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ABSTRACT These proceedings of the 1983 New Jersey-Pennsylvania-Delaware conference are arranged in five sections. Section I, "National Issues," includes summaries of (1) a panel session on the role of educational research and research funding in the new Congress; (2) a paper on "most wanted answers" to questions concerning (a) teacher productivity, methods, and supervision, (b) teaching abstractions to nonintellectual students, and (c) raising standards without eliminating students; and (3) a discussion of the National Commission on Excellence in Education report and its implications for the tri-state region. Section II, on educational technology, contains discussions of BASIC programming on the microcomputer, the impact of computers in the classroom, computer graphics, and software evaluation. Section III's presentations are concerned with school district use of research, cost effectiveness, and the role of the school administrator in school improvement. The fourth section, which focuses on measurement and methodology, addresses questions on measurement and mismeasurement, conducting credible case studies, and researching special education. The document's final section contains summaries of sessions on a variety of topics, from job satisfaction and personal fulfillment in public service to the consequences of youth joblessness. Appendixes provide a sample conference brochure and lists of presenters and participants. (JBM)

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1983  
EDUCATIONAL  
CONFERENCE

EA 016 716

1983 TRI-STATE EDUCATIONAL RESEARCH CONFERENCE

A Proceedings

Sponsored by

Pennsylvania, New Jersey, and Delaware  
Educational Research Associations  
and Research for Better Schools

Held at  
The Hershey Hotel  
Philadelphia, Pennsylvania

May 15-17, 1983

Proceedings prepared by

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This is a proceedings of the Tri-State Educational Research Conference, which was held at the Philadelphia Hershey Hotel on May 15 and 17, 1983. The conference was sponsored by the Delaware, New Jersey, and Pennsylvania Educational Research Associations, with planning and logistical support from Research for Better Schools (RBS). Delaware, for the first time, joined the other two states in presenting this conference; previous conferences (1981, 1982) combined the efforts of the Pennsylvania and New Jersey associations along with RBS.

This proceedings provides an overview of the conference by presenting a synopsis of each session. An appendix provides the conference brochure, a list of presenters, and a list of participants.

Persons interested in more information should contact one of the educational research associations or Research for Better Schools.

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The following RBS staff contributed to the preparation of this conference proceedings: Thomas Biester, Joseph D'Amico, Russell Dusewicz, William Firestone, Edward Patrick and Bruce Wilson each reported on a conference session; Linda Lange reported on the remaining sessions (including the two special luncheon programs), edited them all and produced the final document; John Hopkins and Keith Kershner contributed to the final edit, Eliot Zeitlin designed the cover, and Carol Crociante typed the document.

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## OVERVIEW

1983 PERA-NJERA-DELA  
 TRI-STATE CONFERENCE OVERVIEW

May 15-17, 1983

Sunday May 15, 1983

Room Time	Spruce	Pine
2:20-5:50		BASIC Preession
6:00-7:20	Wine & Cheese Reception	
7:30-9:00		Preession (Cont'd)

Monday May 16, 1983

Room Time	Walnut A	Walnut B	Spruce	Pine
8:30-9:30				Preession (Cont'd)
9:30-11:50	The Role of Research and Funding in the New Congress		Impacts of Com- puters in the Classroom	Preession (Cont'd)
Lunch 12:00-1:50	The Five Most Wanted Answers Bryn Mawr Room			
2:00-2:50		Paper Session A	Paper Session B	Computer Graphics
3:00-4:20	Software Evaluation	Researching Special Ed.	Measurement and -Mismeasurement	
4:30-5:20	PERA Business Meeting	NJERA Business Meeting	DERA Business Meeting	
Cash Bar 5:30-7:00	Bryn Mawr A Room - 3rd Floor			

Tuesday May 17, 1983

Room Time	Walnut A	Walnut B	Spruce	Pine
9:00-10:20	How Districts Use Research to Improve		Conducting Credible Case Studies	Cost Effective- ness in School Improvement
10:30-11:50	How Districts Use Research to Improve (Cont'd)		Job Satisfac- tion & Personal Fulfillment	New Findings Role of the Administrator
Lunch 12:30-3:00	Report on the National Commission on Educational Excellence and Its Implications for Our Region Bryn Mawr Room			

The purpose of this conference was to bring together educational researchers from across the region in order to share with them ideas, trends, and research on educational topics of current interest. These researchers, for the most part, were members of the New Jersey (NJERA), Pennsylvania (PERA), and Delaware (DERA) Educational Research Associations.

The three associations, along with Research for Better Schools, planned and organized the three-day conference, bringing together a rich mixture of presenters and topics. Most of the conference sessions encompassed five general themes: (1) national issues; (2) educational technology; (3) school improvement; (4) measurement and methodology; and (5) paper and other sessions which included: job satisfaction, inservice for school board members, and issues in research on effective schools, to name a few. Presentations ranged from a training session, to presenter/panel discussions, topical symposia, and paper sessions.

Thus, this conference proceedings is presented in five sections:

- National Issues
- Educational Technology
- School Improvement
- Measurement and Methodology
- Paper and Other Sessions

An appendix includes the conference brochure, a list of presenters, and a list of participants.

## I. NATIONAL ISSUES

The Role of Educational Research and Funding in the New Congress

The Five Most Wanted Answers

Report of the National Commission on Educational Excellence and  
Its Implications for our Region

THE ROLE OF EDUCATIONAL RESEARCH AND  
RESEARCH FUNDING IN THE NEW CONGRESS

Presenters: David Florio, American Educational Research Association  
(AERA)  
Anne Lewis, Education USA/Newsline  
James J. Florio, (D.), New Jersey, Member of Congress

Moderator: Mary Kennedy, Pennsylvania Department of Education

Kennedy chaired this panel session and briefly introduced each panelist. Florio then touched upon the forthcoming reports on the status of education, AERA's role in informing Congress on educational issues, and the status of pending educational legislation. Florio noted that at least a dozen reports on the status of education were due including: the Twentieth Century Fund report, the Education Commission of the States report, the College Board's report and the National Commission on Excellence in Education report, to name a few. He encouraged educators to take these reports seriously, and to take the initiative to play an important role in this time of change.

Regarding AERA's work with Congress, Florio noted that the Senate was going through an "awareness" process with regard to an acceptable math/science education program. A coalition of 40 educational groups is promoting a two-year capacity-building program which will ensure that math/science needs will continue to be met in the future. He indicated that approximately five percent of the proposed math/science funds would be set aside for the development of new programs and curriculum materials. He also credited the coalition with influencing the proposed

amendment to Chapter I; which will now require local and state evaluation every two years.

Finally, he described the role that AERA had played with regard to the recompetition of the labs and centers. In brief, AERA worked with the Congress and the press to get a new NIE director, assisted NIE with the planning process, and will monitor the implementation of the process to insure that it is open and fair to all competitors. Prior to the main competition, a new lab will be competed this year in the mid-West, along with a Center for Educational Technology to be located in New England.

Overall, Florio stressed AERA's role in representing education, generally. He concluded by saying that this was "a time for educators to take responsibility, to take charge, and to oppose a quick-fix mentality."

Lewis, who spoke next, noted that although the Reagan administration succeeded in cutting 13 percent off the education budget, Congress has not accepted the administration's view or policy aimed at dismantling the federal role in education. In fact, Congress has assumed a watchdog role to insure a continued federal presence in education. She viewed the proposed categorical aid programs in foreign language, desegregation, and the teacher commission in the states as "statements of interest" by Congress. She stressed a need for stronger involvement by all levels of educators, saying: "We can't separate any federally funded agency (i.e., NIE) from politics...we need to learn how to play off the politics...and strive to make education the government's most important function."

Florio, representative from New Jersey's 1st Congressional District, rounded out the presentation. He agreed that education is one of the government's most important responsibilities, especially in the context of

of our status and abilities as a competitor in the world trading competition. He was less optimistic about any real progress on Congressional funding for education in the next two years. He cited the Reagan administration's anti-government, anti-education, pro-defense stance. "The administration has already succeeded, in large part," he said, "in dismantling the government through changes in the budget process. The budget process of past years has been turned upside down by Stockman...one vote on a Reconciliation Motion resulted in \$36 billion of cuts and eliminated discussion and negotiation of appropriations. They have made the first budget the final budget--and made the rest of the year a waste of time for all Congressional committees. We might have some nice bills passed, but we might have no money for them." He stated, "Educators don't understand the budget process...if there is no interest in reducing defense spending and in raising taxes...then we are wasting our time." He proposed what he felt was a logical solution: defense cuts, or deferments and a tax increase, but said it was "illogical" to expect its implementation. "Reagan has the capability to intimidate Congress...little will happen (in the areas other than defense) in the next few years." He suggested, in essence, that education will live on the margins of the federal budget.



## THE FIVE MOST WANTED ANSWERS

Speaker: Henry M. Brickell, President, Policy Studies in Education

Brickell began his presentation by asking:

1. Can anything make a teacher more productive?
2. Why do all teaching methods work?
3. Whatever happened to supervision?
4. How can we teach abstractions to non-intellectual students?
5. How can we raise standards without eliminating students?

Having asked such provocative questions, Brickell proceeded to provide the following answers.

Can anything make a teacher more productive? Brickell's answer -- probably not. Productivity, as he defined it, is the business of getting more work done with the same effort, or, better still, with less effort. He said the Commission on Excellence wants to pay meritorious teachers more, but the trouble with that is that you cannot pay them more unless they can do more.

One approach to try, Brickell suggests, is to ask other workers to produce more, so you can tax them more, so you can pay teachers more, for doing less. The name for that process: inflation. However, historically, this approach has been hard to sell. He suggested that while the industrial revolution assisted some workers to do more by replacing human muscle power with machine power, and still further advances allowed mechanical devices to replace human sensory processes, and still others furthered human communication power, none of these advances assisted the teacher to become more productive. The current hope is that computers

will increase teacher productivity. Brickell was dubious. He suspects that computers will evolve as tools for students, rather than tools for teachers. Brickell's bottom line: teachers are doing important work, but not enough of it, and he did not offer any viable way to change that circumstance.

Why do all teaching methods work? Brickell answered this question by examining what practitioners (teachers and administrators) and researchers say about teaching methods. Teachers say that "they have their own way of teaching...what works for one doesn't work for the other...they get bored doing the same thing every time." Administrators say: "Change keeps teachers excited...programs work only if teachers believe in them--you have to create ownership." Well, if these are what matter, Brickell pondered, then teaching methods do not. To him, this was unscientific! Wasn't one method better than the rest, or at least some methods better than others? He turned to the researchers.

The researchers were not much help in defining teaching methods either. He said if he were to summarize the last 50 years of instructional research for, say, a board of education looking for guidelines to mandate teaching methods, he would tell them: "Don't mandate anything; everything works." Why is the research not helpful? Because, says Brickell, findings are seldom consistent from one study to the next, they are seldom large enough to guide instructional policy, and, when they are consistent, they make board members laugh. For instance, some consistent findings are:

- students are more likely to learn something if it is in the curriculum

- the more time you spend studying something, the better you will learn it
- if you don't expect much from students, you won't get much.

When you hear these findings, you tend to get his point.

Once, after a round of site visits, Brickell came back convinced that if two schools simply exchanged programs, each one introducing what the other had abandoned, both would soon report better results.

