONOMY OF EDUCATIONAL OBJECTIVES

The Classification of Educational Goals

HANDBOOK II: AFFECTIVE DOMAIN

By

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APPENDIX B

A Condensed Version of the Cognitive Domain of the Taxonomy of Educational Objectives

KNOWLEDGE

1.00 KNOWLEDGE

Knowledge, as defined here, involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting. For measurement purposes, the recall situation involves little more than bringing to mind the appropriate material. Although some alteration of the material may be required, this is a relatively minor part of the task. The knowledge objectives emphasize most the psychological processes of remembering. The process of relating is also involved in that a knowledge test situation requires the organization and reorganization of a problem such that it will furnish the appropriate signals and cues for the information and knowledge the individual possesses. To use an analogy, if one thinks of the mind as a file, the problem in a knowledge test situation is that of finding in the problem or task the appropriate signals, cues, and clues which will most effectively bring out whatever knowledge is filed or stored.

1.10 KNOWLEDGE OF SPECIFICS

The recall of specific and isolable bits of information. The emphasis is on symbols with concrete referents. This material, which is at a very low level of abstraction, may be thought of as the elements from which more complex and abstract forms of knowledge are built.

1.11 Knowledge of Terminology

Knowledge of the referents for specific symbols (verbal and nonverbal). This may include knowledge of the most generally accepted symbol referent, knowledge of the variety of symbols

which may be used for a single referent, or knowledge of the referent most appropriate to a given use of a symbol.

To define technical terms by giving their attributes, properties, or relations. Familiarity with a large number of words in their common range of meanings.¹

1.12 Knowledge of Specific Facts

Knowledge of dates, events, persons, places, etc. This may include very precise and specific information such as the specific date or exact magnitude of a phenomenon. It may also include approximate or relative information such as an approximate time period or the general order of magnitude of a phenomenon.

The recall of major facts about particular cultures.

The possession of a minimum knowledge about the organisms studied in the laboratory.

1.20 KNOWLEDGE OF WAYS AND MEANS OF DEALING WITH SPECIFICS

Knowledge of the ways of organizing, studying, judging, and criticizing. This includes the methods of inquiry, the chronological sequences, and the standards of judgment within a field as well as the patterns of organization through which the areas of the fields themselves are determined and internally organized. This knowledge is at an intermediate level of abstraction between specific knowledge on the one hand and knowledge of universals on the other. It does not so much demand the activity of the student in using the materials as it does a more passive awareness of their nature.

1.21 Knowledge of Conventions

Knowledge of characteristic ways of treating and presenting ideas and phenomena. For purposes of communication and consistency, workers in a field employ usages, styles, practices, and forms which best suit their purposes and/or which appear to suit best the phenomena with which they deal. It should be

¹Each subcategory is followed by illustrative educational objectives selected from the literature.

recognized that although these forms and conventions are likely to be set up on arbitrary, accidental, or authoritative bases, they are retained because of the general agreement or concurrence of individuals concerned with the subject, phenomena, or problem.

Familiarity with the forms and conventions of the major types of works; e.g., verse, plays, scientific papers, etc.

To make pupils conscious of correct form and usage in speech and writing.

1.22 Knowledge of Trends and Sequences

Knowledge of the processes, directions, and movements of phenomena with respect to time.

Understanding of the continuity and development of American culture as exemplified in American life.

Knowledge of the basic trends underlying the development of public assistance programs.

1.23 Knowledge of Classifications and Categories

Knowledge of the classes, sets, divisions, and arrangements which are regarded as fundamental for a given subject field, purpose, argument, or problem.

To recognize the area encompassed by various kinds of problems or materials.

Becoming familiar with a range of types of literature.

1.24 Knowledge of Criteria

Knowledge of the criteria by which facts, principles, opinions, and conduct are tested or judged.

Familiarity with criteria for judgment appropriate to the type of work and the purpose for which it is read.

Knowledge of criteria for the evaluation of recreational activities.

1.25 Knowledge of Methodology

Knowledge of the methods of inquiry, techniques, and procedures employed in a particular subject field as well as those employed in investigating particular problems and phenomena. The emphasis here is on the individual's knowledge of the method rather than his ability to use the method.

Knowledge of scientific methods for evaluating health concepts.

The student shall know the methods of attack relevant to the kinds of problems of concern to the social sciences.

