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## ABSTRACT

Following a brief welcoming statement by Gwen Ericcsen, Executive Director of the Foundation for Oregon Research and Education (FORE), conference papers address a wide range of issues on the current challenges of educational reform. Among these issues are the hard choices brought about by the changing economics of education, and the value of preparing tomorrow's work force by a closer linking of business and education. William "Bud" Davis, Oregon's chancellor of higher education, and Robert W. Sweet, then acting director of the National Institute of Education, are two of six principal speakers represented in the proceedings. Two appendixes include a model of the Centennial (Oregon) business learning center's individual learning program and a chart of per pupil costs from 1949-50 to 1980-81 measuring achievement and Scholastic Aptitude Test (SAT) scores. Proceedings also include memoranda relating to conference funding and a table listing participants according to state and professional status. Of 225 conferees representing government, education, the community, and the private sector, 128 came from Oregon, the rest from Washington, California, Idaho, Colorado, and Arizona. According to FORE Director Ericcsen, the well-publicized conference arrived at a consensus on the need to strengthen American education by doing more with less money, increasing academic achievement and teacher productivity, and reexamining instruction methods for cost efficiency. (JBM)

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# Our Children's Education: A Time For Reform

Conference Presentations  
from a Regional Conference  
on the Current Education  
System, Policy Alternatives  
for Quality, Finance and  
Educational Programming  
to Improve Education

EA 015 743

## FORE

The Foundation for Oregon Research and Education (FORE) is a nonprofit statewide association that provides a voice for citizens concerned about the quality of education and the management, financing, and policy of educational institutions from elementary through university level. FORE engages in education and public policy studies, using corporate volunteers, to promote communication between individuals in education and those in other career areas. Materials and programs produced by the foundation are nonpartisan and educational in nature. The foundation does not participate in political activities nor does it attempt to influence legislation or candidates for public office.

Published February 1983

C O N T E N T S

WELCOME . . . . . 1  
Gwen Ericcsen, Executive Director  
Foundation For Oregon Research & Education

SETTING THE STAGE: WHAT IS OUR CHALLENGE. . . . . 2  
Steve Bell, Program Moderator and Anchorman  
"Good Morning America"

THE CHANGING ECONOMICS OF EDUCATION: FACING HARD CHOICES. . . . . 3  
Daniel Blake, Co-Director  
Center for Economic Research & Education  
California State University/Northridge

EDUCATIONAL POLICY: RETHINKING ROLES & RESPONSIBILITIES . . . . . 7  
William "Bud" Davis, Chancellor  
Oregon State System of Higher Education

BUILDING FOR TOMORROW: A NATIONAL PRIORITY . . . . . 12  
Robert W. Sweet, Acting Director  
National Institute of Education, Washington, D.C.

PREPARING TOMORROW'S WORK FORCE: LINKING THE WORLDS OF  
BUSINESS AND EDUCATION . . . . . 18  
Fred Hume, Vice President of Technology & Planning  
John Fluke Manufacturing Co., Everett, Washington

THE BUSINESS LEARNING CENTER: IT WORKS AT CENTENNIAL . . . . . 24  
Marvin Hempel, Director of Personnel  
Centennial High School District, Gresham, Oregon

PLANNING FOR TOMORROW: MAKING DECISIONS TODAY . . . . . 28

Frank E. Ambruster, Author and Political Analyst  
Hudson Institute, Croton-on-Hudson, New York

CONCLUSIONS. . . . . 35

Gwen Ericcson, Executive Director  
Foundation for Oregon Research & Education

APPENDICES . . . . . 37

- A. The Business Learning Center: Individualized Learning for Cost Effectiveness and Student Achievement.
- B. Cost Per Pupil in Average Daily Attendance, Apparent Achievement Curve, SAT and ITBS Scores

WELCOME

GWEN ERICCSSEN  
Executive Director

Foundation for Oregon Research & Education

It is my pleasant task to welcome you here on behalf of the Foundation for Oregon Research and Education, its Officers and Board of Directors. Since there are obviously more meetings and conferences than any one of you can attend, why did FORE call this one? And why are you here? Perhaps the Conference title *Our Children's Education: A Time for Reform* provides the answer. We are here because we recognize that reform in education must take place. The emphasis, of course, is on "reform." Furthermore, we at FORE hope you will depart from this Conference with a sense of direction and linkage with other individuals who share your views that changes must occur if education is to meet the challenge of providing strong leadership and capable workers for tomorrow.

It is symbolically important, I believe, to recognize that support for this Conference has come from both the public and private sectors. A special thank you goes to the National Institute of Education, the Oregon Economic Action Council, Louisiana Pacific Corporation and to the many businesses, foundations and individuals who share in our desire for excellence in education.

During the next few hours our speakers will share with you their views, concerns and recommendations for change in education. There will be a mix of view points. One we have consciously attempted to provide for you. An interplay of views and interests that in the long run, will help determine the future course of education. We hope that the recommendations formulated through that interaction will be not only representative, but realistic and strong as well.

What is FORE and why is FORE hosting this Conference? FORE, also known as the Foundation for Oregon Research & Education, is a not-for-profit organization that provides a voice for citizens concerned with the quality and direction of education, its management, financing, and policy from elementary through university level. FORE engages in education and public policy studies, using volunteers to promote communication between individuals in education and those in other career areas.

Your presence today is an indication that you care what happens in education and to the young people who pass through its doorways. By combining our talents and efforts, we can seek reform in education. Our theme then becomes: *Together we can make a difference.*

## SETTING THE STAGE: WHAT IS OUR CHALLENGE

Steve Bell, Moderator  
Anchorman, Good Morning America

What's our challenge today? I think our challenge is to identify the problems in our society that relate to education -- wrong turns that have been taken during this traumatic period -- and also to identify directions that can point the educational system toward its necessary role in meeting America's very real challenges.

One observation: I expect we will hear today concern expressed about how to hold down the costs of education, and rightly so. But it should be observed that a recent Gallup Poll shows that the majority of Americans are willing to pay what is necessary, are willing to have the federal government, for instance, take a larger role in providing money for education if, and the caveat is if, they get their money's worth. If the investment they make, in fact, pays off in the product, which is an educated student.

During the next few hours, we will have the opportunity of listening to individuals from throughout the United States whose concerns over the direction of education you may or may not agree with. If each of us maintains an open mind to other points of view, recognizing that reform is not always pleasant, we will enhance the possibility that this program will show us the direction to a stronger education program.

I commend all of you for being here. The common interest that brings us together is a healthy and positive one. I will try to hue to the role of impartial moderator, although I reserve the right to be a gadfly when it seems appropriate. Most important, I am convinced that we can be part of an essential and exciting process of renewal for the educational system in this country and for the nation as a whole.

Thank you for attending. I am sure your time will be well spent.

THE CHANGING ECONOMICS OF EDUCATION:  
FACING THE HARD CHOICES

Daniel Blake, Ph.D.  
Codirector of Center for Economic Research & Education  
California State University/Northridge

It is an honor to be invited here today to discuss with you what I believe is a very critical issue, to share my thoughts and perspectives on the current outlook for education and on the economic constraints and conditions that will shape the choices that we have to make now and in the future.

Education is critically important. It shapes our students, it determines how happily and how successfully they live, how successful they are in their jobs, and, most important, how successful our nation is in following the courses we have set. In that sense, the course of our nation depends on how our students today, who will be our leaders and voters tomorrow, understand and cope with the world around them. A critical part of that understanding comes from their educational exposure in schools, colleges, and universities.

The Role of Economics in Education

Economics is the study of how people and societies make choices, and people and societies are facing some hard choices these days. It is appropriate that economists participate in these discussions. Our particular forte is to outline the constraints and options, and perhaps, to provide guidance in the implication of choosing those options.

Right now, education is facing cuts. Tax reform measures, like Measure 3 in Oregon and the granddaddy of them all, Proposition 13 in California, make those choices more difficult. But the hard choices in education are not going to disappear even if the Measure 3s do not pass. We are going to be forced to tighten our educational budget belts because legislatures, school boards, and public officials are getting the message that people want to spend less, on public budgets and services.

The Effect of Current Economics on Education

One way an economist looks at government is to view it as simply a way for people to make choices about consumption of publicly provided services. If we cut down on those services we privately provide as we economize on our budgets, there is an inclination to cut down on the publicly provided services we consume. We're asking for lower budgets for recreational facilities, highways, for lower

levels of local services and social services.

Education is particularly vulnerable in this cost cutting mood because in hard times people try to reduce their overall outlays. Some of the taxes that we have and use to support our public expenditures are responsive to hard times. If you have a sales tax and people are consuming less, then your payments to government in the form of sales tax declines. If you have an income tax and you're earning less or you're unemployed, then some of your payments decline.

Property taxes, however, are not responsive to this decline in spending. The valuation of real property climbs because there's a high demand for it and because there is a heavy inflationary period. This was a way to protect the real value of your savings as the demand for housing went up. But then the price of housing went up and our property taxes soared. Overall, politicians were able to maintain the same rates and still come out with larger budgets. But that has stopped.

The only way people now can cut their outlays for property taxes is to go after the rates and the appraisal value. Measures like 3 and Proposition 13 attack that from both standpoints: In terms of the appreciation of the property and in terms of the rates on that particular property tax.

Property tax limitation measures have been on the Oregon Ballot several times in the last several years. Nevada currently has five measures on the budget to cut taxes and property taxes. Arizona, Colorado, Alaska, West Virginia, Texas, Tennessee, New Mexico, South Carolina -- all have property tax rate cutting measures on the ballot. In addition, Utah, Washington, and Idaho have measures on the ballots that would shift the burden of property taxes away from the households.

Education probably will feel the impact first because education is largely financed by property tax revenues. In Oregon, almost 50 percent of educational support comes from property tax levies and revenues. Moreover, almost 60 percent -- sometimes an amount greater than 60 percent -- of property taxes goes to support education in one form or another. If property taxes are cut, education is going to be impacted.