After poking fun at practitioners and researchers, Brickell gave his own answer to why all teaching methods work: "No variation in teaching technique is nearly as important as the variation in capacity to learn and readiness to learn which human beings bring into the classroom." He said, "You can learn through any technique, as long as the same ideas are presented. What matters is whether you are capable of learning them and motivated to learn them."

Finally, he said that there is no hope for research and development on instructional methods. His personal hope for the future--that he is wrong.

Whatever happened to supervision? Brickell first explained what supervision is, since he felt everyone in the profession had forgotten. "Supervision," he said, "is the over-the-shoulder prevention of mistakes. That means the supervisor has to be there while the work is taking place, watch it, and keep it from being done wrong."

He then proceeded to trace supervision through the years. He looked at the one room school house, where the teacher had control of all the kids, reported directly to each family, and those families decided at the town meeting whether to keep or fire the teacher. But that wasn't real

supervision. "We had real supervision," says Brickell, "when there were enough classrooms to warrant a head or principal teacher. We had it even when that principal teacher stopped teaching and became the principal."

Brickell says supervision was lost gradually because teachers changed in three respects. First, as teachers began to graduate from real four-year colleges, were exposed to real professors, and observed those professors' behaviors, their behavior changed. Brickell said "the most noticeable behavior of college professors is that you cannot tell them anything. They tell you things. The other professors cannot tell each other anything because they don't know the other's subject, and the dean cannot tell any of them anything because he doesn't teach any subject."

Second, real professors knew that teaching methods didn't matter much--it was what you knew, not how you taught it. Besides, any professor should be free to teach any way she pleased. With these attitudes as models, new four-year teachers came into schools believing they didn't need to be supervised.

And third, since these four-year teachers knew as much subject matter as their supervisors did, as they saw it, they didn't need any supervision.

All of this history, Brickell says, brings us to where we stand today. A new breed of teacher, who cannot be supervised, partly because they don't need to be and partly because they don't want to be. Besides, by this time, teachers were unionized and management had agreed not to bring supervision back.

This history also brings us to Brickell's main point: "You cannot supervise what you cannot teach." Brickell said he recently made this statement during a presentation to a room full of Missouri school board

members. They got angry. They asked: "Don't you think principals can supervise classroom discipline and teaching techniques, even if they can't teach the subject?" His answer: "Maybe. But they cannot supervise algebra, or music, or chemistry, or physical education -- they cannot supervise what is being taught, which is more important than how it is being taught." They then asked for a realistic standard which principals could meet. After considerable thought, Brickell said he had a standard they could use, but it was the lowest possible standard for any principal trying to supervise instruction. "The principal has to pass any test given to the children in her building." After the school board stopped laughing, Brickell told them they were not going to have any supervision in Missouri schools.

Brickell's final thought: "If nothing can make a teacher more productive, and if all teaching methods work, why supervise?"

How can we teach abstractions to non-intellectual students? Or, more to the point, can vocational education teach abstractions to non-intellectual students? With a rolling metaphor, Brickell described vocational education as "a heavy freight train rolling across the meadow, crushing the abstract flowers under its practical wheels." Brickell presented current vocational education as having been derailed from its earlier primary objective: to bring to abstract ideas illustrative concrete experiences.

Abstractions, says Brickell, is what we are trying to teach. Quoting from The Report of the National Commission on Excellence in Education, the "New Basics" section opens -- "to clarify what we mean by the essentials of a strong curriculum." For instance:

"... English ... comprehend, interpret, evaluate, and use what they read.

... Mathematics ... understand geometric and algebraic concepts.

... Science ... the concepts, laws, and processes of the physical and biological sciences..."

Brickell then proceeded to take us down the historical trail of vocational education. From a new book titled The Role and Function of Vocational Education: Some Current Perspectives, he paraphrased -- from the section called "Historical Metamorphosis" -- the evolution of vocational education, or how vocational education went wrong. Briefly (and further paraphrased), it seems that vocational education began as a change from process to content; its major intent was to bring to the learner concrete, physical, experiential materials to illustrate abstract concepts. The book goes back over 300 years. From Comenius in the 1600s, who introduced a practical method of teaching to "give meaning to words by associating them with objects that were familiar to the learner," to Felix Adler who opened the Workingman's School in New York in 1880, and said, "... We do not propose to give our pupils an aptitude for any particular trade... We would consider that a retrograde step, rather than an advance step" -- all have been consistent in their approach to the application of vocational education. All were consistent in teaching the concrete experience not as a vocation in itself, but as a means to understanding concepts. As Brickell says, "you can see how badly vocational education has slipped off the track."

Brickell questioned whether students in today's vocational education classes could learn the abstract from the concrete. Could students of cosmetology come away with principles of aesthetics? Or study refrigeration technology, but learn molecular motion? Could basketball players take auto mechanics and discover that what they call "jump shots" are actually parabolas? Probably not; not in the 1980s. He says today's vocational education teachers were not hired to teach abstractions and he doesn't think they could anyway, even if the curriculum were designed for it.

Brickell's metaphor sums up his feeling of where that leaves vocational education: the "concrete" has crushed the "abstract."

How can we raise standards without eliminating students? Brickell pointed out that Secretary Bell's Commission says we need to raise standards. It goes further, stating that "minimum competency examinations (now required in 37 states) fall short of what is needed, as the minimum tends to become the maximum, thus lowering educational standards for all." Brickell agreed, saying we do not want that to happen.

Brickell pointed out that on the combined math and verbal sections of the SAT, you can get 400 points just by signing your name. And if you can answer one question out of 10 on the two sections, you get another 200 points for a total of 600. Brickell said that in one city, where his organization has been working at one of the local colleges, half of one freshman class cannot do that. In a report to the leading citizens of this city, who want to improve their local colleges, he plans to tell them: "The student makes the college as much as the college makes the student... Good courses, good professors, good libraries, and good laboratories cannot make a good college. There must be good students..." If this college raises

its admission standard to a score of 800 on the combined math and verbal sections, it will close for lack of students. This would not be the fault of the college, says Brickell, but the fault of the local public schools which are better at printing high school diplomas than they are at giving a high school education. Brickell said what he really needs to tell those schools is how to raise standards without eliminating students.

Brickell then asked the audience to help him set the standards for a ninth grade reading test which his organization would have to grade for a Midwestern city, currently in the process of testing 50,000 students in grades one to nine. He passed out a sample of the test and a table of the predicted failure percentage (see table). Brickell said every time

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**PREDICTED PERCENT FAILING**

If passing score were to be set at this percent of questions answered correctly:	Percent of students who would fail
100%	99%
90	85
80	75
70	65
60	55
50	45
40	35
30	15
20	10
10	5
0	0

---

he looked at the test and the table, he felt a tension between wanting high standards and wanting a low failure rate. He didn't like the tradeoff. And the audience? They had no answer to the dilemma.



Brickell's answer to the question "How can we raise standards without eliminating students," was to reverse the question. How can we have students if we do not have standards? His answer to that question: we can not.

"Now," said Brickell, "you understand that Secretary Bell's Commission is not just trying to give us standards again. It is trying to give us schools again."



REPORT OF THE NATIONAL COMMISSION ON EXCELLENCE IN  
EDUCATION AND ITS IMPLICATIONS FOR OUR REGION

Speaker: Milton Goldberg, Executive Director of the National Commission on Excellence in Education

Panelists: Constance Clayton, Superintendent, Philadelphia School District  
Robert G. Scanlon, Executive Assistant to the President of Temple University, formerly Secretary of Education, Pennsylvania  
Sidney Collison, Director of Curriculum and Instruction, Department of Public Instruction, Delaware  
Thomas Hamill, Acting Assistant Commissioner, Division of School Programs, New Jersey Department of Education

Moderator: John E. Hopkins, Executive Director, Research for Better Schools, Inc.

The session began with Hopkins introducing the panelists and speaker. He gave a brief overview of the unique qualities each panelist would bring to the session and then introduced Goldberg. Goldberg was appointed by the Secretary of Education to head the 18-member Commission charged by the Secretary to explore the quality of education in America.

Commission Process

Goldberg's presentation centered on the process by which the Commission went about researching, preparing, and presenting their efforts. In addition, he discussed some reactions engendered by the report.

The Commission members were composed of a diverse group of national leaders in their field which included classroom teachers, high school principals, a state commissioner of education, a superintendent of schools, scientists, a governor, school and state board members, and leaders of higher education.

The Commission was given a Charter by the Secretary of Education to guide their efforts. The most essential item of the Charter was to assess the quality of teaching and learning in this country and to make recommendations about their findings. In particular, they were to focus on the education of teenage youth. While elementary, higher education, and vocational/technical schools were given selective attention, secondary schooling received primary attention. Goldberg noted that one criticism of the report was that it paid too little attention to elementary and higher education, but the Charter had dictated the Commission's focus.

The most important task for the Commissioners, Goldberg said, was to create a sense of credibility and openness to their task, and to encourage people to offer their opinions and ideas. They did this in three ways: by holding hearings across the country to hear testimony from any who wished to attend; by visiting schools in all the cities and communities where hearings were held; and, in those cities and communities, by interviewing teachers, students, parents, and administrators. Said Goldberg, "the process worked." In addition, an enormous amount of mail was received, and every letter was read, catalogued, and answered, and all of the views and ideas were communicated to the Commissioners.

In summing up the process, Goldberg said, "Somewhere in the country, a public event involving some Commission member(s) was held every two-and-a-half to three weeks during the 18 months of the Commission."

After about 14 months, the Commissioners met to decide on how to report their findings in the most constructive way. The hardest decision they faced, said Goldberg, was how long the report was to be. This

turned out to be a most critical decision, in light of the public response. The Commissioners knew it could say an enormous amount, given the thousands of pages of testimony and the dozens of papers commissioned as part of the public record. Their decision, however, was for "a short, straight-forward, dramatic report to get the attention of the American public."

The Commissioners knew that if the report was to be short, it had better carry an important message. Through all the testimony, interviews, and papers, one message was clear -- there needs to be serious improvement in American education. This was not to say that good things are not happening. As the report states, they found "heroic examples of excellence" and "outstanding schools and programs." However, they felt these were few and far between, and found much more that was disheartening. What they found most often were teachers, parents, and administrators with a sense of frustration because they wanted to accomplish more but were encountering serious obstacles. The Commission felt bound to report on the good things, but to bring before the public the serious need for improvement in education, as well. Goldberg, paraphrasing from the report, pinpointed the focus: "While there are many things that need addressing in American society, this report addresses only one -- education. But education undergirds our prosperity, our security, and our civility, and if you care about those three, you have to care about education."

The Commission did not, therefore, set out to create a "recipe book," but rather it made recommendations on what Goldberg called "alterable conditions" -- things which could be changed. The conditions they focused on were: content--how to improve the content being taught; time--how to

improve the efficiency and the amount of time spent on learning; expectations--how to better explicate the expectations held for teachers and students; and teaching--how to make teaching a more rewarding profession and to raise its status.

The Commission uncovered no mysteries, said Goldberg. These four conditions were areas that all schools and school districts worry about and school boards make decisions about. All the recommendations in the report, called "implementing" recommendations, were drawn from the people they talked with and the papers they commissioned. Thus, through its report, the Commission sought to communicate to the American public that the improvement of education is tied to our economy, our defense, and our civility. Without improvement, we are "a nation at risk."