1.30 KNOWLEDGE OF THE UNIVERSALS AND ABSTRACTIONS IN A FIELD

Knowledge of the major schemes and patterns by which phenomena and ideas are organized. These are the large structures, theories, and generalizations which dominate a subject field or which are quite generally used in studying phenomena or solving problems. These are at the highest levels of abstraction and complexity.

1.31 Knowledge of Principles and Generalizations

Knowledge of particular abstractions which summarize observations of phenomena. These are the abstractions which are of value in explaining, describing, predicting, or in determining the most appropriate and relevant action or direction to be taken.

Knowledge of the important principles by which our experience with biological phenomena is summarized.

The recall of major generalizations about particular cultures.

1.32 Knowledge of Theories and Structures

Knowledge of the *body* of principles and generalizations together with their interrelations which present a clear, rounded, and systematic view of a complex phenomenon, problem, or field. These are the most abstract formulations, and they can be used to show the interrelation and organization of a great range of specifics.

The recall of major theories about particular cultures.

Knowledge of a relatively complete formulation of the theory of evolution.

INTELLECTUAL ABILITIES AND SKILLS

Abilities and skills refer to organized modes of operation and generalized techniques for dealing with materials and problems. The materials and problems may be of such a nature that little or no specialized and technical information is required. Such information as is required can be assumed to be part of the individual's general fund of knowledge. Other problems may require specialized and technical information at a rather high level such that specific knowledge and skill in dealing with the problem

and the materials are required. The abilities and skills objectives emphasize the mental processes of organizing and reorganizing material to achieve a particular purpose. The materials may be given or remembered.

2.00 COMPREHENSION

This represents the lowest level of understanding. It refers to a type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications.

2.10 TRANSLATION

Comprehension as evidenced by the care and accuracy with which the communication is paraphrased or rendered from one language or form of communication to another. Translation is judged on the basis of faithfulness and accuracy; that is, on the extent to which the material in the original communication is preserved although the form of the communication has been altered.

The ability to understand nonliteral statements (metaphor, symbolism, irony, exaggeration).

Skill in translating mathematical verbal material into symbolic statements and vice versa.

2.20 INTERPRETATION

The explanation or summarization of a communication. Whereas translation involves an objective part-for-part rendering of a communication, interpretation involves a reordering, rearrangement, or new view of the material.

The ability to grasp the thought of the work as a whole at any desired level of generality.

The ability to interpret various types of social data.

2.30 EXTRAPOLATION

The extension of trends or tendencies beyond the given data to determine implications, consequences, corollaries, effects, etc.,

which are in accordance with the conditions described in the original communication.

The ability to deal with the conclusions of a work in terms of the immediate inference made from the explicit statements.

Skill in predicting continuation of trends.

3.00 APPLICATION

The use of abstractions in particular and concrete situations. The abstractions may be in the form of general ideas, rules of procedures, or generalized methods. The abstractions may also be technical principles, ideas, and theories which must be remembered and applied.

Application to the phenomena discussed in one paper of the scientific terms or concepts used in other papers.

The ability to predict the probable effect of a change in a factor on a biological situation previously at equilibrium.

4.00 ANALYSIS

The breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between the ideas expressed are made explicit. Such analyses are intended to clarify the communication, to indicate how the communication is organized, and the way in which it manages to convey its effects, as well as its basis and arrangement.

4.10 ANALYSIS OF ELEMENTS

Identification of the elements included in a communication.

The ability to recognize unstated assumptions.

Skill in distinguishing facts from hypotheses.

4.20 ANALYSIS OF RELATIONSHIPS

The connections and interactions between elements and parts of a communication.

Ability to check the consistency of hypotheses with given information and assumptions.

Skill in comprehending the interrelationships among the ideas in a passage.

4.30 ANALYSIS OF ORGANIZATIONAL PRINCIPLES

The organization, systematic arrangement, and structure which hold the communication together. This includes the "explicit" as well as "implicit" structure. It includes the bases, necessary arrangement, and mechanics which make the communication a unit.

The ability to recognize form and pattern in literary or artistic works as a means of understanding their meaning.

Ability to recognize the general techniques used in persuasive materials, such as advertising, propaganda, etc.

5.00 SYNTHESIS

The putting together of elements and parts so as to form a whole. This involves the process of working with pieces, parts, elements, etc., and arranging and combining them in such a way as to constitute a pattern or structure not clearly there before.