Education has not been unscathed in California, where Proposition 13 has been on the book for about four years. We entered that era with a \$7 billion surplus accumulated at the state level, and we used that surplus to bail out local communities, and mainly, educational institutions. They've also had cutbacks in athletic and music programs, extracurricular activities and transportation systems.



While Oregon has not passed a property tax measure, some sectors of education have already suffered severe cutbacks. In the last five years, for example, your state colleges and universities have had an 8 percent decline in real expenditures per pupil; per student enrollment. Community colleges have had over a 10 percent decline in real expenditures per student. While elementary and secondary education has not been hurt, in all likelihood it is going to have to take some significant cuts in the near future.

#### Public Opinion and Education

We have two choices. We can insist on producing less for less, or we can try to produce more for less. In California, for example, it looked like the bail-out funds were not going to be there to provide an 8 percent cost-of-living adjustment for teachers. Following this decision, a Bill started to make its way through the Legislature to cut the school year. "If we are going to get paid less, we're not going to work as much." They've already shortened the school day. In elementary schools in Los Angeles the afternoon session is from 1:00 to 2:15.

Why not try to improve our product while cutting the cost? Now that may sound very difficult, but consider what the rest of society is doing.

We're in a depression. We're finding new ways to do the things we did before at a lower cost, and we're developing more ways to create our products. Some say that the recession is a period of regeneration. In fact, the recovery period following a recession is the manifestation of lean, efficient businesses building a pathway into the recovery period.

#### Solutions for Education

Tax cutting will produce problems for education. But problems can be simply opportunities in work clothes. We have an opportunity, even in this recession, for a rebirth of education.

Example: Take advantage of new and existing technologies that exist. They are transforming the way that we handle and dispense information in this society. Businesses and families are adapting. So must education.

Consider the competition. Private schools are doing more with less. Compare them to the public schools. We can all sit back and say, "Well, wait a minute. They don't have an athletic program, they don't have extracurricular activities; they don't have the facilities." Yet concerned parents are taking their children out of public schools and placing them in private schools. They are paying their full share for public schools and an additional amount for private tuition.

The economics of education are not simple, nor are the answers, but the signal is clear. Those who pay the bill want more from their investment than they are currently receiving. The question is, can education successfully meet this challenge.

I believe it can. But the time to do so is growing short and to succeed we will need the cooperation of all concerned with education and its future.

## EDUCATIONAL POLICY: RETHINKING ROLES AND RESPONSIBILITIES

William "Bud" Davis, Ph.D.  
Chancellor  
Oregon State System of Higher Education

### The Role of Schools of Education

I've been asked today to address a number of topics. Outstanding among these is the role of schools of education.

Basically, the role of schools of education is to provide leadership, to be out on the cutting edge of new ideas, to be flexible, able and willing to adapt to change, and, even further, to be able to predict and anticipate change, rather than to react to situations. This calls for strategic planning, because where we are going to be in ten years depends on decisions which we make today.

The second important role of schools of education is to adequately teach the teachers who provide our educational community with concepts and rewards, that will make them productive in their role as guardians of the educational process. Considering the impact that a good teacher has on society, he or she is probably the most unrecognized and unrewarded professional in our society today. Think in terms of your family, your children, your personal experience, and you can appreciate the impact that an inspirational teacher, or better yet, inspirational teachers, can make on young people today.

There are not many rewards in teaching from the standpoint of materialistic recognition. For the most part, one must almost take a vow of semi-poverty to dedicate their lives to educational instruction.

Particularly this is true of women, who for a long time formed the backbone of the teaching profession. As other careers have become lucrative and attractive, women have left the classroom for other professional fields.

In Oregon, improvement of teacher training programs is an immediate goal. Our deans of education are working toward specific concepts to determine what we can do to improve teacher education. We're also looking at the most cost efficient methods of delivering these instructional services while at the same time, improving their quality.

We need to improve both our recruitment of people into the teaching profession, keeping them in the profession, and rewarding and recognizing their merit and contributions. We must also demand the highest level of preparation from them. This involves, again, the basic hard core of knowledge, which we recognize as general education, plus mastery of the field of teaching in the subject matter field in which they specialize.

Critically needed today, are teachers in the fields of math, science, and the computer sciences. Education is often accused of being removed from society and isolated in an ivory tower; somewhat out of step with what is going on in our nation and in our educational programs. It is interesting to me, to review where students in the State system focus their attention in terms of getting their degrees. This past year out of 11,300 degrees awarded in the system, 78 percent of them were in professional fields leading directly into jobs. Fewer than 22 percent were in the fields of what we formally refer to as the liberal arts. This does not represent so much a de-emphasis of the liberal arts, as the fact that liberal arts is now used as a ladder, a stepping stone into professional preparation.

### The Role of Boards of Education and Student Performances

The second item on which I wish to comment is boards of education. My chief concern would be that boards of education raise their expectations. The previous speaker referred to the fact that we continue to do things as they had always been done in terms of our teaching and in terms of our schools. Sometimes I wish this were more so, because in the last 20 years there has been a significant dilution and a lowering of expectations in terms of performance from students. No matter how much we apply the technical knowledge, the computers, and different ways of delivering education to students, they must learn to read, write, and spell. To absorb the basic principles of mathematics, science, and certain matters pertaining to the social sciences, government, history of our country, economics, and international affairs. We have not discovered any real shortcuts to assimilating that knowledge. But we can improve our instructional methods, and this is what people are referring to when they speak of back to basics.

There is an expectation that our students be literate, particularly college students. It is high time we get back to saying that those people - the roughly 50 percent who plan to go on to college - should show the motivation, prior preparation, and planning which will enable them to cope with a college curriculum. It is inexcusable that we expect computer literacy in the third grade yet still provide remedial reading on the college level. Seventy-five percent of high school graduates have had no math past the tenth grade, and in institution after institution, 50 percent of incoming students must take remedial english in order to prepare themselves for the college curriculum. I maintain that if you raise expectations, people will rise to meet them.

The other admonition I offer boards of education is the same directive that I have for schools of education. *Don't react, lead.*

### The Role of the Legislature

Third is the role of the Legislature. The Legislature concentrates on the funding of public schools and taxes. Whether it is property

taxes or state general fund taxes, these are the driving force for our public education system. Fiscal policy determines program emphasis and even limits which programs can be offered.

It has also been my impression that decisions affecting education are political. I strongly believe in 100 percent central state funding of the public school system. This is the only way we can offer full equality of opportunity.

One of the most important decisions a legislature can make is to determine in what league the state system of higher education or the state institutions will compete. Oregon's biggest problem in higher education is inadequate funding to provide "average" support for the institutions in the State.

Oregon currently averages \$3,600 per student in higher education as compared to a little over \$3,300 per student in the public education system. That \$3,600 is \$1,000 below the national average.

This past week The Chronicle of Higher Education analyzed state-by-state the funding of public higher education. Over the past two years Oregon ranked 50th in the country in terms of the percentage of increase in support for higher education. Over the past ten years it ranked 42nd which is a little better than 50th. In terms of commitment by the State, which is measured in expenditure per capita income and expenditure per \$1,000 of income, we do a little better. We ranked 34th and 35th, but again, considerably below the average.

This affects the education system in a number of ways. One certainly is in salaries. As an example; in the Pac-10 to which Oregon and Oregon State belong, our institutions rank 9th and 10th in faculty salaries. Compared with the Western Athletic Conference, our salaries top only the University of Texas/El Paso, which is not a doctoral degree granting institution. In the Big Eight, Oregon and Oregon State rank ahead only of Kansas State.

Where we do lead is in the tuition and fees that we charge our in-state students. Here the average tuition is roughly \$1,400 per student, roughly twice what the resident student pays in California, Arizona, New Mexico, and Wyoming.

#### Education and Economic Development

Those of us in education interested in the economic development in Oregon are concerned with our national reputation. Oregon has had high commitment to excellence in education. But we have become vulnerable to raids by out-of-state institutions and private industry who are after our best faculty members and administrators. We are also losing many of our good students to out-of-state institutions.

There is good reason to be concerned about retaining the solid core of excellent people who live in this State. When business or industry seeks to locate, expand, and develop in a new state, it often looks for the qualities that money can't buy and that Oregon has - a magnificent climate, unmatched renewable resources, including plenty of water, fine parks and recreation areas, and people committed to the work ethic. These qualities provide an intellectual, educational, and cultural core that draw people and make desirable communities in which to live.

This is why we have gone to business and industry and asked how can we better interact and form a strong partnership between business, industry and our educational institutions. This is what we hear: Stabilize the economy, turn it around; revitalize the State of Oregon. Get us back on a sound fiscal basis so that we can move into the future from a strong educational foundation, with the flexibility to plan and respond to changing needs.

### Strategic Planning in Education

Within the institutions, we've asked ourselves the question, what can we do now with the limitations on resources. The fiscal and economic conditions are not going to change overnight. Nonetheless we believe that we should be planning for the future. We call this strategic planning.

In Oregon, one of the first things we did was to announce that we are adopting new requirements for admission to our public colleges and universities. The Board will act on this in the Fall. I am well aware that the public schools have a much larger mission, that of educating all students regardless of whether they go on to college. But of the 50 percent who do go on to colleges and universities, we must require four years of English, including emphasis on composition and grammar; three years of mathematics, including the equivalent of advanced Algebra or beyond; an advanced laboratory science; and a core program covering Government, History, and Economics. We also would like to add, at a later date, the requirement for foreign language as a condition for admission to the institution.

The idea is not to create barriers to keep people out of our institutions, but simply to raise the level of expectations. Saying, this is what we expect of you. If you're coming to our campuses, we feel that the majority of our students should have this background.

We are interested in revitalizing our recruitment efforts at the high school and college level so that we aggressively go after and recruit the top students in the State of Oregon. Through our development foundations, we are establishing presidential merit scholarships to be awarded to Oregon high school graduates in the amount of \$1,000 each. They are based on academic achievement, leadership, and character.