Goldberg discussed further the part of the report dealing with the "learning society," a part he felt had received little attention in the press. The Commission's message in this section was to highlight what it believed to be one reason why education was not held in high esteem and why people did not worry about improving education. The reason: "We are not a learning society," as an adult society. In other words, we view our learning as terminated upon completion of formal schooling. We see the rest of our life as spent experiencing new things, but not as learning per se. The Commission says we need to prize learning, that unless there are adult models it will be tough to convince kids that learning is important.

In highlighting some of the reactions to the report, Goldberg said he was "struck by a phenomenon which I can't comprehend myself." According to Goldberg, Fred Hechinger of the New York Times said "the Commission report has caught a wave that was already underway." Goldberg felt this

was somewhat true -- that it was "just a matter of time before some paper or report got people stirred up." Another reaction, from a letter he received, indicated surprise at getting a report from Washington about education that "sounded like it neither came from Washington nor was about education." What this meant, said Goldberg, was that it did not have the language usually found in such documents.

Among the critical reactions, two were most common: (1) "it was too short, it should have said more about...X, Y, or Z," and (2) "...well, the problems are real, but they're not real for my school system."

One such respondent was a state superintendent of schools who said that his school system was already working on the problems highlighted in the report. Goldberg said he was glad to hear that, but, several weeks later, he came upon mathematics achievement scores from that state. Of the ninth graders taking the test, only 60 percent of the students could give the correct answer to the question: "You have made a purchase costing \$16.95, and given the cashier twenty dollars. How much change should you get back?" Goldberg found it disturbing that 40 percent of the ninth grade students could not answer the problem. Said Goldberg, this is just one example of why "...but not for my school," just is not true. The College Board, said Goldberg, recommended that, by the age of 17, students should be able to solve trigonometric, exponential, and logarithmic equations. "If this is so," Goldberg said, "something is wrong somewhere."

Goldberg said that, personally, he did not believe that any one report could answer all the questions. He mentioned other reports coming out, including the Twentieth Century Fund and the Education Commission of the States reports. Last November, the Commission co-sponsored a meeting

with all these groups, to talk about how they could make the most of their reports and to encourage continued contact.

In conclusion, Goldberg quoted Dr. Howe, currently at the Harvard Graduate School of Education and formerly U.S. Commissioner of Education: "American education does not have pneumonia, but it may have the flu." Goldberg said, "I do not know what it has, but it has got to be cured; and that's the message from the report of the National Commission on Excellence in Education."

### Panelists' Responses/Questions

Each panelist commented upon the report's findings and posed questions to Goldberg. What follows are brief summaries of their remarks, with Goldberg's responses, when given, following each panelist's questions.

#### Constance Clayton

Clayton announced that she was happy to see the report. After taking office last October, she presented a 66-point outline for the improvement of schools in Philadelphia, which included many of the recommendations of the Commission. Clayton had some comments to make about the report; specifically, she was pleased that the report:

- makes the connection between education, jobs, and the economic health of our country. This, she felt, would be the key to generating wide support across American citizenry
- does not place the entire burden for the educational crisis on teachers and administrators; rather, it puts it in the appropriate context of calling on all of us to take appropriate action
- calls for better management of teacher time, putting more emphasis on time spent on instruction and freeing teachers from administrative burdens and disruptive students

- has received the support of the AFT and NEA, and that these and other groups had called for hearings in support of the report. She hoped others would join them because it is in the best interest of our teachers, administrators, and professional organizations to support the central thrust of this report
- stated the role the federal government should play in education; perhaps the most powerful statement in the report. The report states that the federal government has the primary responsibility to identify the national role in education and should help fund and support education.

Addressing Goldberg, she noted that it was interesting that the report ignores, or, by implication, rebuffs the current administration's position regarding the federal role. Nowhere does the report discuss tuition tax credits or other initiatives to which the administration seems committed and, in fact, the report issues a clarion call to the leadership of federal, state, and local governments to assume their respective responsibilities. Clayton then directed the following questions to Goldberg:

- Q. "The Commission recommended that standardized tests be used as gatekeepers at major transition points. Nationally, standardized tests have been attacked as having cultural biases. Is the NIE planning to commission a study of the cultural fairness of the existing tests, or the development of new, culturally fair ones?"
- A. "I really don't know. I don't know if NIE is planning to do that or not."
- Q. "On page 18, item 8, the Commission recommends accelerating achieving students. Did you intend for the recommendation to call for the acceleration of achieving students and the retention of those who are not?"
- A. "The Commission's suggestion on that point is that age not be the only criterion that is used to determine a student's placement in school and that schools should not be bound by age concerns. Primary concern should be what's best for the student."
- Q. "On page 11, the Commission found that minimum competency testing tended to lower standards for all. Were they able to determine the effects of mastery learning?"



A. "No, there was a general view, after getting to a lot of states and talking to people, they (the Commission) didn't say they should do away with minimum competency tests, but felt strongly that if people get locked into minimal competency tests, we're not going to be doing enough for most kids."

Q. "Can you address, from the perspective of the Commission, the responsibility of the federal government for funding some of the recommendations and providing support to state and local systems?"

A. "I think the Commission's report, and their recommendations in that regard, speak for themselves."

Q. "Do you have some recommendations for the federal government as to how they might do that?"

A. "No, the Commission made no recommendations beyond those in the report. The Commission, don't forget, is made up of people not unlike the people who sit in this room. The Commission felt strongly that if the people who sit in this room, and in rooms like this across the country, have views about that, there is some presumption that they would be heard."

Hopkins commented, before moving on to the next panelist, that a member of the Commission had, in the previous day or so in testifying before Congress, indicated that the federal government as well as the other levels of government has a responsibility to do more in education. He suggested that perhaps in that hearing there were more specific suggestions made.

#### Robert G. Scanlon

Scanlon stated that he felt the Commission report "has had an effect-- mostly positive." Personally, he believes that debate in education is healthy. "We shouldn't," said Scanlon, "be surprised with the report, because we heard back what we said and what we know." In his four years as Pennsylvania's Commissioner of Education, he visited 1,200 classrooms-- roughly 10 percent of all the classrooms in Pennsylvania's schools. Scanlon said he saw the best teachers and the best classrooms across the state. He said he knew, of course, that it was arranged that he see only the best,

but that did not matter. What mattered was that the successes of that 10 percent "point out what the other 90 percent could be like." And, said Scanlon, the Commission report is so healthy because it raises those questions.

Scanlon then touched upon his testimony before the Commission, in Atlanta, on teacher education. He was asked to testify, he said, for two reasons: (1) he was then in the process of completing a nationwide report on what was happening in teacher education, state by state; and (2) he had suggested some fundamental changes in the 89 schools of education in Pennsylvania. Scanlon presented his findings to the Commission and said that "teacher education is an area in which fundamental change is starting to occur, but not fast enough. It is an area in which we can begin, rather quickly, to make some real differences."

Scanlon acknowledged an earlier comment by Goldberg that the Commission was "struck by the fact that although the Chief State School Officers sat beside the teacher organizations of NEA and AFT, and they sat beside the principals, who sat beside the accrediting groups, who sat beside the colleges of teacher education, there seemed to be 'precious little' conversation between them." Scanlon agreed that this was exactly true. "The political realities of public education are such," said Scanlon "that we need new strategies to get everybody on the same wavelength to make these fundamental changes."

Scanlon concluded by asking the following three questions of Goldberg:

Q. "How do we go about coalescing the respective political interests? Given the financial considerations necessary for improvements, where do we find support? From business, or the community?"

What strategies should we consider for implementation? Where will it occur?"

- A. "Those are good questions Bob. Perhaps the coalescence of the political interests, in some ways, may be the question to which an adequate response could answer not only the other two questions, but a lot of other questions as well."

"I think that there are some very promising harbingers in the country today, but I fear that we, in education, won't take advantage of them. There appear to be a lot of people outside of education who seem willing to discuss education as a major issue today." Quoting a newspaper columnist who said, "education may be one of the one or two most important domestic political questions," Goldberg said, "I don't think we should sell that short. As a profession...we ought to know that education is a political matter... that the decisions about education get made in the context of working with school boards and city and state governments."

"I think there's an enormous need for leadership that works to coalesce that interest. The Commission saw examples of it in some parts of the country...In some cities for example, the superintendents made it a point not to meet with us without certain leaders of the parent/citizen community as well as leaders of the business community...This communicated a signal to them (the Commission) that in this city, when we address educational issues, we address them with civic, business, and political leadership...I think we need more examples of this...After all is said and done, the decisions about what changes to implement, no matter how much the resources are or where they come from...the decisions...are going to have to take place at the local level. They've got to. We never met anybody in any of our visits in any school system across the country that wanted somebody outside the school system to tell them how many hours they ought to spend in school, or what kind of standards...or curriculum they ought to have. They wanted to make those decisions at the local level."

As for business support, Goldberg said, "There is an enormous amount of business interest growing around the country in education. A lot of this interest takes the form of self-interest, but my feeling is, so what? That's what most interest is. Somehow, we have to tap that self-interest to enable the business community to see the need for improved education, from their point of view, and why they have to play a stronger role in that. Let me say one other thing about that. A lot of folks outside of education would be glad to help, but don't know what to do...They will ask the question: How can we help? And I'm afraid that, too often, we haven't known how to answer the question, and so the conversation has died. And I think that to some degree that condition may still apply. There are business leaders who might be willing to help... but they are not quite sure what they can do...I think we

have to work to help build a conversation to help provide the answers to those kinds of conversations."

"That, Bob, is a partial answer to the third question as well... strategies for implementation. Specific implementation, is of course, essentially a local matter. The implementation that responds to the charge of the Commission...it's a personal hope that they will occur because there will be meetings like this one in every city and town across the country...and that there will not be meetings just for people who have been spending their lives in education...(but will include) people who have kids in school, or people whose kids are not in school...or for some reason haven't seen the importance of education to them, personally. I think we have to dramatize that, and that's where implementation is going to take place."

### Sidney Collison

Collison, substituting for William Keene, Superintendent of Public Instruction in Delaware, said that Delaware educators "liked the attention they were getting from the report." Said Collison, "we expect some flagellation as the report comes out, but, hopefully, that will change to assistance...Hopefully, we will begin to hear people talk responsibly about how society is going to improve its schools." From a historical perspective, Collison noted that, in 1932, only 24 percent of students graduated from school, but by 1978 that figure had grown to 78 percent. This increase exemplified a changed purpose in schooling, said Collison, "a shift from the schooling of the elite to the schooling of the total population." Collison went on to address three specific topics: (1) the costs for Delaware to implement the Commission's findings, (2) current educational reform efforts in Delaware, and (3) the lack of research on secondary schools.

Collison highlighted some of the costs Delaware would face if they implemented some of the Commission's recommendations. For instance, the Commission recommends increasing the school day by one hour. Said Collison, "for little Delaware, with 95,000 students, increasing the school

day from 6 hours to 7 hours--a 16-percent increase--would cost \$16 million per year. Given Delaware's funding method, this would be composed of three-quarters state funds and one quarter local funds." The second Commission recommendation, to increase school days from 180 to 200, "would be a \$10.5 million increase," said Collison. The third recommendation, to add a month extra of schooling, "would cost \$14 million. Actually, the three recommendations together would account for a 37 percent raise in teacher salaries or increases of \$370 per student in increased costs. This would increase the average teacher's salary from \$20,000 to \$27,500." Collison said, "If money alone is what's needed to keep excellent teachers and to draw excellent people into teaching, then it's not a bad recommendation--we should pursue it immediately in Delaware and at the national level as well."