5.10 PRODUCTION OF A UNIQUE COMMUNICATION

The development of a communication in which the writer or speaker attempts to convey ideas, feelings, and/or experiences to others.

Skill in writing, using an excellent organization of ideas and statements.
Ability to tell a personal experience effectively.

5.20 PRODUCTION OF A PLAN, OR PROPOSED SET OF OPERATIONS

The development of a plan of work or the proposal of a plan of operations. The plan should satisfy requirements of the task which may be given to the student or which he may develop for himself.

Ability to propose ways of testing hypotheses.
Ability to plan a unit of instruction for a particular teaching situation.

5.30 DERIVATION OF A SET OF ABSTRACT RELATIONS

The development of a set of abstract relations either to classify or explain particular data or phenomena, or the deduction of propositions and relations from a set of basic propositions or symbolic representations.

Ability to formulate appropriate hypotheses based upon an analysis of factors involved, and to modify such hypotheses in the light of new factors and considerations.

Ability to make mathematical discoveries and generalizations.

6.00 EVALUATION

Judgments about the value of material and methods for given purposes. Quantitative and qualitative judgments about the extent to which material and methods satisfy criteria. Use of a standard of appraisal. The criteria may be those determined by the student or those which are given to him.

6.10 JUDGMENTS IN TERMS OF INTERNAL EVIDENCE

Evaluation of the accuracy of a communication from such evidence as logical accuracy, consistency, and other internal criteria.

Judging by internal standards, the ability to assess general probability of accuracy in reporting facts from the care given to exactness of statement, documentation, proof, etc.

The ability to indicate logical fallacies in arguments.

6.20 JUDGMENTS IN TERMS OF EXTERNAL CRITERIA

Evaluation of material with reference to selected or remembered criteria.

The comparison of major theories, generalizations, and facts about particular cultures.

Judging by external standards, the ability to compare a work with the highest known standards in its field—especially with other works of recognized excellence.

APPENDIX A

A Condensed Version of the Affective Domain of the Taxonomy of Educational Objectives

1.0 RECEIVING (ATTENDING)

At this level we are concerned that the learner be sensitized to the existence of certain phenomena and stimuli; that is, that he be willing to receive or to attend to them. This is clearly the first and crucial step if the learner is to be properly oriented to learn what the teacher intends that he will. To indicate that this is the bottom rung of the ladder, however, is not at all to imply that the teacher is starting *de novo*. Because of previous experience (formal or informal), the student brings to each situation a point of view or set which may facilitate or hinder his recognition of the phenomena to which the teacher is trying to sensitize him.

The category of *Receiving* has been divided into three subcategories to indicate three different levels of attending to phenomena. While the division points between the subcategories are arbitrary, the subcategories do represent a continuum. From an extremely passive position or role on the part of the learner, where the sole responsibility for the evocation of the behavior rests with the teacher—that is, the responsibility rests with him for “capturing” the student’s attention—the continuum extends to a point at which the learner directs his attention, at least at a semiconscious level, toward the preferred stimuli.

1.1 AWARENESS

Awareness is almost a cognitive behavior. But unlike *Knowledge*, the lowest level of the cognitive domain, we are not so much concerned with a memory of, or ability to recall, an item or fact as we are that, given appropriate opportunity, the learner will merely be conscious of something—that he take into account a situation, phenomenon, object, or stage of

affairs. Like *Knowledge* it does not imply an assessment of the qualities or nature of the stimulus, but unlike *Knowledge* it does not necessarily imply attention. There can be simple awareness without specific discrimination or recognition of the objective characteristics of the object, even though these characteristics must be deemed to have an effect. The individual may not be able to verbalize the aspects of the stimulus which cause the awareness.

Develops awareness of aesthetic factors in dress, furnishings, architecture, city design, good art, and the like.

Develops some consciousness of color, form, arrangement, and design in the objects and structures around him and in descriptive or symbolic representations of people, things, and situations.¹

1.2 WILLINGNESS TO RECEIVE

In this category we have come a step up the ladder but are still dealing with what appears to be cognitive behavior. At a minimum level, we are here describing the behavior of being willing to tolerate a given stimulus, not to avoid it. Like *Awareness*, it involves a neutrality or suspended judgment toward the stimulus. At this level of the continuum the teacher is not concerned that the student seek it out, nor even, perhaps, that in an environment crowded with many other stimuli the learner will necessarily attend to the stimulus. Rather, at worst, given the opportunity to attend in a field with relatively few competing stimuli, the learner is not actively seeking to avoid it. At best, he is willing to take notice of the phenomenon and give it his attention.