We are concerned about developing our capabilities in high technology fields. We are also interested in how high technology may be applied to the fields of agriculture, forestry, engineering, fisheries, biomedicine, and health sciences.

Most of all, we are trying to restore and maintain public confidence in the higher education system of this State. There is a dissatisfaction with current conditions, a desire to create change and to make things happen. During this recession our goal should be to help Oregon get back on the road to economical solvency. We have great opportunities to enrich the lives of people through offering them expanded educational opportunities that provide both access and high quality of delivery. Let's make the most of those opportunities.

## BUILDING FOR TOMORROW: A NATIONAL PRIORITY

Robert W. Sweet, Jr.  
Acting Director  
National Institute of Education

It is appropriate for us to spend time talking with each other, listening to one another, and working to develop alternatives and suggestions for consideration that will improve the quality of education for our children.

Parents are sending the message that they want academic instruction and quality education for their children. Teachers are, in a sense, giving a collective sigh of relief that perhaps we are getting back to what they thought schools were all about. And so I will point out to you the need for reform; the need to rethink the purposes of education and some federal, state, local, and private sector partnerships; the role of NIE; and recommendations on what collectively might be done to move ahead in our search for quality education.

### The Role of the NIE

For the past few months I have been serving in the Reagan administration as a the director of the National Institute of Education. I believe NIE can provide a data base of factual information that can bring about changes in American education within a relatively short period of time. For 40 years or more, we have done nearly everything possible to avoid the truth about American education, the truth about reading instruction and the truth about education practices in general. Secretary Terence Bell has said that a serious deficiency in education over the years has been the remarkable obstinance and refusal of educators to adopt practices and procedures that have been markedly successful.

### The State of U.S. Education

American education has undergone a revolution. It has been a three-way taffy pull between social scientists determined to use the classroom as their laboratory, politicians whose purpose was social reform, and educators, some of whom are interested in things other than basic and true education. Schools ought to be for schooling - organized, disciplined, systematic teaching of subject matter, including memorization and drill in the basic skills necessary for the development of clear thinking and reasoning. The success of today's students in a competitive, technological society depends on how well they can read with understanding; write with clarity; use the English language; understand and use scientific and mathematical principles; and understand the value of their country and its form of government.



Today there is a desperate need for a new generation of leaders in American education. Parents should be demanding about the curricula and what goes on inside their children's classroom: Disciplined training of the mind, the transition to responsible adulthood. They should be intolerant about any lobbying for the attention of children during the day. They should insist that children attend to Dante, Shakespeare, geometry problems and biology experiments.

If this concern were acted upon, a surprising phenomena would result - society would benefit. Having school children develop their intellect would eventually have the consequence of graduating children who are the best equipped, who have requisite imagination, and who are fit and able to address the problems of society.

#### The Role of Educational Reform

Intelligent social reform will come only from those of whose years were not wasted by undue attention to social reform. Education itself will not reform society. It will not eradicate poverty, prejudice, and war. It is even less likely to have an effect on these matters when the study of poverty, prejudice, and war replace the study of grammar, literature, mathematics, and science.

On the other hand, education can reform the reformers of society. Politicians and educators at all levels have tried to solve the problem of declining test scores and increasing illiteracy by allocating more money through local, state, and federal taxation. Last year Americans spent nearly \$200 billion on education at all levels; more than all other countries in the world combined. During the past ten years, the National Institute of Education spent more than \$700 million in research and development. In fact, this year our budget is just over \$53 million; part of the \$14-plus billion dollar total budget allocated for education by the federal government.

#### The Failure of U.S. Education

One of the most distressing signs of our failure in education is the increasing number of illiterates who are graduating from our high schools. I refer to testimony before the Senate Subcommittee on Education. One educator recently observed that for the first time in the history of our country, the educational skills of one generation will not surpass, will not equal, will not even approach those of their parents. After 12 years of school, 15 to 20 percent of the graduates will not read well enough to become cooks, mechanics, or supply clerks. According to Judge Charles Phillips of Florida, 80 percent of the new criminals that pass his desk would not be there if they had graduated from high school and could read and write. The implications are enormous.

Chief Justice Warren Berger observes that veteran criminals manifest the same educational pathology. "The percentage of inmates in all institutions who cannot read or write is staggering," he concludes. The rising generation of law breakers follows the same pattern. A recent study found that 85 percent of our youth who appear in juvenile court are disabled readers. Thirty-four percent of institutionalized juveniles are functionally illiterate. Why should public education not accomplish in 12 years at a cost of some \$20,000 per pupil, what private schools do in half the time and less than one-third the cost.

### The Opportunity for U.S. Education

Let me describe for you now what I see as a genuine opportunity for those of us who believe that the social engineering of the '60s and '70s should be left far behind. That we should get back to basic classroom instruction: teaching of reading, writing, mathematics, history, science, foreign language, and the arts. As an example, I use the National Institute of Education effort that has been called the Effective School Study. More than 50 million research dollars have been spent over the past seven or eight years to prove or to bring forward the following principles that make an effective school. We need:

- \*Strong administrative leadership by school principals, especially in instructional matters;
- \*A school climate conducive to learning. That is, a safe orderly school relatively free of discipline and vandalism;
- \*School-wide emphasis on basic skill instruction which entails agreement among professional and instructional staff that basic skills is the primary goal of the school;
- \*Teacher expectations that all students, regardless of family background can reach appropriate levels of achievement;
- \*A system for monitoring and assessing pupil performance which is tied to the instructional goals of the school.

### The Issue of Literacy and the Legislative Role

Another key issue is that of literacy. Every administration addresses literacy, but sometimes we miss the fundamental reasons why we have illiteracy in this country.

Since legislators hold the purse strings to the state teacher training institutions, let me give you an example of what might be done.

Instruct the legislature to appoint a task force of parents, media and retired teachers with full power to visit any teacher training institutions without warning. Visit the classes at random. Ask to see the curriculum and lecture notes. Quiz the professors. Talk to the students. Then present an annual evaluation to the state based on the students overall exposure to culture, refinement, knowledge, overall enlightenment, and the ability to communicate. The task force could then rank the teachers colleges, and the state legislatures would give money each year based entirely upon this

ranking. Anybody want to bet that this sort of no-nonsense evaluation of state teacher training institutions would not blast into a gung-ho reconstruction within a minimum of two years? I'll take your money.

### Federal, State, Local and Private Sector Partnerships

Solving the problems and improving the educational system will take a concentrated effort by the federal government, local and state communities, and the private sector. It will require the cooperation of officials at various levels of government, and by schools, superintendents, administrators, principals, teachers, parents, and others concerned about the educational welfare of our children. We should not continue to have large infusions of federal dollars and the programs that they bring. These programs have not only been large failures, they are harmful.

In 1958, through the National Education Defense Act, the government spent billions of dollars in developing curricula in almost every subject area. Yet the commensurate rise in scores has not come about. In fact, there has been a decline during that same period so why continue to throw money down a bottomless hole?

The National Institute of Education will address the problem of reading. As you know the government invests a considerable amount of money in research. We have a center for the study of reading at the University of Illinois. Soon I will meet with the president of that center, and we will discuss what we hope will be a director's report on reading. There has been much debate over the past 50 or 60 years on the kind of methodology to use in teaching reading. I don't propose to say that we're going to mandate in Washington what type of methodology you should use. Nevertheless, there are some fundamental principles in reading research that can be brought together and put in a report which I hope will play on "Good Morning America" and be discussed in Reader's Digest and Business Week and any other platform on which a public debate can be stimulated. The National Institute of Education hopes it will be instrumental in helping pull together a group of people who are separate from the political spectrum per se and can formulate a report that will have credibility.

When I met with Secretary Bell recently to present my report on various centers that we fund at the Institute, he asked me if I could tell him ten ways to teach reading. I replied, "Well, Mr. Secretary, no. I don't have the answer to that. But perhaps we can address some of those issues that will help teachers if we consolidate the research that already exists. It's not a matter of re-inventing the wheel, but simply looking at what's already here."

### Industry-School Cooperation

Here are some of the positive things that are going on. The private sector always comes to the rescue if we allow it to work.

The District of Columbia Public Schools is establishing, with the assistance of industrial corporation, a series of five career high schools. The schools are in the areas of communication, engineering, health services, and hospitality, including hotel management and culinary arts, business, and finance. Many corporations have donated equipment, money and staff time to assist the schools. Mobil has provided a half million dollar three-year grant to fund a performing arts program. Control Data Corporation has contributed a quarter of a million dollars of computer equipment and software, so students can engage in computer-assisted instruction in reading, math, science, social studies, career planning, and writing skills. Corporations are also providing teacher training and assisting in developing curricula for these specialized high schools.

Volunteers in Public Service operates in the Houston area. Bill

Reagan, superintendent of schools, has arranged with about 25 companies in the area to donate the time of some of their engineers and technical personnel to serve as tutors for minority children. Reynolds International, one of the smaller companies involved, allows release time for about 12 engineers to tutor for a few hours a week. Another program is called SEED; Special Elementary Education for the Disadvantaged. It attempts to raise the self concept and confidence of economically disadvantaged children by teaching them to succeed in mathematics. It operates in a number of areas including Atlanta, Berkeley, and Dallas.

There is a need for technical manpower in the Silicon Valley of California. And local school districts are establishing a high technology high school with assistance of local industry. Students from nine high schools in the Los Gatos-Saratoga Joint Union School District and the Fremont Union High School District will attend the part-time high school for about two hours per day for instruction in mathematics and science while continuing their studies in their regular high schools. About 1,800 students per day should be served when the school is opened. National Semiconductor Corporation has donated a \$500,000 computer to the school.

Some of it gets down to just basic instruction in reading and mathematics. In fact, a year ago a gentlemen spoke here from one of your power companies. He said, "Just give us people who can read the manual so they won't be electrocuted when they climb the telephone pole, or people who can read the numbers on the meters so we can send people the right bill."