Moving on to his second topic, Collison reviewed educational reform efforts in Delaware. A 46-member high school curriculum committee was formed over the last year to review and make recommendations on changes in high school requirements for graduation. In April, the committee recommended to the state board some changes in these requirements, including an increase in credits that would include: four years of English; three years of social studies; two years of science (up one credit); and two years of mathematics (also up one credit). "These changes," said Collison, "will not affect the majority of Delaware graduates...the average number of credits earned right now is 22 plus. However, the committee did state that college-bound students would be encouraged to take three years of a foreign language and three credits each of mathematics and science, as well as a half credit of computer science."

With the aforementioned areas in mind--increased requirements and costs--Collison felt a third missing component had to be considered, if one were to implement these changes. The missing component, said Collison, is the culture of the high schools. "I don't think we can avoid some deliberate dialogue about the culture of the high schools because it is different. There are different people living there, from the point of maturity, than in elementary schools." Collison felt that educators need to do more to support and promote a higher level of socially mature behavior in students. Often times, reflected Collison, this culture reflects the attitude of just wanting to survive the experience, or defeat or contest it, rather than to find satisfaction or profit from it. Said Collison, "I see that we have to find ways for students and teachers to secure more ownership of this place where we spend so much time...The kind of outcomes we desire will require a little missionary zeal on the part of educators."

Collison ended his remarks with the following question to Goldberg:

Q. "What is the role of the federal government and where are the resources coming from?"

A. "There are a couple of items in addition to those raised before, that I think are important. The issue of the breadth of population served by the schools today, compared to one or two generations ago, is a very important one. It was addressed in the report...as a major advance in America that we must be very proud of. The report is very clear about the fact that aspiring to educational excellence does not require any diminution of effort in the areas of equity or access. In fact, it's a mistake to think that it does...so, we need to be proud of the access we've provided, but we ought not to be proud, (given) this access we provide, that there is still so much mediocrity. We have a responsibility to do something about that...every youngster that now has the opportunity to go to school, also has the right to a first-rate education."

"The issue on the culture of the high school is a very, very important one, and, frankly, is dealt with hardly at all in the report, except in terms of the issue of expectations...A lot was written about student motivation. We got some very interesting work on the nature of the differences in schooling at elementary, middle, and junior high school and post high school levels. The shifts, for example, that take place in the role of the teacher from the early grades through high school, a very obvious difference for anybody who has been in education...or done research in schools, but we pay very little attention to when we organize our schools...or how we build our schools. We just expect the student to become a much more independent learner, as the student gets older...it comes as a shock to some students that the teacher isn't going to provide all the information they need. You still hear kids in high school say 'Why was that on the test, you didn't teach it?' Because, in the lower grades, the expectation from students is that the teacher will provide all the other information that the student is going to have to respond to...that changes over time. That's just one example of those differences that were highlighted. I would commend the whole issue of the culture of the high school as a major area of concern and study that needs attention, so I would agree with you."

Thomas Hamill

Coming last, said Hamill, made it easy for him to say "Yeah, me too!" to all the points raised by the other panelists. However, he did have several points to add.

Hamill said he felt that "A Nation at Risk" must really be the right title for the Commission report, because, two months before the release of the report, he had attended a conference of the New Jersey Association of Manufacturers, whose meeting theme was exactly that. The conference, said Hamill, was attended exclusively by presidents and vice presidents of major New Jersey manufacturing companies. These manufacturers were frightened said Hamill. They said that no matter how you slice it, the U.S. was a third class nation; they defined third class as "importing technical expertise and exporting raw materials." They cited Japan as a major threat, given their system of government, industry, and education.

Hamill thought it interesting that the manufacturers and the Commission should come to the same conclusions.

Hamill then discussed New Jersey's school systems. He said that there were three types: suburban, rural, and urban. Said Hamill, "with a little more money, and some extra effort, the suburban schools could implement the recommendations almost tomorrow--as soon as the message to the public gets out." The rural schools, said Hamill, "have to start way back." The urban schools have one thing going for them, Hamill said. "There are still, left over from 30-40 years ago, pockets of excellence they can look to--which they can build upon." But the urban schools are going to be the hardest to change.

These descriptions of conditions in New Jersey's schools led Hamill to his second point: "Where was the funding to come from to implement the Commission's recommendations?" Hamill said, "If you take Newark as an example, they have a funding program of \$200 million less than the 65th percentile (of other districts' funding in the state). If they would pay that additional \$200 million for schooling, 87 percent would come from the state government and 13 percent from local funding." However, Newark indicated that there was no possibility that they could raise the 13 percent (of local contribution). Hamill did not understand how this was possible, so, he looked at homes in the city of Newark and found a house that was much like his own, but worth only half as much and taxed at twice the amount he was paying. Said Hamill, "How can these people, living in an urban environment, fund the Commission's recommendations?"

In closing, Hamill addressed the problem of good math and science teachers. He felt that the suburban schools have very little problem



attracting good teachers. That rural schools have some problems. But, if you look at urban schools, you will find that they have the worst problems in finding good math and science teachers. Said Hamill, "Urban schools are having a hard time finding and keeping anyone half decent. If they have any quality whatsoever, local industry hires them at 50 percent more in starting salary right off the bat. When you're competing with that kind of a world, you have a hard time talking about where you'll find the math and science teachers for three years of math, three years of science, and a half-year of technology, as the Commission recommends."

The luncheon session ended with Hamill's presentation, as the session had run its allotted time.

## II. EDUCATIONAL TECHNOLOGY

BASIC Programming on the Microcomputer

Impact of Computers in the Classroom

Computer Graphics

Software Evaluations

## BASIC PROGRAMMING ON THE MICROCOMPUTER

Presenter: Ned Davis, Educational Improvement Center Northwest, New Jersey

This optional pre-session training course combined both formal presentation and hands-on practice for educators wishing to learn how to write elementary BASIC programs. The Commodore PET 403 was used, but the course content is readily transferable to other computers. Topics covered included: an overview of computer use in education, computer terminology, saving and loading programs, inputting data, outputting information, graphing/animation, branching techniques, character strings, and arrays. The course provided a total of nine instructional hours.

## IMPACT OF COMPUTERS IN THE CLASSROOM

Presenters: Henry Jay Becker, Johns Hopkins University  
Audrey Champagne, Learning Research and Development  
Center, University of Pittsburgh  
Glen Snelbecker, Temple University

Moderator: Leonard Coplein, Haddon Township Schools, New Jersey

Coplein introduced the three speakers and mentioned his own and his district's use of and interest in computers.

Becker's presentation centered around the findings of a National Survey of School Use of Microcomputers conducted by the Center for Social Organization of Schools at Johns Hopkins. The study was based on a probability sample of 2,209 public, private, and parochial elementary and secondary schools in the United States. The survey was administered between December 1982 and February 1983 and was conducted by means of mailed questionnaires to the principal and a telephone contact to the school. The remaining information about microcomputer-using schools was provided by a teacher at the school identified as the "primary computer using teacher." By April 1983, 1,076 completed 18-page questionnaires had been received from these teachers.

Some of the results of the survey Becker discussed included:

- 53 percent of all schools in the U.S. have at least one microcomputer used for instructing students (as of January 1983)
- secondary schools remain the largest pre-college users of microcomputers--by January 1983, 85 percent of all high schools, 77 percent of all junior-senior combinations, and 68 percent of all junior-senior combinations had one or more microcomputers.
- the corresponding figure for elementary schools rose to 42 percent during the same period

- on the higher concentration of use, elementary schools reported more use in: introduction to microcomputers (64%), drill and practice (59%), programming instruction (47%), and tutoring for special students (41%); whereas secondary schools reported use in: introduction to computers (85%), programming instruction (76%), drill and practice (31%), business education/vocational (29%), and programming to solve problems (29%), to name a few
- a comparison between anticipated use of the computer at the time of purchase vs. actual use of the computer over time showed a lower use for drill and practice than anticipated
- schools with more microcomputer experience leaned more toward "programming" users. In fact, over a three-year period schools showed a steady increase in the use of computers for programming, while showing an equally steady decline for drill and practice in both elementary and secondary schools
- teachers said that the greatest impact of computers has been social--that is, that they have had more effect on the social organization of learning than on increased student achievement per se. Substantial numbers of microcomputer-using teachers believe that micros have led to increased student enthusiasm for schooling (30%); to students working more independently, without assistance from teachers (18%); to students helping one another and answering each other's questions (15%); and to students being assigned to do more work appropriate to their achievement level (12%)
- teachers use micros more with packaged programs than with their own programs.

These and other results of the study are being prepared in a series of reports, each designed to deal with some aspect of the national survey.

Champagne presented the findings of a project conducted by the University of Pittsburgh, and implemented with teachers of three 3rd grade classes in one school. The project studied the impact of teaching base 10 numeration by computer.

The computer was chosen as the medium of instruction for two reasons: (1) it could help to identify content problems which teachers do not teach well or children do not learn well; and (2) it could provide "physical contact"--that is, act as a manipulative--like Dean's blocks, to aid understanding of math concepts.

Champagne said that she thought of the implementation as going through three phases: (1) introduction into the school, (2) the "closet" tutor, and (3) out of the closet and into the classroom. Essentially, in phase one, the teachers were given the materials to review over the summer and they brought in children with math problems to try out the materials. The teachers convinced the Assistant Superintendent of the soundness of the content and its match to the current curriculum. Pretests were administered to students prior to implementation.

Phase two, Champagne dubbed "closet tutor" because that is literally where the computer was put in one of the classes--in the girls' cloakroom, off the classroom. The reason for this isolation was discipline. Teachers were concerned that there would be a lot of interruptions and rubber-necking to see what was happening on the computer. The computer program supplemented their regular instruction. The program contained 15 lessons and took a child anywhere from a half hour to two hours to do a lesson. One child at a time was scheduled on the computer. The computer remained in the closet about two-and-a-half months before the project moved to its third phase.

Phase three saw the computer come out of the closet and be installed near the teacher. It also saw a shift from a teacher controlled program to a student controlled program. The computer became an integral part of the classroom--the teacher could keep an eye on what was going on and the children could go about their lessons with some independence. Peer tutors were often helpful to some of the slower children.

The overall impact of the project was very positive. From the posttests, it was obvious that the children learned what they had been

taught. Champagne said that the project completely changed the way math was taught--teachers were motivated by their students' learning and there were orders from teachers for Dean's blocks. The children and teachers were sorry to see the project come to an end. Champagne, in conclusion, said that she felt computers had a great capacity for teaching.

Snelbecker's presentation focused mainly on procedures used to create courseware and on its appropriate uses. He was concerned about the fact that poorly created courseware and improper use of the computer would cause us to lose a tremendous advantage for expanding teaching and learning by computer. Snelbecker felt that the nature of instructional design theory had to be more closely followed, and that teachers who designed their own courseware needed to be exposed to these theories to aid their efforts. Snelbecker read excerpts from several articles to illustrate some of his points. He also felt that there was not enough attention being paid to the interpersonal and interactive aspects of using computers. He said that computers could promote student collaboration around using the computer--to promote problem-solving and shared experiences. He also felt that we needed to go beyond drill and practice uses of the computer to more interactive uses.

## COMPUTER GRAPHICS

Presenter: William Fowler, New Jersey Department of Education

Fowler discussed the use and versatility of computer graphics. His presentation was in two parts. First, he presented a series of computer generated graphics, which he designed. Second, he presented a high-tech video graphics demonstration tape.