Attends (carefully) when others speak—in direct conversation, on the telephone, in audiences.

Appreciation (tolerance) of cultural patterns exhibited by individuals from other groups—religious, social, political, economic, national, etc.

Increase in sensitivity to human need and pressing social problems.

1.3 CONTROLLED OR SELECTED ATTENTION

At a somewhat higher level we are concerned with a new phenomenon, the differentiation of a given stimulus into figure

¹Illustrative objectives selected from the literature follow the description of each subcategory.

and ground at a conscious or perhaps semiconscious level—the differentiation of aspects of a stimulus which is perceived as clearly marked off from adjacent impressions. The perception is still without tension or assessment, and the student may not know the technical terms or symbols with which to describe it correctly or precisely to others. In some instances it may refer not so much to the selectivity of attention as to the control of attention, so that when certain stimuli are present they will be attended to. There is an element of the learner's controlling the attention here, so that the favored stimulus is selected and attended to despite competing and distracting stimuli.

Listens to music with some discrimination as to its mood and meaning and with some recognition of the contributions of various musical elements and instruments to the total effect.

Alertness toward human values and judgments on life as they are recorded in literature.

2.0 RESPONDING

At this level we are concerned with responses which go beyond merely attending to the phenomenon. The student is sufficiently motivated that he is not just 1.2 *Willing to attend*, but perhaps it is correct to say that he is actively attending. As a first stage in a "learning by doing" process the student is committing himself in some small measure to the phenomena involved. This is a very low level of commitment, and we would not say at this level that this was "a value of his" or that he had "such and such an attitude." These terms belong to the next higher level that we describe. But we could say that he is doing something with or about the phenomenon besides merely perceiving it, as would be true at the next level below this of 1.3 *Controlled or selected attention*.

This is the category that many teachers will find best describes their "interest" objectives. Most commonly we use the term to indicate the desire that a child become sufficiently involved in or committed to a subject, phenomenon, or activity that he will seek it out and gain satisfaction from working with it or engaging in it.

2.1 ACQUIESCENCE IN RESPONDING

We might use the word "obedience" or "compliance" to describe this behavior. As both of these terms indicate, there

is a passiveness so far as the initiation of the behavior is concerned, and the stimulus calling for this behavior is not subtle. Compliance is perhaps a better term than obedience, since there is more of the element of reaction to a suggestion and less of the implication of resistance or yielding unwillingly. The student makes the response, but he has not fully accepted the necessity for doing so.

Willingness to comply with health regulations.
Obeys the playground regulations.

2.2 WILLINGNESS TO RESPOND

The key to this level is in the term "willingness," with its implication of capacity for voluntary activity. There is the implication that the learner is sufficiently committed to exhibiting the behavior that he does so not just because of a fear of punishment, but "on his own" or voluntarily. It may help to note that the element of resistance or of yielding unwillingly, which is possibly present at the previous level, is here replaced with consent or proceeding from one's own choice.

Acquaints himself with significant current issues in international, political, social, and economic affairs through voluntary reading and discussion.
Acceptance of responsibility for his own health and for the protection of the health of others.

2.3 SATISFACTION IN RESPONSE

The additional element in the step beyond the *Willingness to respond* level, the consent, the assent to responding, or the voluntary response, is that the behavior is accompanied by a feeling of satisfaction, an emotional response, generally of pleasure, zest, or enjoyment. The location of this category in the hierarchy has given us a great deal of difficulty. Just where in the process of internalization the attachment of an emotional response, kick, or thrill to a behavior occurs has been hard to determine. For that matter there is some uncertainty as to whether the level of internalization at which it occurs may not depend on the particular behavior. We have even questioned whether it should be a category. If our structure is to be a hierarchy, then each category should include the behavior in the next level below it. The emotional component appears grad-

ually through the range of internalization categories. The attempt to specify a given position in the hierarchy as *the* one at which the emotional component is added is doomed to failure.

The category is arbitrarily placed at this point in the hierarchy where it seems to appear most frequently and where it is cited as or appears to be an important component of the objectives at this level on the continuum. The category's inclusion at this point serves the pragmatic purpose of reminding us of the presence of the emotional component and its value in the building of affective behaviors. But it should not be thought of as appearing and occurring at this one point in the continuum and thus destroying the hierarchy which we are attempting to build.