#### The Future of the National Institute of Education

Are we going to survive? Are we going to be maintained in the current debate on the federal role in education? When I came to Washington, I felt one of our legitimate roles was the area of statistical information gathering and research. I have not changed my mind on that. It should be a search for truth. That is, the truth as we can best determine it in education. How do children learn? What kinds of tools can we provide teachers to help them improve the quality of education in our country.

We need a link to practice. Somehow we must transfer the research into the classroom. The Institute for Research and Teaching in Michigan has an interesting concept. They have a practitioner - one who is presently teaching in the school system - and researchers working side by side. The practitioner spends half time in the research center and the researcher spends part time in the classroom. They have been able to bring together some of the practical applications of research in a way that strengthens education.

Development should be a major role for states and local communities in the private sector and a smaller role for the federal government. NIE should engage in those needed activities that states and the private sector are incapable of doing because of the high economic risk or lack of human talent and duplication that would occur. NIE should use its resources to test prototypes and models that others can then utilize and implement. We should not be in the position of developing a prototype which ultimately would become a national curricula.

There are many, many good educators, parents and people who are working together to try to improve the quality of education in this country, and I'm encouraged. I think that what I've observed from my limited travels in the past year is that there really is some hope and that we're getting on with the business that all of us have wanted to address for some time; quality education for our children.

PREPARING TOMORROW'S WORK FORCE:  
LINKING THE WORLDS OF EDUCATION AND BUSINESS

Fred Hume,  
Vice President of Technology & Planning  
John Fluke Manufacturing Company

The field of electronic instrumentation is changing rapidly. We estimate that an engineer has a half life of seven years. It does not mean his information will be wrong, but that it will be obsolete in seven years because there will be other information that is more important and more relevant. This rapid obsolescence of knowledge is a characteristic of our society, and it affects all businesses and industries. We must recognize it and cope with it if we are going to improve our educational system.

But what about industry in general. I am not critical of industry when I use this example, but it illustrates some points. For over a half a century every major automotive tire manufacturer in the United States had a factory and headquarters in Akron, Ohio. This past summer, the last automotive tire that will ever be produced in Akron, Ohio, was completed. Our market leadership in the automotive tire industry has been lost to France and to Japan. This came about because of the radial ply tire, and was further caused by the increasing cost of petroleum during this last decade.

When you think about this, the first comment is that this is another example of how American industry has failed the U.S. But I think when you examine the story more carefully, you see that the industry executives did not have the knowledge or the education necessary to cope with the change that took place in the industry. Perhaps the cause, therefore, was the failing of our educational system. When I refer the educational system, I'm not simply referring to one particular part of education. I'm referring to the continuum that should last throughout a person's life.

I have chosen this example to illustrate three points. First, we lost our market leadership to global competitors; Secondly, competitors gained the market advantage through new technology. And third, the knowledge of the industry executives was inadequate to cope with the changes that occurred within industry.

Competition, Protectionism, and Isolationism

The past decade was one of great prosperity for electronic companies in the U.S. There are signs, however, that this well spring of prosperity is drying up. And the causes for the adversity in the industry are both external and internal in nature. The external influences I can sum up in three words. One is competition, the second is protectionism, and the third is isolationism.

It is important to illustrate several things we can learn from the Japanese. In the December 1974 issue of Electronics magazine, published by McGraw-Hill, Japan, Inc., a unique combination of Japanese industry and government, announced its intention to become the leader in computer technology by the year 2000. It is interesting to note that by 1980, Hitachi in Japan had exceeded IBM as the foremost computer supplier in Japan. The Japanese achieved this leadership through concentrating, as they have in so many markets, on the low end of the marketplace. The Japanese manufacturers concentrated on building a device that's called the 64,000 byte RAM, or random access memory. It is a dynamic memory that can be refreshed and is the fundamental building block of most modern computers. By 1981 the Japanese manufacturers had captured 70 percent of the available world market for the 64K RAM.

The Ministry of International Trade and Industry (MITI) states their vision of Japan for the next decade in "A Vision of MITI Policies in the 1980's." One of the last pages states, "Education has played a vital part in the process of Japan's modernization. In order to foster the qualities needed in the 1980's and beyond, creativity, individuality, and internationalism, education is expected to play an even more important role."

Japanese are fascinated by electronics. This is obvious by the amount of equipment found in their cities and the vending machines that dispense basic integrated circuits. Committed to the office of the future the Japanese are rapidly developing products that will link these offices universally.

Few of us understand the potential impact on the United States should we lose our technological leadership in the world. Before World War II, the United States did not rank in the top ten military powers of the world, we were able to rise to the occasion because of our economic strength and our industrial base.

The second factor in terms of the external markets relates to protectionism. The world is becoming essentially multi-polar, and each country is focusing on protecting their own interests. The government of Mexico has established a national computer integration plan. In describing the plan, Data General's Jim Whitaker stated that for an American firm to sell in the Mexican computer market, it is expected to manufacture locally under unfavorable terms. This is characteristic of what's happening around the world.

Recently McDonald-Douglas received an order for F-18 aircraft from the Canadian government. In exchange for this contract, McDonald-Douglas had to agree to provide marketing services for Canadian manufacturers totalling \$2.9 billion. When Colombia wanted to buy buses, they finally selected buses from Spain because Spain agreed to buy all of its coffee from Colombia. Brazil recently bought satellites from Canada because Canada agreed to give favorable tariffs to Brazilian shoes. These protectionist policies

have been thoroughly assimilated by the Third World. We must develop new strategies in our industry if we intend to keep our free trade policies effective.

At a time when communications technology and transportation technology is shrinking our world, America is becoming increasingly isolationist. As a manufacturer of electronic equipment, we have requests to sell our equipment all over the world. In some countries we must file for export license procedures with the Department of Commerce. Because of the red tape involved in receiving an export license, it is almost not worth the trouble. Our allies, however, are not under similar kinds of legal obligations to disclose their intent to sell from their government, allowing rapid expansion in those protected markets in which the U.S. manufacturers cannot compete.

### Our Changing Workplace

Turning to the internal characteristics of the work place, we find that the nature of the work place has changed, especially during the last ten years.

In our company, computer terminals are strung throughout the factory and secretaries, managers, engineers and technicians have access to terminals. These computers are no longer the special tool used by a select few. They impact every worker in our factory.

The factory environment in a high technology company is much different than that of a normal factory. We are committed in our industry to eliminate dull, boring, and routine jobs and to give them work that is challenging. Our facility is much like a modern office. Individuals work in small teams to construct the entire product from beginning to end. This improves quality because if a defect occurs in the assembly process, the test person can speak with the person who is doing the actual assembly work.

This in turn has an impact on the skills that are required by the worker in this environment. First, the worker must be able to communicate in both a verbal and written fashion. Most of our employees have an opportunity to think and plan each day based on the results achieved in the previous day. They read drawings for instruction and communicate frequently with one another. They must be able to rapidly learn new information and assimilate quickly, new thoughts and knowledge. The emphasis in manufacturing companies of the future is on the automated methods structured on the conband approach used in Japan: Smallest quantity, greatest variety, and lower cost.

With this philosophy, workers must be adaptable because the company's strength is to produce a variety of products. American industry has always been adept at making the greatest benefit out of economies of scale; for instance, the automotive industry. The Japanese have



taken a totally different approach. They seek to reduce inventory costs by cutting down the work in process time. As a result, they have much greater flexibility in their work.

### The Business Environment and the Educational System

What are the implications of this changing business environment for the educational system? Compare education to a three-layer cake. At the base level, we have basic character. Among those elements are ethics, honesty, integrity, persistence, attention to detail, and inter-personal skills. The second layer is basic knowledge of math, science, and humanities. Unfortunately business has few positions for people who only possess these first two layers of education. A person having mastered these levels can be considered educated but unskilled. Business and industry need people who possess the third or skill layer as well. This skill layer applies to all fields for which business has a need, including accounting, data processing, industrial relations, marketing, and manufacturing.

We find that elements of the skill layer have descended and become essential elements of the basic education layer. An example is computer technology. It no longer is knowledge that belongs to a few people. This element is an essential part of the basic education layer. Today, if a student wants to major in engineering, he or she should make that decision in the ninth grade. If not, the student probably will not gain the math skills in high school necessary to qualify for a college engineering program. In comparison, the average university freshman in Japan or the Soviet Union has two years of calculus in high school.

Another essential element of education that our work force must have is technological literacy, particularly in science and technology. The public must deal with emotionally charged and politically sensitive issues such as nuclear power, the MX missile, and ecology. We should expect that the graduates of our public schools understand the process of science and have the ability to use the tools of mathematics to cope with the plethora of highly technical issues. Many of our educational processes in the past, unfortunately, have taught people to think rigidly rather than preparing them for rapid change. In 1970 we had 17,000 graduates of law schools in the U.S. During the decade of the 1970s the number of graduates in law increased from 17,000 to 34,000. In the same ten year period of time, the number of engineering graduates with advanced degrees stayed constant, 17,000.

The May 19 issue of Electronics Magazine, spotlighted the shortage of electronic engineers in the U.S.

"Is there a shortage of electronic engineers, or isn't there? After electronics editors around the country put that question and others to companies, colleges, and

others deeply affected by the answer, the consensus is that the shortage is indeed real, though its severity varies with specialty location and above all the quality of any particular engineer. Unfortunately, this conclusion lends comfort neither to the conspiracy theorists, who argue that short fall rumors are concocted by companies plotting to keep salaries low, nor to those who counsel complacency because such conditions are cyclical in nature.

The truth is that even though some engineers are out of work, many firms of all sizes and in every sector of the electronics industry simply cannot find enough qualified professionals. Electronics is one of the nation's basic industries, taking its place beside autos and steel...Sophisticated engineers and specialists in the technologies that make up electronics, are needed to feed that demand.