Using some educational statistics from New Jersey as a backdrop for his presentation, Fowler first held up several of the typed statistical charts one usually sees presented in reports--columns of figures, multiple categories of information on one page, and completely unreadable. Even enlarged on an overhead, the charts were difficult to read, much less interpret. Fowler then presented a series of graphics based on the statistics from the typed chart. He showed several of his preliminary attempts to break out the information in such a way as to dramatically display what the statistics meant, using computer graphics to give them form and substance. He then presented several examples of the final charts. Specifically, he had designed a computer-drawn State of New Jersey map -- a flat outline of the state, with sharp peaked mountains used to portray the number, concentration and type of information presented. Thus, various charts showed the concentration of K-12 school districts by school district organization, the schools with the largest student populations, parts of the state where vandalism was higher, etc. By overlapping several charts, one could see the movement and ramifications of the data. In essence, the computer graphics generated to illustrate the statistical charts provided an instant basis for understanding the



ramifications of the numbers far more efficiently and effectively than the typed statistical charts achieved.

In the second half of his presentation, Fowler ran a video graphics demonstration tape produced by Evans and Sutherland (producers of the high tech video graphics used in the movie TRON). This glossy demo consisted of overviews of such subjects as 3-dimensional geometrics, astronomy, molecular modeling, medical analysis (of patients), energy development, and flight simulations for pilots (in real time).

Fowler also handed out a copy of Siggraffiti for April 1983, published quarterly by ACM (Association for Computing Machinery's Special Interest Group on Computer Graphics).

## SOFTWARE EVALUATION

Presenter: Kenneth Komoski, Executive Director, Educational Products Information Exchange (EPIE)

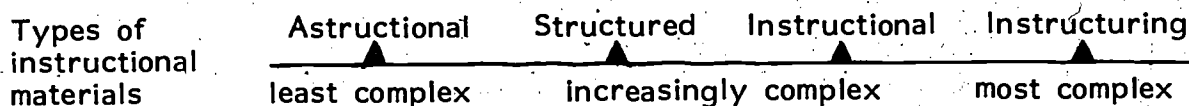
Komoski discussed instructional software from three perspectives: (1) the development of the EPIE Pro/FILES, (2) influences which impact selection and application of instructional materials, and (3) the home/school market--how schools can inform, influence, and assist parents' decisions about hardware/software for home use.

The EPIE Pro/FILES were developed to provide reliable evaluations of existing software. The design and criteria used in these evaluations was influenced primarily by the work of Ralph Tyler. Komoski said that the Pro/FILES follow Tyler's template; specifically, they examine: (1) intents--what is the program's stated purpose, (2) contents--scope and sequence, (3) methodology--is the program effectively organized, and (4) evaluation--does the program attain what is intended (i.e., #1). In addition, the Pro/FILES also examine the technical aspects of the program (e.g., graphics, pacing, branching, feedback, etc.).

Komoski then presented some statistics on the current approach to and use of instructional materials. On the average, he said, only about one percent of a school's budget is used to purchase text-related materials. This year, said Komoski, that amount was about 1/10th of one percent. Yet, teachers use these materials 90-95 percent of the time in their classes. The amount of new material introduced by the teacher said Komoski, over and above what is presented in the instructional materials, is only about two percent. When one weighs the money expended on textual materials against the degree of use, the implications for software

purchase and selection are clear. If only 1/10th of one percent goes toward instructional materials, and if that is split between texts and software, the software had better be good. EPIE, therefore, provides evaluation of software to facilitate informed selection.

In an attempt to place software and computers within an instructional context, Komoski posed the following view. If all materials used for instruction were placed on a continuum, he feels they would fall under four categories:



An example of an astruational material would be a computer--a tool used to assist instruction. Structured and instructional materials would be those with a scope and sequence or that use an instructional strategy/methodology; an example would be LOGO. Instructuring materials, the most complex said Komoski, would be materials so well designed as to fit the learner's level of knowledge/competency; for example, tutorial instruction. Although software is created for no one individual, well designed programs with sound instructional strategies provide the best opportunity for student learning.

The design of the software is crucial, said Komoski, if it is to support or enhance instruction. Komoski felt that there needed to be a stronger bridge between the designer and the learner, as well as between the intents of the software and the evaluation of the effects on the learner. Currently, the goals and objectives of software programs are not strongly tied to existing tests/assessment instruments. Thus, measuring

software program effects are difficult. Komoski suggests that what is currently being measured in computer studies is "entropy." Entropy, the unused energy in a system, in a school is really the amount of difference between boredom (students not being challenged) and engagement (students meaningfully and challengingly occupied).

Komoski then discussed what he believes will become the major software market in the near future--the home. According to Komoski, parents will become the largest purchaser of instructional software by 1988. Currently, home sales of software (educational and other) exceed school purchases, and he predicts it will become three to five times larger. Vendors, realizing that home sales are where the profits will be, have geared their advertising to that market. Said Komoski, schools need to think about becoming involved in this phenomenon. Some of the ways in which schools could become involved include:

- provide parents and children with training for at-home learning with the computer
- provide parents with the opportunity to preview software used by the school prior to their purchase to facilitate home/school matching of instruction
- arrange with vendors to allow parents/teachers to receive the school's discount when they purchase home computers or software.

Komoski feels that the schools can do a great deal to see that the instruction children receive on home computers is congruent with, not contradictory to, what is being taught in the school. Since the home market is a real and growing one, the schools need to take the initiative in seeing that, instructionally, it is a helpful and appropriate one.

### III. SCHOOL IMPROVEMENT

How Districts Use Research to Improve

Cost Effectiveness in School Improvement

New Findings on the Role of the Administrator in School Improvement

## HOW DISTRICTS USE RESEARCH TO IMPROVE

Presenters: Serge Madhere, Newark, New Jersey Board of Education  
Hope Hartman-Haas, Newark, New Jersey Board of Education  
Jann Azumi, Newark, New Jersey Board of Education  
Henry Harper, Appoquinimink, Delaware School District  
Paul LeMahieu, Pittsburgh, Pennsylvania Public Schools  
Louis Venson, Pittsburgh, Pennsylvania Public Schools  
Ronald Larkin, New Brunswick, New Jersey Public Schools

Moderator: Ron Brandt, Association for Supervision and Curriculum Development

This two-part panel presentation was introduced by Brandt, who set the ground rules and introduced the speakers. The first speaker, Madhere, described how the Newark Board of Education's Office of Research and Evaluation was meeting one of its major goals--improvement of student achievement and personal growth. He explained that by using implementation analysis in carefully chosen Title I schools, his office was able to gather data on the real effectiveness (i.e., effectiveness in producing results) of three popular Title I remediation strategies:

- laboratory approach
- pull-out approach
- regular classroom approach.

The data gathered, he explained, would be used to document and validate the effectiveness of these three approaches in hopes that other Title I schools could adopt the most effective ones with greater confidence.

Hartman-Haas described another Newark project in which state compensatory education classrooms were surveyed to identify their needs related to four research-identified study variables: setting, time, support system, and instructional activities. The information was synthesized and

translated into a set of recommendations about what administrators can do to increase reading and mathematics achievement among compensatory education students. The recommendations--categorized according to the four variables--became the topic of a series of workshops conducted by Hartman-Haas and presented to principals throughout the state.

Azumi, also from Newark, described her efforts in using research for school improvement. Focusing on research-identified organizational characteristics that affect student achievement, she attempted to use her study and its results with five Newark schools. Specifically, she wanted to profile each school's organization according to leadership, parental involvement, instructional time allocation, climate, and the like. Then, working with the principal, she planned to develop and carry out improvement projects aimed at high priority organizational needs. The bulk of her presentation dealt with various obstacles she encountered and which she felt might be expected in any such effort. In the end, she concluded that a lack of personnel, administrator discomfort with outsiders, and administrator reluctance to acknowledge problems were the most significant obstacles undermining her efforts. She did end on a positive note, however, by pointing out that two schools still were actively involved. One was focusing on attendance and parental involvement, and one was focusing on instructional time.

Harper, from Appoquinimink School District, outlined his district's involvement with RBS' Achievement Directed Leadership (ADL) program. He began by describing several of the district's dismal experiences with other research-based improvement efforts. He went on to discuss some of the early problems he and RBS staff encountered in trying to convince his

principals of ADL's usefulness and in making the research information appropriate for teacher use. Once he accomplished this, however, they found that it worked well. This positive experience encouraged him to introduce other research-based improvement efforts.

LeMahieu introduced what he called the "Pittsburgh Story." He explained how the Learning Research and Development Center (LRDC) helped the Pittsburgh Public Schools identify and prioritize educational areas in severe need of improvement throughout the district. For each high priority area, a research-based program was adopted or developed to facilitate the improvement process. He described two:

- Monitoring Achievement in Pittsburgh--a program involving frequent assessment of student mastery
- Schenley High School Teachers' Center--a program of intensive, long-term staff development

Another representative of the Pittsburgh Public Schools, Venson, continued the "Pittsburgh Story" by describing his work with seven low achieving, high minority schools. In describing his efforts to increase building level effectiveness and boost basic skills achievement, he continually reiterated a theme which he felt was central in getting districts to use research; namely, the necessity of making research strategies and implications comprehensible and palatable to practitioners. In his work, this theme led him to allow the schools' staffs to define their problems and to use a combination of common sense, "intuitive knowledge," and relevant research to solve their problems. Specifically, this strategy led him to assist the schools in the development of:



- a principal-centered discipline model
- an achievement monitoring model based on pacing and mastery which incorporates re-teaching
- an expectations model which focuses on active parent involvement
- a principals' in-service program.

The final presenter, Larkin from the New Brunswick public schools, also described his experiences with RBS' Achievement Directed Leadership program. As Harper had done previously, Larkin focused on what he had to do to convince his district staff to use what he considered to be a viable, research-based approach to school improvement. He briefly outlined his strategy. First, he developed mission statements for parties with a stake in the educational system: administrators, teachers, students, and parents. Then he used data from New Jersey's minimum basic skills test and the California Achievement Test to pinpoint needs and to rank schools in his district according to their students' levels of achievement. Finally, using the ADL and other research-based models, he translated the research information for district personnel. He provided the following three illustrations of his strategy:

- he used research information about strong administrative leadership to develop a program whereby principals became responsible for teacher in-service
- he used research information about structured approaches to teaching to help teachers develop and follow curriculum maps which specified content and time allotment
- he used research information about prior learning to assist teachers and administrators in analyzing and using students' past test data.

## COST EFFECTIVENESS IN SCHOOL IMPROVEMENT

Presenters: George Jarrach, Middletown Township, New Jersey  
William Fowler, New Jersey Department of Education

Jarrach presented the findings of a research project which examined the changes made by three urban high schools which, for three consecutive years, failed to meet minimum basic skills standards.

The New Jersey state law requires that all students in public schools must meet minimum levels of proficiency in the basic skills. It further mandates that if deficiencies exist, as identified by the Minimum Basic Skills (MBS) Test, a Comprehensive Basic Skills Review (CBSR) process must be followed. The CBSR process analyzes existing school programs/practices in relationship to alterable factors identified by research as associated with successful achievement of basic skills. The three urban high schools underwent the CBSR process in the fall of 1980 and achieved the highest gain on the Minimum Basic Skills (MBS) test administered in the spring of 1981.