Enjoyment of self-expression in music and in arts and crafts as another means of personal enrichment.

Finds pleasure in reading for recreation.

Takes pleasure in conversing with many different kinds of people.

3.0 VALUING

This is the only category headed by a term which is in common use in the expression of objectives by teachers. Further, it is employed in its usual sense: that a thing, phenomenon, or behavior has worth. This abstract concept of worth is in part a result of the individual's own valuing or assessment, but it is much more a social product that has been slowly internalized or accepted and has come to be used by the student as his own criterion of worth.

Behavior categorized at this level is sufficiently consistent and stable to have taken on the characteristics of a belief or an attitude. The learner displays this behavior with conviction in appropriate situations that he comes to be perceived as holding a value. At this level, we are not concerned with the relationships among values but rather with the internalization of a set of specified, ideal, values. Viewed from another standpoint, the objectives classified here are the prime stuff from which the conscience of the individual is developed into active control of behavior.

This category will be found appropriate for many objectives that use the term "attitude" (as well as, of course, "value").

An important element of behavior characterized by *Valuing* is

that it is motivated, not by the desire to comply or obey, but by the individual's commitment to the underlying value guiding the behavior.

3.1 ACCEPTANCE OF A VALUE

At this level we are concerned with the ascribing of worth to a phenomenon, behavior, object, etc. The term "belief," which is defined as "the emotional acceptance of a proposition or doctrine upon what one implicitly considers adequate ground" (English and English, 1958, p. 64), describes quite well what may be thought of as the dominant characteristic here. Beliefs have varying degrees of certitude. At this lowest level of *Valuing* we are concerned with the lowest levels of certainty; that is, there is more of a readiness to re-evaluate one's position than at the higher levels. It is a position that is somewhat tentative.

One of the distinguishing characteristics of this behavior is consistency of response to the class of objects, phenomena, etc. with which the belief or attitude is identified. It is consistent enough so that the person is perceived by others as holding the belief or value. At the level we are describing here, he is both sufficiently consistent that others can identify the value, and sufficiently committed that he is willing to be so identified.

Continuing desire to develop the ability to speak and write effectively.

Grows in his sense of kinship with human beings of all nations.

3.2 PREFERENCE FOR A VALUE

The provision for this subdivision arose out of a feeling that there were objectives that expressed a level of internalization between the mere acceptance of a value and commitment or conviction in the usual connotation of deep involvement in an area. Behavior at this level implies not just the acceptance of a value to the point of being willing to be identified with it, but the individual is sufficiently committed to the value to pursue it, to seek it out, to want it.

Assumes responsibility for drawing reticent members of a group into conversation.

Deliberately examines a variety of viewpoints on controversial issues with a view to forming opinions about them.

Actively participates in arranging for the showing of contemporary artistic efforts.

3.3 COMMITMENT

Belief at this level involves a high degree of certainty. The ideas of "conviction" and "certainty beyond a shadow of a doubt" help to convey further the level of behavior intended. In some instances this may border on faith, in the sense of it being a firm emotional acceptance of a belief upon admittedly nonrational grounds. Loyalty to a position, group, or cause would also be classified here.

The person who displays behavior at this level is clearly perceived as holding the value. He acts to further the thing valued in some way, to extend the possibility of his developing it, to deepen his involvement with it and with the things representing it. He tries to convince others and seeks converts to his cause. There is a tension here which needs to be satisfied; action is the result of an aroused need or drive. There is a real motivation to act out the behavior.

Devotion to those ideas and ideals which are the foundations of democracy.
Faith in the power of reason and in methods of experiment and discussion.

4.0 ORGANIZATION

As the learner successively internalizes values, he encounters situations for which more than one value is relevant. Thus necessity arises for (a) the organization of the values into a system, (b) the determination of the interrelationships among them, and (c) the establishment of the dominant and pervasive ones. Such a system is built gradually, subject to change as new values are incorporated. This category is intended as the proper classification for objectives which describe the beginnings of the building of a value system. It is subdivided into two levels, since a prerequisite to interrelating is the conceptualization of the value in a form which permits organization. *Conceptualization* forms the first subdivision in the organization process, *Organization of a value system* the second.