Advanced electronic technology clearly points the way toward increased productivity, full employment, and the health of the general economy. To reduce the equation to just two words; the future. By permitting shortages of qualified professionals needed to build that future, we are in effect short circuiting it."

While this article specifically addressed the company, we also have demands for mechanical engineers, technicians, people who operate our computer drafting equipment, and for people who work in the factory. In 1981 in the midst of this country's recession, research and development spending by electronics companies increased more than 25 percent. According to preliminary statistics, that high level was unprecedented in the history of this country and that level of research and development spending increased again during 1982. If we believe that ultimately R & D spending turns into products sold in marketplace, then within the next two years, we will see an array of electronics products which require the kind of manufacturing and production support that will stimulate an increase in employment.

In the past, the technology business has been isolated. During the 1970s, international sales in our company grew from about 8 percent in 1970 to 1979 40 percent. This interdependence of the U.S. will increase. Business will be much more affected by what goes on outside of the United States. We need this kind of knowledge from workers in our company.

We can improve our educational process and delivery. But some impediments exist. One is limited classroom hours. Japanese students at the high school level receive over 40 percent more classroom instruction per year than U.S. students. Another is lack of a merit review system that rewards teachers for increased effectiveness. A third is disinterested students. Education is a life-long process. The people who are most fulfilled in life are those who have integrated all three phases of life, education, work,

and recreational retirement. We should establish exit points in the educational system that allow people to drop out of the system when they've reached the level at which they can do a job well. They could work for a few years then re-enter the educational continuum.

### The Need to Link Business and Industry to Education

The difficulty achieving linkage between the needs of business and industry and the educational process should not be under-estimated. By the time you can measure the quality and the success of a program, that program may be obsolete. But despite these impediments, working to improve this linkage is a worthy goal. One of the best examples is the example of matching.

I believe we need a good match between educational programs and industry's needs. We have an organization in the State of Washington called the Council on Post-Secondary Education. Recently the council recommended the establishment of a bachelor of science degree in engineering technology. This program would be offered at some of our regional universities.

This program is a poor match for industry's needs. First, by the time a student has spent four years in the university, I believe that they should be able to be hired in industry as an engineer. Unfortunately, this program does not provide students with sufficient math skills to enable us to use them as an engineer. And they end up in jobs that would basically be technician level entry positions. We must look at our programs carefully, understand the real needs of industry and compare the money we are investing into the educational program to make sure that we have a good match.

One of the methods that often is used to improve this match is the industry survey. In my position as vice president of technology and planning, I have been involved in a lot of surveys because part of my job relates to looking and planning for the future and our companies growing needs.

But more importantly, a close working relationship between faculty members and professionals in business and industry is essential in linking education and business.

THE BUSINESS LEARNING CENTER:  
IT WORKS AT CENTENNIAL

Marvin Hempel  
Director of Personnel  
Centennial School District, Gresham, Oregon

In this presentation, I will present a model that has been in operation for ten years at a high school located between the cities of Gresham and Portland. You will notice in Part I of my Outline, (1) that the focus of this discussion will be directed at the productivity and cost effectiveness of the Business Learning Center (BLC) model. A model that attempts to do more, with less.

In discussing the BLC, we are talking about a change in the teaching/learning process. We are not talking about 25 to 30 students in a room where the teacher is the "dispenser" of information. Judging from my 22 years of educational experience, I find that a great majority of our education is still being taught through the lecture process. The BLC model turns that process around and takes the information dispensing away from the teacher, releasing the teacher to work with individual students.

The number one responsibility of a teacher is to motivate students to achieve their highest potential. All too often, the teacher is bogged down trying to dispense information and the students are scrambling to capture that information, with some form of measurement as the end result.

The BLC model speaks about educational technology and how technology will change education as a result of using computers. While this model does not use a computer, it does provide practical technology application by using audio recordings, combined with teacher skill, in motivating students. The emphasis is placed on student achievement, not on the Carnegie Unit. The Carnegie Unit measures student progress based on time spent in the classroom. When this system was first implemented it was used to standardize the type of students coming to universities in order to provide a pension program for university professors.

The BLC model is cost effective. Studies have found the BLC program is about 53 percent below other statewide costs for similar programs. But what is just as important is the expansion of curriculum offerings, especially to small schools, that can be realized through the use of this program. Large schools benefit from better utilization of personnel and by providing individualized programming for students.

(1) Appendix A, Page 1; The Business Learning Center: Individualized Learning for Cost Effectiveness and Student Achievement.

## The Future Role of Professional Educators

Educators need to try something new in education. We need to step out and take the risk of actually failing in some cases. We need to equate our duties as teachers with the needs of our students. We need to treat all students as unique, with each one trying to accumulate knowledge and move to his or her highest potential. No longer can we treat these people as "groups." We must regard them as individuals. We need to accept the fact that we are accountable for our students' achievement and integrate programs that will enhance our level of success.

My emphasis in defining individualized learning relates to the components in the learning process that combine these stimuli. Many people refer to individualized learning as educational road maps; giving students assignments and telling them to proceed and if they need help, searching out the teacher. Individualized learning, however, must impact these areas.

First, you must have audio and visual support for students. You also must employ tenecetic principles when students are actively involved in the learning process. You need a cognitive area of application for students to apply "digested" learning into a recognized measurement.

In Centennial's BLC program, we offer 12 courses simultaneously, using one teacher and one paraprofessional. While many school districts have declining enrollments, the BLC has maintained a high level of student participation; basically due to its scheduling flexibility and to student interest in individualized courses.

I am frequently asked: "What about textbooks?" We use student guides or student syllabuses. The syllabus is the software that is correlated with the audio cassettes. In accounting, as an example, there are three books. When a student completes all three, they have finished one year of accounting. We operate on a variable credit basis. If a student finishes a year's program in less than a year, he or she receives full credit and can begin the next level of learning. Likewise, if a student completes only a portion of the standard material, he or she receives credit only for that portion of achievement completed. Students proceed at their own pace and demonstrate individual achievement, unhampered by the other students.

### How the System Works

The BLC is housed in a regular classroom, using the combined technology of audio cassette recordings, printed student guides and close teacher/aide supervision. At the beginning of class, students check out equipment and begin their assignments. As questions arise that require dialogue with the teacher, the student simply raises his or her hand to receive personal assistance that is required to reinforce the learning process. Each student's

progress is logged each day of the grading period. When a student is ready for testing, done on Scantron sheets, his or her work is immediately checked, recorded, and returned. This immediate reinforcement is essential. If the student is successful, the student moves forward. If additional assistance is required, we know at what point the "break" in the learning process has occurred.

When I began this program, I did not know how students would process this delivery system of information. I found that they learn how to listen, decide what they should put in their syllabus, and quickly reinforce language skills. Many students were unable to take notes. By using individual instruction, they have the opportunity to learn this valuable educational tool. The lecture method, however, does not provide the opportunity of "backing up" and re-evaluating what was just communicated.

During the past eight years, more students have enrolled in the BLC than in the counter-part lecture classes. This is clearly shown on Page 3 of the Appendix. As the chart demonstrates, the BLC has handled and served 2,543 students. The average number in a lecture class for the same period of time was 1,026. In other words, more than 2-1/2 times the number of students taught by the traditional lecture method enrolled in the BLC.

In a study done at the request of the Oregon Department of Education, the BLC was recognized as the best developed business education cluster in the state. Achievement levels of students, based on criterion referenced tests and expressed as a percentage of students with A and B grades, showed remarkable increases; up 77 percent. *In fact, the academic achievement results of this program are so good that it is difficult for many educators to accept the realities of the program.*

This same study pointed out that we need to apply available and proven research in the classroom. Robert Sweet, Deputy Director of the National Institute of Education, mentioned that we know how to teach students to read. We have many alternative techniques that are available that could improve the current system, yet we do not use them. I ask you, why?

In a study sponsored in 1976 by the National Institute of Education, interviewers spoke to 1,000, aged adults. They asked these adults about their educational experiences, and 65 percent indicated that their education would have been much improved with an individualized approach.

Centennial District conducted its own study on the cost of the BLC program. We did not include capital outlay construction or administrative costs, only the costs that dealt directly with instruction. The average cost per student in a lecture taught class was \$237.71. In the BLC, the cost was \$83 per student.

It is important to mention that in reviewing the academic achievements and cost effectiveness of the BLC, one must recognize that the initial capital investment required to establish a similar model is equal to the cost of about eight new electric typewriters. The fact that we are not talking about thousands of startup dollars is one of this programs strongest assets. It is equally dramatic if you combine this figure with a projection of what the system can do in terms of reducing per student costs, while improving student achievement.

In summary, Dr. Peter Drucker sums it up quite well.

"Demand for education is going up, not down. What is going down, and fairly fast, is the demand for traditional education and traditional schools. Almost all youngsters and apparently oldsters, as well, are capable of attaining the same standards within a reasonable period of time. But for too long, educators have insisted that there is one way to teach and learn, even though they have disagreed about what that way is."

Keep in mind that the BLC is a teaching methodology that utilizes the professional skills of the teacher. *We do not eliminate the teacher.* The teacher's role becomes more important; he or she becomes free to teach, working with the individual students whose need for learning reinforcement is greater than the individual who understands the concept and has no problem applying the concept in his or her classwork.

A transition must take place in schools in order to adequately prepare young people for tomorrow's work force. Education has always lagged behind the developments commonly accepted in society. My experiences with the BLC are no different. In fact, almost every major department and agency in Washington, D.C. uses some form of individualized instruction for their employees.

Initially, the BLC model was considered a "fad." But after 10 years of documentation and numerous studies to determine its feasibility in other areas of education, it is safe to say that this program is not a "fad" but a trend. The only obstacle limiting the future of this model is on the part of educators. I could spend hours sharing with you the comments and enthusiasm expressed by educators who have visited the BLC and subsequently have implemented similar programs in their school districts.