To determine which CBSR recommendations would be followed, focus interviews were conducted and verified by visiting schools, observing programs, and participating with staff. Central office staff were also interviewed to determine the costs associated with the changes to be implemented. Finally, a cost effectiveness analysis of each program was conducted to determine the cost per student for each unit of growth on the MBS test. This process led to the determination that 74 of the 76 recommendations made would be implemented, most in the first year. (The

two recommendations not implemented involved the hiring of additional staff.)

Jarrach discussed the implementation process, the changes that were made, the perceptions of school staff involved, the results of the implementation, and the costs per student. Regarding costs, it was determined that the mean cost per student to implement change was \$271.88. The most expensive category to implement was Basic Skills Mathematics/Instructional Time which consumed 38 percent of the total implementation costs, followed by District Policies and Procedures at 24 percent, Basic Skills Reading/Instructional Time at 23 percent, Staff Knowledge and Attitudes at 14 percent and Parent/Community Relations at 1 percent. Each of the aforementioned categories are in the CBSR document, identified by research as affecting school improvement.

Fowler discussed his recent research paper which put forth the assertion that the key to understanding why money does not make a difference in school improvement is tied to the understanding that schools spend money in ineffectual ways.

Fowler discussed some of the extant research on and the methodological concerns in assessing school productivity and school effectiveness (e.g., Coleman (1966); Glasman and Biniaminov (1981); Guthrie (1971); Lou (1979); Mayeske (1972); Rossmiller (1982); and McKenzie (1983); to name a few).

In conclusion Fowler made three points about cost effectiveness in school improvement:

- at the present time, neither the (old) input-output studies nor the (new) school effectiveness research provides reliable and valid conclusions that should be acted upon. The

recent hoopla over effectiveness characteristics should be tempered by the strong suspicion that the results are spurious

- all research into school effectiveness must be conducted under the most rigorous research conditions the educational community can muster. This means large sample sizes at the school level, longitudinal research, sophisticated multivariate simultaneous equations, and the use of control variables for student background characteristics and native ability
- an effort must be made to determine if different actions and resources are effective for all schools, regardless of community background and resource allocation, or for certain types of schools.

NEW FINDINGS OF THE ROLE OF THE  
ADMINISTRATOR IN SCHOOL IMPROVEMENT

Presenters: Bruce Wilson, Research for Better Schools  
H. Dickson Corbett, Research for Better Schools  
William A. Firestone, Research for Better Schools

Moderator: Matthew Miles, Center for Policy Research

First, Wilson reported on how school administrators shop for external assistance. The data came from a survey of 345 principals and district administrators in 68 districts supplemented with 72 interviews. He found that: (1) administrators seek assistance externally about twice as often as teachers do; (2) administrators seek assistance externally about as often as they do internally; (3) assistance seekers tend to be generalist district office staff who are in frequent communication with others in the district; (4) external assistance is sought more from neighboring districts, education service agencies, professional associations, and state departments of education than from institutions of higher education; (5) that most contacts are very brief--often telephone calls; and (6) that many assistance seekers are very sophisticated and able to pick out relevant, high quality assistance.

Next, Corbett described what had been learned about the spread and institutionalization of change from an observational study of 14 schools. He found that the spread of innovations within a school is facilitated by linkages among school staff. These include shared goals, frequent staff interaction, or consistently adhered to curriculum guides. While such linkages are rarely found throughout a school, there are often pockets of frequent communication. Principals can take advantage of these pockets

by including representatives on planning teams. Continuation of an innovation by teachers is facilitated by administrative incentives. These can often be symbolic, such as occasional questions about the innovation from the principal, or more formal, like questions about the innovation during evaluation meetings.

Firestone identified differences in climate and principal leadership between elementary and secondary schools. The data came from a survey of teachers in 50 schools. Secondary schools have less goal consensus among staff, greater conflict, more decentralization of influence over classroom issues, and less facilitative leadership than is found in elementary schools. These differences can be attributed to three characteristics of secondary schools relative to elementary schools: the size, the prevalence of departments, and the larger proportion of male teachers. Contrary to expectation, climate was found to be more related to leadership at the secondary level. Facilitative leadership reduces conflict, and centralization of influence increases goal consensus, but only at the secondary level.

In reviewing the session, Miles pointed out that the papers were unusual because they provide findings rather than "bromides" about the roles of the principal and district staff. He also showed how the papers addressed recurring dilemmas in education such as the tension between autonomy and interdependence and between centralization and decentralization of control.

#### IV. MEASUREMENT AND METHODOLOGY

Measurement and Mismeasurement

Believe It or Not--Conducting Credible Case Studies

Researching Special Education

## MEASUREMENT AND MISMEASUREMENT

Presenter: A. Jon Magoon, University of Delaware

Magoon's presentation involved a critique of traditional approaches to the measurement of mental ability in light of recent social issues and research findings, and concluded with a discussion of the implications for classroom instruction if we reconceptualize human ability. He began by giving a (MIS) Measurement Quiz that listed assertions and misconceptions about the nature of human ability and aptitude testing. Each of the statements in the quiz was discussed in terms of his paper A New and Needed Ethic in Measurement: Feuerstein's Reconstruction of Ability.

Magoon's challenge to traditional assumptions about ability measurement is based largely on the work done over the last thirty years by Feuerstein and his colleagues in Israel. The conclusion of this research is that mental ability should not be seen as a stable trait, as it is viewed by the traditional psychological testing movement, but, rather, "ability should be understood as a dynamic facility that develops largely through the social mediation and agency of a deeply-caring teacher." Feuerstein's work with "retarded performers" demonstrated that students' intellectual skills can improve radically under the right combination of conditions. Magoon cited examples of effective schools and "super teachers," such as Marva Collins in Chicago, as further evidence of this position.

On the basis of these arguments, Magoon said the human organism should be understood as an open system capable of much development rather than as a closed system where ability is fixed at birth, in different amounts for different individuals as assumed by the followers of Binet in



the aptitude testing movement. Magoon cited evidence which indicated that Binet's original work was largely misunderstood and that he was actually "open" to the human system's openness.

Magoon argued that merit or ability rankings that follow from the "closed system" approach may be considered unethical, unjust, and useless. He cited the work of McGuire that calls for "a new American justice which would require redistribution of top jobs in the society to both women and minorities." He concluded that many jobs do not require merit, only trainability. Magoon noted that even the Chinese, who instituted a civil service examination system for ranking ability more than 2,000 years ago, threw out their measurement system (80 years ago) when confronted with issues of social justice.

Magoon noted some implications of his "constructivist" approach for educators and measurement specialists. Specifically,

- measurement must not be seen as an end in itself
- ability measurement should be used to provide diagnostic information about what the student should learn next, but should not be used for summary ranking or comparison purposes
- measurement can be used to determine how seemingly critically-needed skills are developed at various points in students' education/training
- teachers' close social observations of students (i.e., "striking up an acquaintance") should, for the most part, replace the traditional measurement model for diagnosing student needs
- teachers need to adopt a basic philosophy of education where they are "believers in kids" and they must accept that all students can experience successful achievement; education should focus on all students, not just the "above average"
- teachers should recognize the importance of and assume a very powerful social role with respect to their students

- teachers and administrators need to be retrained concerning the stability of human ability and effective strategies for accomplishing change (i.e., social mediator skills)
- "super teachers" are caring teachers
- recent findings in the effective schools movement are consonant with Feuerstein's Instructional Enrichment (F.I.E.) approach; as such, teachers and administrators should pay attention to factors such as small class size, school climate, relevance of instruction, concern for achievement, effects of prior learning, provision of positive feedback and opportunities for success, and students' self-concept
- implementation of elements of the F.I.E. approach could have profound effects on increasing the ability of educationally disadvantaged students in the United States
- school boards should abandon the notion that test scores are the appropriate measure of the quality of their educational system.

## BELIEVE IT OR NOT: CONDUCTING CREDIBLE CASE STUDIES

Presenter: Lois Ellen-Datta, Group Director, Educational Studies,  
Institute for Program Evaluation, U.S. General Accounting  
Office

Ellen-Datta began her presentation with a plea for the use of case study results in evaluation. Her plea was based on the argument that there has been an increased use of quantitative data to justify the need for change and the places where changes are to take place. She argued that quantitative data offer good insights into what the problem is, but not how to change it for the sake of improvement.

She then proceeded to give a brief summary of the historical roots of case study method in evaluation. This summary was based on an extensive review she has conducted as part of her current work at the General Accounting Office on the "History of the Case Study Method." She argued that the roots of the case study method derive from anthropology and grew out of a lack of confidence in the interpretation of quantitative data. This translation from pure ethnography (anthropology) to applied case studies (educational evaluation) has not been without its problems. Two key dilemmas face researchers who adapt ethnographic approaches for evaluation purposes. First, there is the element of control on the part of those who are buying the evaluation. In pure ethnography, it is solely within the power of the researcher to decide what to study, what information to collect, and how to present the findings. These features are compromised with the introduction of an outside contractor paying the bills. Second, the demand for generalizability has forced the case study evaluator to use a

multiple site design. This choice greatly reduces the richness of data that can be collected and used to describe how or why something happens.

To summarize the current state of affairs, Ellen-Datta suggested that there are five types of case studies in evaluation:

- illumination: presents a photograph of what a particular program is like
- critical instance: an indepth description of a key single site
- exploratory: used to help inform the design of a larger study, this type attempts to determine the key elements of a program
- program operation/program effectiveness studies: prevalent in education, these studies expose the assumptions of the funder and operator of a program and how those assumptions get played out through daily activities
- cumulative: provide data across multiple cases and are designed to provide generalizable findings.

Ellen-Datta concluded with three cautionary notes about problems that continue to plague researchers using the "case study" method. First, there is rarely any connection made between the sites chosen (i.e., the sample) and the problems being studied. The interaction between these two is important, but seldom developed. By not paying attention to this linkage, it is often difficult to match what has been learned from the case study with what question is being asked. Second, with the increased emphasis on generalizability there has been a multiplication of cases. When multiple sites are visited, it becomes more difficult to describe what is happening and why it is happening. If frequency of occurrence is the objective, then case studies are inappropriate. Furthermore, if the settings and populations to be investigated are heterogeneous, then case studies may not be the appropriate tool. Finally, there is an overriding concern with bias. Are the views of the observer too intertwined with the requirements of the

contractor? In quantitative studies, replicability is a technique used to test bias. In case study research, the criterion should be plausibility. Several external validation techniques were discussed as a way of testing bias and documenting the plausibility of the original researcher's perspective.

## RESEARCH IN SPECIAL EDUCATION

Presenters: G. A. Smith, University of Delaware  
Julius Meisel, University of Delaware

Smith's presentation dealt with the issue of observer reactivity. Much research in special education relies on systematic observation for the measurement of changes in student performance. The burgeoning use of direct observation and recording of behavior to evaluate change across various problems and populations appears to have led to unquestionable acceptance of this kind of methodology. Some research, however, has suggested that observer performance becomes erratic when such observers move from a training situation to a data collection situation. Smith summarized pertinent investigations which had been conducted by others and then proceeded to report the results of his own research on observer reactivity.