While the order of the two subcategories seems appropriate enough with reference to one another, it is not so certain that 4.1 *Conceptualization of a value* is properly placed as the next level above 3.3 *Commitment*. Conceptualization undoubtedly begins at an earlier level for some objectives. Like 2.3 *Satisfaction in response*, it is doubtful that a single completely satisfactory loca-

tion for this category can be found. Positioning it before 4.2 *Organization of a value system* appropriately indicates a prerequisite of such a system. It also calls attention to a component of affective growth that occurs at least by this point on the continuum but may begin earlier.

4.1 CONCEPTUALIZATION OF A VALUE

In the previous category, 3.0 *Valuing*, we noted that consistency and stability are integral characteristics of the particular value or belief. At this level (4.1) the quality of abstraction or conceptualization is added. This permits the individual to see how the value relates to those that he already holds or to new ones that he is coming to hold.

Conceptualization will be abstract, and in this sense it will be symbolic. But the symbols need not be verbal symbols. Whether conceptualization first appears at this point on the affective continuum is a moot point, as noted above.

Attempts to identify the characteristics of an art object which he admires.
Forms judgments as to the responsibility of society for conserving human and material resources.

4.2 ORGANIZATION OF A VALUE SYSTEM

Objectives properly classified here are those which require the learner to bring together a complex of values, possibly disparate values, and to bring these into an ordered relationship with one another. Ideally, the ordered relationship will be one which is harmonious and internally consistent. This is, of course, the goal of such objectives, which seek to have the student formulate a philosophy of life. In actuality, the integration may be something less than entirely harmonious. More likely the relationship is better described as a kind of dynamic equilibrium which is, in part, dependent upon those portions of the environment which are salient at any point in time. In many instances the organization of values may result in their synthesis into a new value or value complex of a higher order.

Weights alternative social policies and practices against the standards of the public welfare rather than the advantage of specialized and narrow interest groups.

Develops a plan for regulating his rest in accordance with the demands of his activities.

5.0 CHARACTERIZATION BY A VALUE OR VALUE COMPLEX

At this level of internalization the values already have a place in the individual's value hierarchy, are organized into some kind of internally consistent system, have controlled the behavior of the individual for a sufficient time that he has adapted to behaving this way; and an evocation of the behavior no longer arouses emotion or affect except when the individual is threatened or challenged.

The individual acts consistently in accordance with the values he has internalized at this level, and our concern is to indicate two things: (a) the generalization of this control to so much of the individual's behavior that he is described and characterized as a person by these pervasive controlling tendencies, and (b) the integration of these beliefs, ideas, and attitudes into a total philosophy or world view. These two aspects constitute the subcategories.

5.1 GENERALIZED SET

The generalized set is that which gives an internal consistency to the system of attitudes and values at any particular moment. It is selective responding at a very high level. It is sometimes spoken of as a determining tendency, an orientation toward phenomena, or a predisposition to act in a certain way. The generalized set is a response to highly generalized phenomena. It is a persistent and consistent response to a family of related situations or objects. It may often be an unconscious set which guides action without conscious forethought. The generalized set may be thought of as closely related to the idea of an attitude cluster, where the commonality is based on behavioral characteristics rather than the subject or object of the attitude. A generalized set is a basic orientation which enables the individual to reduce and order the complex world about him and to act consistently and effectively in it.

Readiness to revise judgments and to change behavior in the light of evidence.

Judges problems and issues in terms of situations, issues, purposes, and consequences involved rather than in terms of fixed, dogmatic precepts or emotionally wishful thinking.

5.2 CHARACTERIZATION

This, the peak of the internalization process, includes those objectives which are broadest with respect both to the phenomena covered and to the range of behavior which they comprise. Thus, here are found those objectives which concern one's view of the universe, one's philosophy of life, one's *Weltanschauung*—a value system having as its object the whole of what is known or knowable.

Objectives categorized here are more than generalized sets in the sense that they involve a greater inclusiveness and, within the group of attitudes, behaviors, beliefs, or ideas, an emphasis on internal consistency. Though this internal consistency may not always be exhibited behaviorally by the students toward whom the objective is directed, since we are categorizing teachers' objectives, this consistency feature will always be a component of *Characterization* objectives.

As the title of the category implies, these objectives are so encompassing that they tend to characterize the individual almost completely.

Develops for regulation of one's personal and civic life a code of behavior based on ethical principles consistent with democratic ideals.

Develops a consistent philosophy of life.