I would like to see a strong movement within the educational community across the country that would present models like the BLC. Other opportunities exist. Cooperatively we can meet the challenges, remain within, or reduce our budgets, and successfully achieve our ultimate goal - excellence in education.

## PLANNING FOR TOMORROW: MAKING DECISIONS TODAY

Frank E. Armbruster  
Author and Political Analyst  
Hudson Institute

In 1975, the Hudson Institute conducted a longitudinal study of more than half of the primary and secondary students in this country to determine why achievement scores were declining. This was an instant pilot and control program, using the whole school system to do the comparisons and providing an insight you would not otherwise have had.

With some exceptions, the trend in academic achievement in our primary/secondary schools during the '60s and '70s was downward for all socio-economic and competence levels. What is still not widely known is that the competence of the brighter students, and those from more affluent neighborhoods, with well educated parents and homes full of books, often fell faster than did that of less bright students from less affluent central cities.

When we first started the study, we thought we were dealing with a phenomenon of the central cities, but we were not. I have test data from the State of California that confirms that the higher percentile group was literally falling faster. This was also true of the other states we surveyed, including my home state of New York.

I also want to point out that we evaluated cohort studies, which are costly and lengthy. But if we are going to improve our current school system, we do not have time to do additional studies of this type, because with each passing year, more children complete their required education.

We're not dealing with fruit flies; these are people, and we cannot afford to let them miss their primary opportunity of learning.

Cohort studies also draw a coalition between declines of achievement and home environment, and rightfully so. But socio-economic changes do not occur as rapidly as achievement declines have occurred, drawing us to the national conclusion that other reasons are responsible for this academic decline.

As part of our effort, we prepared a longitudinal study looking at the socio-economic conditions during one of the worst economic times of our history - the 1908-09 school year, when we had a vast number of immigrant children in the country. We followed these children through two and one-half generations, and it turned out that these same children had become some of the wealthiest people in the country.



During the '60s, constant dollars expenditures for education went up very fast, affecting inflation along the way. Federal funding became rampant, fueling the process of inflation even more - creating a spiralling expenditure per pupil that is amazing when illustrated by a graph.

The attached chart <sup>(1)</sup> will demonstrate our discussion to this point. It shows that as the amount of money was increased, achievement levels declined. Why?

We started giving Standardized Achievement Tests in the 1930s, and it is interesting to note that in the 1940s, we had a drop in achievement which was quite similar to what we are having now. We found that the schools had decided to "educate the whole child," and a few other things which sound very familiar. The correlation seems to be that teachers again became concerned that the schools were not teaching the children correctly, and they incorporated changes. As achievement scores fell, there was a human cry among parents and taxpayers for improvement.

Arthur Bestors said: "Intellectual training may not be the only function of the schools, but in the last analysis, it is the primary function. True education is the deliberate cultivation of the ability to think through training and the basic academic disciplines, History, Mathematics, English, Science, and foreign language. Democratic education differs from aristocratic education only in the numbers of persons with whom it deals, not in the values it seeks to impart." He said, "To convert the education of the common man into something other than systematic intellectual training is to rob him of his birthright."

Sound familiar? The same arguments you hear today were being made then. The attacks they were making were the same kind of attacks they are making now. They were attacking among other things, the 44 programs and work study programs.

Let me discuss the public elementary and secondary schools student/teacher ratio. It's been going down since the late '20s. Yet one of our highest achievements rates ever coincided with that 30 student/teacher ratio. There does not appear to be any correlation between the student/teacher ratio and academic achievement. I mention this because it is the most expensive portion of a school budget, and we have spent billions of dollars to improve our schools by dropping that student/teacher ratio. In fact, there are numerous studies that support the position that class size does not impact achievement - but greatly increases school budgets and per pupil costs.

(1) See Appendix B

West Virginia is a good example that shows it is not necessary to expend large sums of money to realize solid achievement levels. West Virginia is not an affluent state. Yet during the '70s they were holding up very well on standardized scores. There was a correlation between very mundane things, for example, the amount of homework given that was teacher-corrected; how many times the teacher sent the child to the blackboard - which is individual instruction; and the fact that teachers stayed after school with children to bring them up to speed so they would be up with the class next day. Today these practices are almost obsolete - which is why we have a problem.

Dan Blake asked how we can get more for less. We talked to certain school districts and suggested that rather than have a remedial reading teacher who would catch a child on Thursday who was behind on Monday, that the classroom teacher stay after school, and even be paid some overtime, if necessary, to bring that youngster up to speed that day. Those suggestions did not go over well. Doing things a bit more cost efficiently did not seem acceptable. Promoting people through the grades seemed to be a more acceptable solution.

*If you want to raise the achievement scores don't promote children into the next grade until he can perform at the appropriate level.*

Dr. Davis mentioned improving standards. Looking at the requirements for a student to graduate from high school in New York State, you find the math a student takes is really grade school math, or pre-algebra. He has to read at the first-month eighth grade level and needs no foreign language to receive a twelfth grade diploma. But that same student's curriculum record is littered with electives. This situation occurs nationally. The curriculum combines all kinds of social study courses, covers huge amounts of history with themes, but contains no chronological approach, and offers courses in sports communication, art, or film that are supposed to pass for English credit. It should come as no surprise if this child doesn't do well on an achievement test.

During the Depression, a time of high academic achievement, few people went to college. Most students took a manual arts program to prepare them to make a living. But before you could take tin-shop, woodshop, and what-have-you, you needed two years of higher math, Algebra and Geometry; two years of foreign language, Latin, German, and French; two years of science, general science and biology; three years of History, English, European, and American standard history; four years of English, grammar, composition, classical, American literature, and one year of Government or Civics.

Look at the impact of the GI Bill. Peter Drucker said, "Every educator knew that the large masses of GI Bill students who surged onto American campuses after World War II were inevitably at "the base" of academic standards. Instead every teacher found out that the real problem was that these students were so incredibly superior

that they made demands the faculty could not satisfy." Many of these GI Bill students came from the Depression period, with large classes and big student/teacher ratios, and they outscored other students in every single area.

One of the troubles we have today is that the manual arts programs are used as dumping grounds for hard-to-teach students. This is wrong. It goes against everything this country stands for. There is nothing wrong with students going into manual arts programs, but I believe you have to be very careful to provide them with fundamentals as well.

Earlier today someone in the audience asked, "How do we get the standards and keep the group from becoming too large?" Well, you flunk. The dropouts in those days were more highly qualified than a lot of a lot of high school graduates today. I never knew anybody who could not read or could not do basic mathematics and did not know basic geography. But somewhere along the line, we drastically altered the curriculum. It reminds me of what Burt Lance was supposed to have said when he was in government, "If it ain't broke, don't fix it."

We are not teaching children what they should learn. We educate children for the future; this great, changing future. That's been a problem since Aristotle. No teacher can teach a child something that is yet to come. As a matter of fact, what you do traditionally is to teach a child the best you know. I'm not saying you should not change the system. You should, but we must be careful in how this is done.

Another problem today is that people continue to learn after they get out of school. If they have the basics, they can learn other things. As a matter of fact, they do. The education we gave our children in the past seemed to be all right, and they seem to be able to handle things that come up in the future. As time progressed, theory and rap sessions took the place of drill and memorization; "innovative teaching" the place of tradition. This problem surfaced in the schools of education and began to multiply.

In the meantime, we were told that the parents were not interested and parents did not understand. So we did the best we could. We looked at the public opinion polls that were taken, and it turned out that parents did care. They wanted kids to learn fundamentals. They did not want schools to raise their children. They wanted schools to support the family, but did not want to hand their children over to the schools, and they were willing to help as much as they could.

They did not like permissiveness. They understood their children were not little adults and could not take the responsibility for a lot of things the schools were asking them to do. They

wanted guidance and a structured existence for their children. Studies indicate that children themselves want this. And in fact, the lower the socio-economic group, the more they want a structured existence.

### Accountability

Parents were concerned about curriculum and they had reason to be. One woman said to me, "Heck, my kids are watching 'Butch Cassidy and the Sundance Kid' in school for English credit."

Someone asked why private schools do better than public schools. James Coleman did a study which came out last August, because private schools did not have enough money for all the electives. They had to stay with standard courses, often accepting students who were considered incorrigible by the public schools.

What about measuring input versus output. If you ask a group of experts how good is your school, they say it's fine. We have more Ph.Ds in our system, we have large libraries, and many electives. A high school in Connecticut, with 1,000 students, has 125 elective courses. It is a rich place. However the way to measure a school is by measuring the school against itself over time. If the trend is down, or even if it is up these days, you better look at that curriculum and look at it closely. The curriculum is the key and responsible educators in the schools are willing to tell you about the problems.

### Speculation on a Solution

We tend to feel that any way you can get the achievement scores up is fine. Marv Hempel presented us with a program that seems to be working well. That's great. If we can't do that, if we don't have enough imaginative people like Marv to make this kind of program available, then we have to do what we call sideways technology: Raise the standards and get rid of Mickey Mouse electives. Make the pupils take grammar and literature. Go back to the way we used to do it. Restore discipline. Give students a structured existence and the opportunity to respect their teachers.

Teachers can not be pals with the kids. They can be friends, they can be somebody who cares about them, but they can not be one of the boys or one of the girls. And there's too much of that going on. The language of these teachers, their own grammar, must be improved.

Go back to learning. Drill and rote learning will teach children things they can not learn any other way. You must push the individual student.

Set standards and at the same time, push individual students to achieve. Spend more time each day on the fundamental academic subjects. If you assigned work, teacher corrected homework, quizzes and tests, have the children use the blackboard more so they can determine when someone's behind and then do what is necessary to bring that child up to speed.

Lengthen the school year. They're down to 180 days and that's really not very much, particularly when they have substitute teachers coming in who in effect babysit the class.

The curriculum has to be kept up and the standards have to be kept up. If a student can't perform at his or her level despite help, summer school, etc., keep him back. It won't kill him. If you keep passing him on and giving him harder and harder things to read, he becomes discouraged and drops out.