In his own research, Smith utilized videotapes of pre-schoolers to create a laboratory analogy of naturalistic observation. He used this analogy to examine variables affecting observer reactivity. Sixteen undergraduates were randomly assigned to a monitored and unmonitored condition after training in an 11 category observational code. Results indicated a significant decrease in observer agreement scores coinciding with the shift from training to data collection. This drop in performance was noted for both groups, although the decrease was only expected for the unmonitored condition. Implications of these results for training of observers and conducting observational research were discussed by Smith with respect to special education. Such implications, however, range far beyond

the field of special education. Smith's findings raise questions about the reliability of observational techniques in naturalistic settings across all educational fields and content areas.

Meisel's presentation dealt with an examination of social processes in the classroom and the academic integration of handicapped children. Meisel has recently completed a pilot study on mainstreaming academically handicapped with non-handicapped students and the implications for comparative results of their performance.

The concept of mainstreaming for handicapped children has implicitly assumed that such practice results in benefits to the handicapped children. The research questions addressed in Meisel's study included: "Do mainstreamed handicapped children compare their performance with non-handicapped children, and, if they do, how is their self-concept affected?" Conditions in local schools in Delaware were ideal for the purposes of this study, since they used an integrated classroom model with 10 handicapped children mainstreamed with 20 non-handicapped children, under the supervision of two teachers.

Pilot studies were conducted on social interaction by introducing an auditing procedure into third and fifth grade classrooms. A point system had been established within the classrooms to promote achievement and good behavior. The auditing procedure consisted of allowing the children to ask the teacher, at pre-designated times during the class periods, how many points they each had gained. In addition, they could ask about other students and how many points they had gained. Records were kept on the frequency of questions about how many points each student had and on the frequency of their questions about each of the other students' points.

Using a Guttman small space analysis, regular auditing behavior of each of the students in the participating third and fifth grades was studied as an index of the extent of social comparisons made among the children and the direction of comparisons. While still in its pilot stages, this research is leading to fruitful hypotheses concerning the effects of mainstreaming on handicapped children.



## V. PAPER AND OTHER SESSIONS

Long-Term Public Service: Job Satisfaction and Personal Fulfillment

### Paper Session A:

An Assessment of the Perception of a Regional Program to Improve School Program Articulation

Results of a Study of Local, Ongoing Inservice Practices and Programs for School Board Members in the Commonwealth of Pennsylvania

### Paper Session B:

Critical Issues in Research on Effective Schools

The Design and Implementation of a Statewide Technical Assistance System for School Improvement: Alternative Considerations

Consequences of Youth Joblessness

LONG-TERM SERVICE: JOB SATISFACTION  
AND PERSONAL FULFILLMENT

Presenters: Billy Ross, University of Delaware  
Millard Fischer, Personnel Consulting Institute

Moderator: Wayne Conrad, New Jersey Department of Education

Conrad introduced the speakers and touched briefly upon the purpose of the session. Conrad said that recent research shows that job satisfaction and personal fulfillment for people, generally, and for educators, particularly, are becoming increasingly difficult to maintain, given the erosion of job security, especially in the public sector, and the shift of workers from the public to the private sector. This session, then, was to present some ways people could "diversify their psychological portfolios" to help them become more productive and experience greater fulfillment from their jobs.

Ross presented some findings by such researchers as Maslow; Lelong; Yamolowski; and Hopich, Fuller and Gassel as to why people were experiencing dissatisfaction. He said that Yamolowski found that the status of the profession (education) had declined in recent years and that there were trends to diminish the profession. Hopich, et al. found that, between 1935 and 1970, teachers' job dissatisfaction level was only about 10 percent--that 88-90 percent were satisfied. However, recent findings indicate that teacher job satisfaction has decreased dramatically since 1970. Ross said that Lelong's theory that "job satisfaction for the professional educator might be different than satisfaction levels for other professionals," might account for the percentages.

Fischer, a clinical psychologist, discussed some of his findings in working as a personnel consultant. He also discussed two tools which could be used to help one get a better perspective of "self" and attain better feelings toward work.

Fischer said that he found that feelings of self-dissatisfaction are derived primarily from the job, "context," rather than the job itself. In order to help people, said Fischer, you have to work with and study individuals in their daily work "context" or environment. Another area for job dissatisfaction, said Fischer, is that very few people have "decided on their career choices"--most people do not end up doing what they thought they might--therefore, dissatisfaction is not unusual.

Two tools which one could use to change dissatisfaction are a personal journal/organizer and self-hypnosis. The personal journal, said Fischer, is to be about you--it should show your daily life, at work and at play. People have too much of a tendency to compartmentalize their life, they should "lump it all together" to get a better total feeling from it. Said Fischer, you can confront yourself better on paper than in your thoughts. When you think of yourself, you can be masterful, and fantasize, and be less rational. A log will allow you to be systematic and rational. Eventually, said Fischer, as you get into the habit of keeping a log, you will experience a higher level of fulfillment and get a better sense of "self."

The second tool, self-hypnosis, does two things. It provides you with a way to relax yourself, and a way to gain a calm perspective of yourself and your actions. Fischer ended his presentation by having the group participate in a self-hypnosis exercise.

## PAPER SESSION A

### Presenters/ Papers:

Brenda Benson Burrell, Washington Township Public Schools, New Jersey. "An Assessment of the Perception of a Regional Program to Improve School Program Articulation"

Antonia Neubauer, Research for Better Schools. "Results of a Study of Local, Ongoing Inservice Practices and Programs for School Board Members in the Commonwealth of Pennsylvania"

Burrell presented the results of a study to assess the perceptions of a regional program to improve school program articulation efforts through an established project--Project Dragon. Project Dragon, initiated in 1974 with Title III funds, was to develop a workable approach that would lead to the improvement of program articulation among four separate school districts. Three of these districts were K-6 elementary schools that "feed" their students into the fourth school district--a 7-12 regional high school. The data collected through this study examined two aspects of Project Dragon's efforts: (1) success factors that contributed to making Project Dragon effective in developing an articulation program K-12, across-districts, in participating schools, and (2) common program or administrative characteristics that existed in the districts that participated in Project Dragon.

Two statistical treatments were used: (1) t-test to compare project participants with non-project participants, and (2) reliability coefficient to establish interrater reliability among appraisers on a characteristic scale. Significant differences were found between Project Dragon participants and non-Project Dragon participants in the following areas: (1) conditions that exist or existed, (2) decision-making factors in implementing articulation

programs, (3) effects and outcomes of articulation programs, (4) support for future articulation development, and (5) joint regional/constituent school district development.

It was concluded that vertical articulation was needed in the development of K-12 curriculum; a workable plan had been established through Project Dragon; joint efforts among all educational staff members, school board through teachers, were important in the development of articulation processes; and, finally, limited regional and constituent districts were needed to develop joint articulation processes in order to ensure students, K-12, a "thorough and efficient" education.

Neubauer presented the results of a study of local, ongoing inservice practices and programs for school board members in the Commonwealth of Pennsylvania. The study asked four specific questions.

- What were the inservice needs of school board members?
- What local, ongoing inservice programs and practices have local districts and school boards developed to meet those needs?
- Should local districts have a formal, ongoing inservice program, and, if so, what kind?
- What are the major constraints on the initiation or expansion of local ongoing inservice programs and practices for school board members?

Three groups of respondents were surveyed in this process--experts, board members (including presidents), and superintendents. Their responses were analyzed according to district characteristics (size, type, finances, and location) and respondent characteristics (status group, length of board tenure, age, sex, profession, and education). Data from

the study were utilized to develop guidelines for local inservice that were generally applicable to all school districts across the country.

The study determined that:

- although one can provide guidelines for a local board development program and examples of "programs that work," there is no single inservice model that is applicable across all districts
- significantly more board development needs to occur at the local level, especially in rural and small town areas
- an active state school boards association plays a crucial role in promoting and providing for board development
- local development should be more participatory and involve more activities focused on skill development
- strong board development programs tend to promote district stability
- a superintendent's education and self-image affect his/her willingness and ability to provide a strong board development program
- board members and superintendents are clear in their desire for more local inservice regardless of the major constraints of time or pressure to conserve funds.

## PAPER SESSION B

### Presenters/ Papers:

Linda F. Winfield, New Castle County School Consortium.  
"Critical Issues in Research on Effective Schools"

Edward Patrick, Research for Better Schools  
"The Design and Implementation of a State-Wide Technical Assistance System for School Improvement: Alternative Considerations"

David Lynn Passmore, The Pennsylvania State University.  
"Consequences of Youth Joblessness"

Winfield's paper centered around the findings of recent research on effective schools. She discussed some of the research findings of effective urban schools (e.g., Armor et al., 1976; Brookover, 1978) and the study by Parkey and Smith (1982) which reported some "flaws in the original research and inconsistency across studies concerning the factors discovered in effective schools."

Winfield then discussed traditional definitions of effectiveness from the standpoint of conclusions derived from case studies of five urban low SES schools in a major metropolitan area in the Northeast, conducted over school year 1979-80. According to Winfield, the results of this study question the adequacy of traditional definitions of effectiveness.

Patrick's paper described and analyzed the alternatives considered in designing and implementing Pennsylvania's statewide technical assistance system for school improvement. He reviewed some of the implications derived from recent RAND, TAG, RDU, NDN and RDx research studies pertinent to the role of technical assistance in school improvement. He also discussed, from a case study perspective, the practical considerations encountered in relating the research implications to the general design,

management, implementation, support, and evaluation components of the system.

Passmore's paper addressed the question: Is youth joblessness actually a problem? In reviewing over 160 pieces of literature concerning the consequences of youth joblessness, Passmore found among other things, that (1) modest evidence links youth joblessness with less frequent employment and lower earnings as an adult; (2) evidence is scarce that youth joblessness is related to lost output of goods and services, increases in federal expenditures, changes in criminal behavior, and diminished health; (3) joblessness over all age groups is related to increases in federal expenditures, crime, and stress-induced illnesses; (4) policy-makers can consider policies to reduce youth joblessness in relation to their opportunity costs--that is, in relation to the cost of reducing the effects of youth joblessness rather than pursuing other goals; and finally, (5) future research should emphasize improvements in the methodology used to determine the consequences of joblessness.



## APPENDICES

- Conference Brochure
- List of Presenters
- List of Participants

# Pre-Conference Post

Third Edition

Tri-State Educational Research Conference May 16-17, 1983

Page 1

## New Jersey, Delaware and Pennsylvania Educational Research Associations Announce Joint Conference

Agatha Christie  
Staff Writer

Two years ago this column carried an exclusive report on the first joint conference of the Pennsylvania and New Jersey Educational Research Associations. Mystery shrouded last year's fete like a dense fog and prevented the publication of any details. This year the Associations have "come clean" and confessed to plans for a May 16-17, 1983 meeting at the Philadelphia Hershey Hotel. A startling fact came to light when evidence indicated that the newly formed Delaware Educational Research Association has joined the conspiracy. This reporter would advise Delaware to watch out; remember guilt by Association.

Careful sleuthing turned up a copy of the conference blueprint - filled with the names, dates, and places of conference sessions. Two reputable investigators have somehow been conned into giving keynote addresses. After Monday lunch, Mitch

Brickell will reveal his answers to the big educational problems of the decade. On Tuesday, Milt Goldberg will divulge the findings of the Commission on Excellence in Education. In this climactic session a distinguished panel will cross examine the Commission and present their own judgments:

Anyone who can swing it, should assume the guise of a researcher and slip into the Philadelphia Hershey on May 16 and 17, 1983. You'll experience all of the excitement of the nether side of the law.

### Philadelphia Beckons Again!

Claude William Dukenfield, AP

A devotee of excesses in living rarely knows where to draw the line. But, without a hint of hesitation or dram of doubt, it can be said that the Tri-State Educational Research Conference is just too much. This column reported that the 1981 affair amused, beguiled, and coddled all who attended. It was heard that 1982 conferees were delighted, exhilarated, and festive. This year's event promises to be a gala hurricane of intellect and joviality.

(See Philadelphia-P 2)



BEST COPY AVAILABLE

Philadelphia *Continued from Page 1*

The new Philadelphia Hershey Hotel, that radiant and resplendent refuge for refreshment and rejuvenation, will be the conference site. Spacious splended overnight accommodations await with special thrifty tariffs of only \$55 or \$65 per night. The entire Fourth Floor Meeting Level will be devoted to conference sessions. Unique among Philadelphia hostelries, the Hershey offers extravagant recreational appurtenances to enhance stamina and salubrity - indoor swimming pool, sauna, exercise room, jogging track, sundeck, roof garden - all free to overnight guests. Finally, the Hershey boasts two fine restaurants serving epicurean delights and no less than four lounges offering discrete libations.

Two conference sessions are of principal and preeminent interest, thus receiving special note in this column. Conferees with the foresight to arrive Sunday evening will be treated to a welcoming wine and cheese reception. Also, Monday's program will be capped by a cash bar affair designed to soothe and sedate all who attend.

**Weather Forecast**

Sunny and warm,  
highs in the 70s



**Program Highlights**

Sunday, May 15, 1983

- 1:00 p.m. Conference Registration
- 2:00 p.m. Pre-session  
BASIC Programming on the  
Microcomputer  
Ned Davis, EIC NW
- 6:00 p.m. Wine and Cheese Reception
- 7:30 p.m. Pre-session Continued

**Microcomputer  
Pre-session Offered**

An exciting innovation awaits 1983 conference-goers: an optional pre-session on microcomputer programming. This pre-session course is for all educators who wish to learn how to write elementary BASIC programs on the microcomputer. No programming background is required. Taught by Ned Davis from EIC NW, the course begins at 2:00pm on Sunday, May 15 and concludes by noon on Monday, May 16, for a total of 9 instructional hours.

Through both formal instruction and hands-on practice, participants will learn how to create programs in the BASIC language, using Commodore  
*(See Microcomputer, P. 3)*

Monday, May 16, 1983

- 8:30 a.m. Conference Registration  
and Pre-session, continued

Monday, May 16, continued

- 9:30 a.m. The Role of Educational Research and Research Funding in the New Congress  
David Florio, AERA  
James Florio, Member of Congress  
Anne Lewis, Education  
USA/Newsline  
Mary Kennedy, PDE—Moderator
- or: Computers Classroom  
Glenn Snelbecker, Johns Hopkins U  
Audrey Champagne, LRDC  
Glenn Snelbecker, Temple U  
Leonard Coplein, Haddon Twp.  
NJ—Moderator

- 12:00 noon LUNCH followed by  
"The Five Most Wanted Answers"  
Henry Brickell,  
Policy Studies in Education

- 2:00 p.m. Computer Graphics  
William Fowler, NJDE

- or: Paper Session A
- or: Paper Session B

- 3:00 p.m. Software Evaluation  
Kenneth Komoski, EPIE

- or: Research in Special Education  
Julius Meisel, U of DE  
George Smith, U of DE

- or: Measurement & Mismeasurement  
A. Jori Magoon, U of DE

- 4:30 p.m. Association Business Meetings

- 5:30 p.m. CASH BAR

## Program Highlights

Tuesday, May 17, 1983

9:00 a.m. How Districts Use Research to Improve

Ram Durga, Newark NJ  
Henry Harper, Appoquinimink DE  
Ronald Larkin, New Brunswick NJ  
Paul LeMahieu, Pittsburgh PA  
Louis Venson, Pittsburgh PA  
Ronald Brandt, ASCD—Moderator

or: Believe It or Not—Conducting Credible Case Studies

Lois-ellin Datta, GAO

or: Cost Effectiveness in School Improvement

George Jarrach, Middletown Twp. NJ  
Rudolph Marshall, Rutgers U  
William Fowler, NJDE

10:30 a.m. How Districts Use Research to Improve, continued

or: Long Term Public Service: Job Satisfaction & Personal Fulfillment

Thomas Corcoran, RBS  
Millard Fisher, Personnel Consulting Institute  
Billy Ross, U of DE

or: New Findings on the Role of the Administrator in School Improvement

H. Dickson Corbett, RBS  
William Firestone, RBS  
Bruce Wilson, RBS  
Matthew Miles, Center for Policy Research—Moderator

12:30 p.m. LUNCH followed by Report of the National Commission on Educational Excellence and Its Implications for Our Region

Milton Goldberg, Commission Chairman, USDE  
William Keene, DPI  
Robert Scanlon, Temple  
John Hopkins, RBS—Moderator

3:00 p.m. Adjournment

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Register by April 8, 1983.

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## Microcomputer

*Continued from Page 2*

PET 4032 microcomputers. Course content is readily transferable to other computers. Topics covered include: an overview of computer use in education, computer terminology, saving and loading programs, inputting data, outputting information, graphing/animation, branching techniques, character strings, and arrays.

The cost of the pre-session is only \$50. Enrollment will be limited, so send in your registration early. Check the box for "Pre-session Fee - Micro Programming" and include the \$50 with your registration form.

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Philadelphia Hershey Hotel  
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## Food Anyone?

J. Child  
*Resident Gourmet*

This year's menus will please gourmets and gourmands alike. True to the maxim "The way to the Cognitive is through the Culinary," conference planners have included two splendid luncheons.

Our Monday appetites will be peaked by a medley of refreshing and flavorful fruits. Then, delicately braised breast of chicken will be served in a delightful tarragon mustard sauce, along with rice pilaf and sauteed leaf spinach. This repast will be topped off with the Hershey's own exquisite chocolate rum parfait and beverages of choice.

Tuesday's noon fete will begin with tangy melon balls au porto. The main course will consist of a hearty filet of beef chasseur en vol'au'vent, accompanied by green beans almondine and succulent broiled tomato. The crowning touch will be an absolutely sinful portion of frosty ice cream cake roll in - you guessed it - Hershey chocolate sauce. Beverages, rolls, and butter are included, of course.

The cost for both remarkable meals is \$30, or \$15 for either day. This cost, which includes taxes and gratuities, is small in relation to quality of food, solicitous service, and conversational verve which will greet each diner.

Bon Appetit!

# Travel to Philadelphia

Sean Sobakovich  
Foreign Correspondent

To further the cause of international understanding, Tri-State Conference planners have invited researchers from both sides of the data curtain to Philadelphia. This reporter, a fellow traveller from the East, is well qualified to provide travel suggestions to our comrades from afar. First, be sure to register early - the deadline is April 8, 1983. Second, allow plenty of time for travel on the Trans-Siberian Railway, two weeks to

twenty years. Finally, bring your red shirt and plan to stay extra days in Philadelphia - May is a big month.

Researchers from the local area will have an easier time getting to the Philadelphia Hershey, as the map below will demonstrate. On to the conference! This reporter, himself, will present a session on the Kolmogorov-Smirnov tests and the Lenin Square design.

## Don't Delay

Advance registration is due by April 8, 1983. Special rates and luncheon places cannot be guaranteed after that date. Conference planners worked hard to get these materials to you in plenty of time; please respond by sending in your registration promptly. Address responses and inquiries to "Tri-State Conference" c/o Keith M. Kershner, Research for Better Schools, 444 N. Third St., Philadelphia, PA 19123.

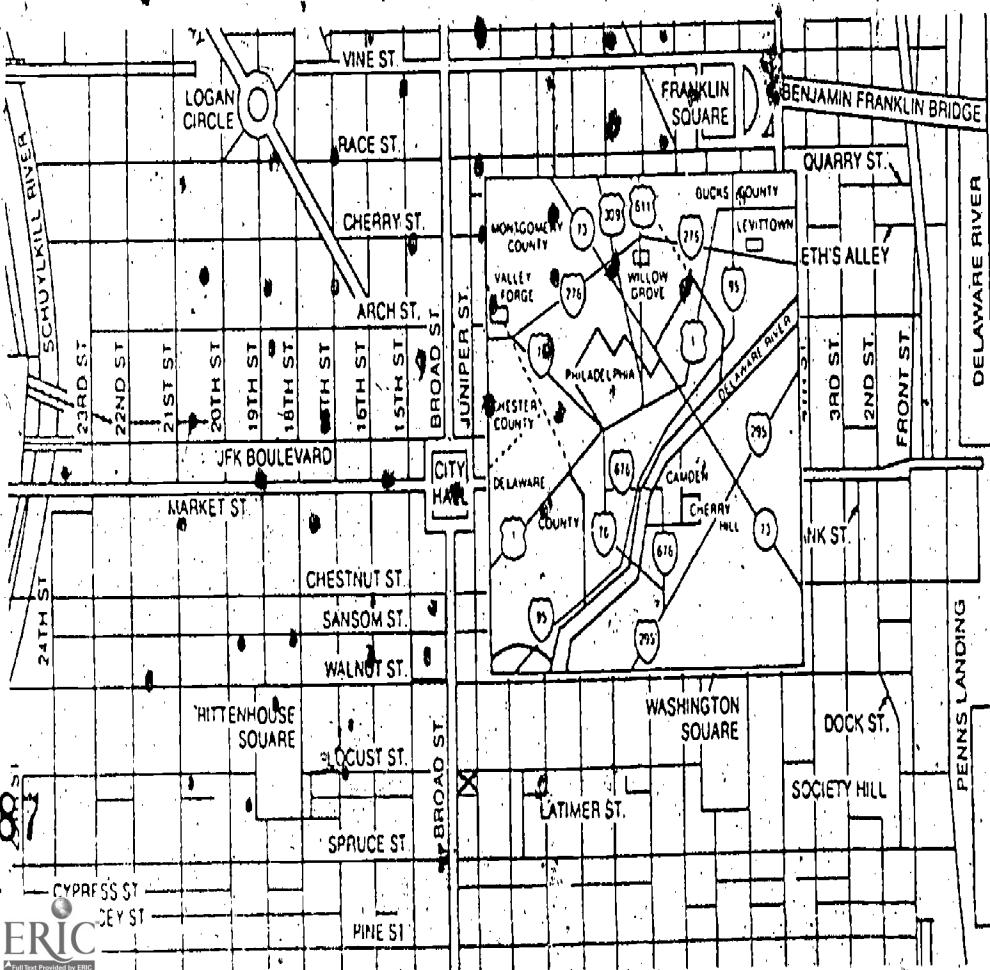
To the Philadelphia Hershey  
From Suburban Station: taxi - \$1.15, bus - \$1.75  
From Airport: taxi - \$10.20, limo - \$4.75, bus - \$2.25

## Editor's Corner

Perry White

Anyone who has had the perseverance to read this entire paper knows what editors have to put up with in writers these days - turgid prose, insufferable puns, and rank self-interest. Those of you who've made it through should be rewarded. Write the word "Editor" somewhere on your registration form, send it in by April 8, 1983, and I'll buy you a drink at the Cash Bar. In fact, I'll pick one preregistrant at random and foot the bill for dinner for two at the Hershey. No fooling - send it in.

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