It is important to pay more attention to the requests of parents. From all we can find in these public opinion polls, the parents had it right all along. It was the educators who didn't have it right. Try to get a feel for what they want. They're loving, concerned adults; they care about those children. Listen to them. They aren't qualified to tell you exactly what to do in the school, but they have some feel for what children are and what they need.

#### Expenditures

Reduce nonacademic hours. It not only helps children, but cuts down on the cost. Enrichment courses, while fun, do little to prepare a student for the next level of learning. You may actually want larger classes. Use the old method of the blackboard. We might be able to get more for less by some new methods, and, by all means, use them if they have been proven effective. Just stop trying to solve the problems by gimmickry.

Go back to basics. There seems to be some move in that direction. We may have had some gains, but it is a little early yet to see what's going up.

#### Conclusion

The system that we have can work. One of the reasons it can work is because universities, state and local organizations, taxpayers and parents are creating pressure to turn things around.

There are still educators who have to accept the need for some of these things and I'm not saying it's going to be easy. There's a lot left to be done before we can reach the goals we want, to get those scores back up where they were.

We can restore high academic standards in our schools and the start may have already been made. We know how to educate children; we've done it in our compulsory public school system for generations for all kinds of children in all socio-economic conditions, speaking

almost every language under the sun and we can do it now.

It requires competent teachers and putting our pupils back to work. It is hard work to learn; we don't want children to be unahppy, but if it's a question about being a little unhappy and learning, then let's have a little unhappy.

## CONCLUSION

Gwen Ericcsen  
Executive Director

Foundation for Oregon Research and Education

Education shares a number of common problems, concerns, and characteristics. Though these problems can be addressed by cooperative, and in some cases regional, efforts, no single course of action will be appropriate to the circumstances and policy making structure in every state. But the problems, and the conditions that create them, call for the serious attention from those concerned with its future.

Currently, this nation is trying to improve the economy through a national policy that attempts to release capital "resources for reindustrialization." Education's role in this process should not be underestimated - it is an integral ingredient if this policy is to succeed.

During the last few hours, educators, government and business leaders shared with us their concerns and suggestions on how education could approach the challenge of improving itself. In summary: We must face reality. In this period of economic scarcity, we have discovered we have less money to devote to almost everything in our lives including education. Just when we have come to the conclusion we haven't been getting our money's worth, just when we perceive a public loss of confidence and respect for the product in public education, and just when we have been disillusioned by the roll of the federal government as dispenser of funds and mandator of programs we realize education must reform its policies and directions.

Our challenge then is to find positive renewal in the midst of adversity. Some suggest an emphasis on back to basics, some suggest a new emphasis on technology and methodology, some would put the emphasis on accountability, and some would offer merit awards for performance. At the same time we got a warning today from the Chancellor of Oregon's university system, that in the midst of cutbacks you have to compare competitiveness with sister institutions and systems, that you may try to make the best of adversity, to give proper consideration to others who are forced to make the same kind of decisions and not allow yourself to fall behind competitively.

We must also come to grips with the fact that the education establishment is resistant to change.

Because of the competitive circle in which we live, business and industry asks that students be proficient in basic skills, steeped in a general understanding of the world around them and possess flexible skills that will allow for transition from one phase of development to another.

We look at European and Japanese educational systems with appreciable awe, yet we do not necessarily agree with their methods of accomplishment. What then should we strive for?

As a beginning, please consider:

- 1) Examine and employ new and or existing programs that will improve educational performance at a cost taxpayers can afford;
- 2) Duplicate those programs that fit your school's needs;
- 3) Improve schools of education; perhaps by tying funding to performance;
- 4) Increase school administration and school board leadership;
- 5) Set higher expectations for student achievement;
- 6) Match school programs to business and industries needs;
- 7) Develop closer relationships between the educational community and the private sector;
- 8) Utilize existing research to improve state and local programs;
- 9) Eliminate electives and place emphasis on core curriculum and its content;
- 10) Strengthen planning for fiscal and policy procedures;
- 11) Work more cooperatively with the community at large, for it is their children's future that lies in the balance of your judgment.



# THE BUSINESS LEARNING CENTER:

## INDIVIDUALIZED LEARNING FOR COST EFFECTIVENESS AND STUDENT ACHIEVEMENT

1. The main focus of this session will be directed at discussing the productivity and cost effectiveness of the Centennial Business Learning Center model.
  - A. Change in teaching/learning process
  - B. Educational technology
  - C. Emphasis placed on student achievement, not Carnegie Unit
  - D. Cost effective/expanding curriculum
  - E. Risk-taking/accountability based on well-defined standards
  
2. My emphasis in defining individualized learning relates to components in the learning process that combine these stimuli:
  - A. audio
  - B. visual
  - C. kinesthetic
  - D. cognitive
  
3. As mentioned earlier, one of my major goals is to bring to you a practical model of an individualized learning program that has been successfully developed and field-tested at Centennial School District.

### Slide presentation of the Centennial Model:

Accounting 1-2  
Accounting 3-4  
Accounting Specialty Lab (2-hour block)  
Recordkeeping for Personal Finance (1/2 credit)  
Recordkeeping for Business (1/2 credit)  
Business Communications (1/2 credit)  
Data Processing (Intro) (1/2 credit)  
Business Economics (1/2 credit)  
Personal Shorthand (1/2 credit)

- a. More flexibility in expanded curriculum.
- b. More flexible scheduling of courses.
- c. Individualized pacing.
- d. Variable credit.
- e.. Open-entry, open-exit.
- f. Increased enrollment potential.
- g. Enhances student interest in advanced programs.
- h. Allows for "split" 2-hour blocks.
- i. More effective student placement in courses.
- j. Immediate feedback to student questions and programs.
- k. Consistency in "delivery system" of instructional program.
- l. Allows for increased peer and teacher/student interaction.
- m. Allows for more flexibility in meeting student needs relating to makeup work and homework assignments.
- n. Student records can be maintained on a daily basis.
- o. Teacher assumes a more personal role with all students.
- p. Improvement in the quality on instruction.
- q. Improved student motivation and achievement.

- r. Small schools can offer a more comprehensive curriculum.
  - s. Adaptable to competency-based instruction.
  - t. Motivates considerable interest in night adult programs.
  - u. Opportunity to expand program to include business and community leaders in developing instructional materials.
  - v. Cost effective!
5. During the past eight years, the BLC model has serviced considerably more students than those taking "traditional" lecture courses:

Comparison of Teacher Productivity  
(Based On Total Number of Students Served By Teacher)

	APPROXIMATE BLC TOTAL STUDENTS SERVED	APPROXIMATE TRADITIONAL MODEL MAXIMUM STUDENTS SERVED
School Year: 1973/74	290	130
School Year: 1974/75	275	140
School Year: 1975/76	475	166
School Year: 1976/77	330	145
School Year: 1977/78	320	130
School Year: 1978/79	310	110
School Year: 1979/80	219	107
School Year: 1980/81	324	98
<b>TOTAL</b>	<b>2543</b>	<b>1026</b>

6. Fred Manasse's study, entitled The Oregon Program Effectiveness Project, Phase 1, Report No. 2, reports about the academic effectiveness of the BLC model.

"...the achievement levels of students (based on criterion reference tests) and expressed as the percentage of students with "A" and "B" grades is currently 88.7 percent, up 77 percent from the previous 50 percent. This instructional model is the best developed of all business education clusters in the state."

7. Just prior to the Manasse study, the Oregon Department of Education designated Centennial High School as the state's Accounting Cluster Demonstration Center.
8. A major claim for utilizing the BLC concept is that this instructional methodology is more cost-effective than the regular "traditional" lecture approach to teaching/learning.

Manasse Study Finding = BLC program is about 33% below the most common level (statewide)

1980/81 Centennial Study = Average cost per student in high school "traditional" lecture classes was \$237.71

Average cost per student served in BLC was \$83.00

9. In reviewing the academic achievement results and cost-effectiveness of the Centennial BLC, it is important to note that the initial capital investment to establish a BLC model is ~~equal~~ to the cost of about eight new electric typewriters!

10. In summary, Dr. Peter Drucker sums it up quite well:

"Demand for education is actually going up, not down. What is going down, and fairly fast, is demand for traditional education in traditional schools....Almost all youngsters--and apparently 'oldsters' as well--are capable of attaining the same standards within a reasonable period of time....But for too long, educators have insisted that there is one way to teach and learn, even though they have disagreed about what that way is."

11. Important points to keep in mind about the BLC model:

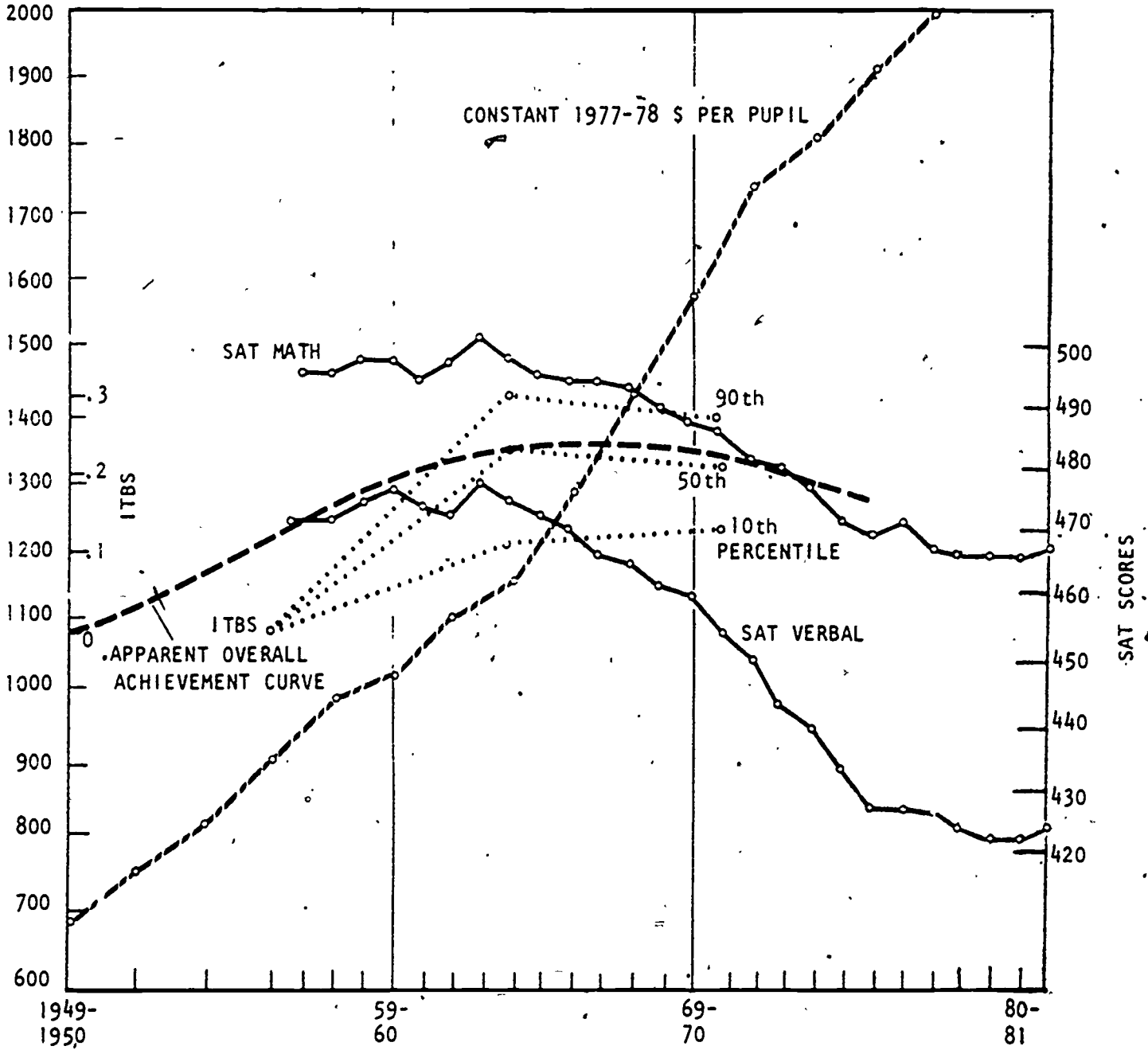
- A. New teaching methodology that utilizes the professional skill of the teacher and practical technology.
- B. Student-oriented and individualized to meet the learning needs of each person enrolled in the BLC.
- C. Provides consistent quality of instruction to each and every student, emphasizing academic standards, not "seat time" in class.
- D. A vast majority of courses can be offered using this same system.
- E. Proven to be cost-effective by state and local cost studies.
- F. Represents a transition that must take place in schools in order to apply the new technologies of the future.
- G. Makes available a broader curriculum selection to all schools, small or large; anywhere, anytime!

Mr. Marvin W. Hempel,  
Administrative Asst. - Personnel  
Centennial School District No. 28J  
18135 S.E. Brooklyn Avenue  
Portland, OR 97236  
(503) 761-5454

APPENDIX "B"

COST PER PUPIL IN AVERAGE DAILY ATTENDANCE,  
 APPARENT ACHIEVEMENT CURVE, SAT AND ITBS SCORES

CONSTANT  
 77-78 \$



# MEMORANDUM

UNITED STATES DEPARTMENT OF EDUCATION  
WASHINGTON, D.C. 20202

April 11, 1983

EA

TO: Crystal Norris.  
NIE Contract Specialist

Thru: Robert Leestma  
Associate Director, NIE

From: Paul E. Cawein  
Project Officer

SUBJECT: FINAL REPORT AND CLOSE OUT RECOMMENDATION : NIE G-82-0032

This grant to the Foundation for Oregon Research and Education, represented partial support for a conference held in Portland, Oregon, on October 25, 1982, with the subject: "Our Children's Education, A time for Reform."

Under the grant conditions, the grantee was to provide NIE with copies of the conference report, tapes and a typed transcript of the presentations, along with an administrative report. All of these items were received in late February, 1983. Copies of the report are attached, along with a copy of the transcript, and of the letter dated February 17, which represents the administrative report.

You will recall that following my initial review of the grantee's submissions I discussed some concerns with you, and with your approval contacted the project director to request addition information regarding the number and characteristics of the participants, and the pattern of financial reimbursement for travel. This information was received in the letter attached, dated March 29. To facilitate analysis of the data on participation I prepared the chart attached.

- o the number of participants represented approximately two-thirds of the number anticipated for the one day meeting;
- o approximately one-quarter of the participants represented state-level legislators and educational policymakers, (Travel reimbursement was targeted on this group;)
- o a second quarter represented local educators;
- o a third quarter came from Business, mostly in Oregon, presumably members of FORE;
- o and the final quarter represented a mixture of local state, and intermediate groups.

- o The project director reports that approximately 375 copies of the report have been disseminated to participants and other groups according to the grant conditions.

Based upon this information, it is my judgement that the grantee has met the requirements of the grant. While the cost of the conference appear very high, I have no reason to question the expenditures claimed by the grantee and therefore must recommend that you approve final payment.

Copies of the Final Report and a copy of the transcript are enclosed to be transmitted to ERIC for review. I recommend that a copy of the transcript along with the tapes and final report be sent to the NIE library for its collection of NIE Products and Reports.

Attachments

CC:Loretta Butler, NIE Clearinghouse



PARTICIPATION IN CONFERENCE: "Our Children's Education, A time for Reform"  
 Portland, Oregon 10/25/82 Sponsored by Foundation for Oregon  
 Research and Education (FORE) NIE G 82-0032

	OREGON	IDAHO	WASHINGTON	CALIFORNIA	Reimbursed for travel
Gov.'s Staff	---	---	---	2*	2
State Legislators	13*	3*	5*	6*	37
Board of Educ.	7*	2*	2*	---	11
Dept. of Educ.	4*	1*	4*	2 (2)*	11
Inter. Sch. Dist.	---	---	---	2*	2
Comm. College	---	---	1	---	---
Higher Educ.	7	1	---	4 (1)*	1
LEA Adm/Bd	19	6	6	12 (3)*	3
Teacher: Pub	16	---	5	---	---
" :Pvt	9	---	---	---	---
Business	34	1	11	5	---
Parents/PTA	15	---	6	1	---
Other Comm.	4	---	2	---	---
	128	14	42	34	

\*Reimbursed for travel

	218
Press	8
(WISHE) Other	3*
Grand Total	229
	60

Compiled by P.E.Cawein from data provided by FORE

**NIE/IS CLOSE-OUT FORM**

This form should accompany each memo sent forward from a Project Officer to the Executive Office of the program recommending that a project be closed out.

The Accomplishments section should be a narrative description of what the project has done. This paragraph, not to exceed 200 words and written according to the attached specifications, should summarize the project's most important accomplishments. This will constitute a past tense abstract and will replace the original abstract in the information system.

The Products section should include a bibliography of the project's major products (books, articles, reports, curriculum materials, etc.). Each entry should contain standard bibliographic information, enabling interested persons to obtain the products without having to contact NIE. In some cases it may be useful to add a note describing the nature of the product (e.g., teachers' guide; a set of nine brochures) if that is not clear from the bibliographic information.

**RESULTS:****a. Accomplishments:**

This grant to the Foundation for Oregon Research & Education (FORE) represented partial support for a one day conference held in Portland, Oregon, on Oct. 25, 1982, with the subject: "Our Children's Education, A Time for Reform." Presentations made by public and private sector leaders (including participants from state-level legislators and educational policy makers) which addressed problems in the educational system, and addressed various approaches to solving them. Conference attendees were unanimous in their agreement that education in America must be strengthened.

Subjects addressed were: Economic restraints and working with less to acquire academic success, the "Productivity Level", and Instruction Delivery Methods, the "Business Learning Center" Program and its potential savings on educational instruction costs.

Conference follow-up revealed that four school districts have begun to duplicate this highly successful program. They are Reynolds, Banks and Corvallis school districts in Oregon, as well as Menlo Park in California.

**b. Products:**

Copies of the conference report, tapes and a typed transcript of the presentations, along with an administrative report.

(Completed by Executive Office)

2. CLOSE-OUT DATES

Actual Dates

PO Recommended Closeout

0	4	1	1	8	3
---	---	---	---	---	---

Report sent to Clearinghouse

--	--	--	--	--	--

Specifications for Summaries of Project Accomplishments

**Clarity:** These summaries will be read by various audiences, including persons largely unfamiliar with research methods and terminology. Therefore, they should be written in plain English, avoiding technical jargon to the fullest extent possible.

**Brevity:** The summaries should not exceed 200 words. They are intended to provide a general understanding of what the projects were about, not detailed explanations. Each sentence should say something worth knowing.

**Contents:** While the contents should vary to include information most salient to each project, each abstract should say something about each of the following topics:

- subject (what was the project about?)
- purposes and significance (why was the project done? why was this important?)
- activities (what was done? what methods were used?)
- target population (what special group was studied or served?)
- location (where was the work performed, if different from the location of the Principal Investigator's organization?)
- major outcomes (what was learned? what types of products or reports were produced? to whom will these be useful?)



March 29, 1983

Dr. Paul Cawine  
National Institute of Education  
1200 19th Street N.W.  
Washington, D.C. 20208

Dear Paul:

"Our Children's Education: A Time for Reform," hosted by FORE in late 1982, was attended by 225 individuals representing government, education, the community and the private sector.

This regional conference was designed to provide a forum for individuals of varied professional and personal background, to discuss the need for educational reform.

Taking a closer look at the conferees; 128 came from Oregon, 41 from Washington, 34 from California, 14 from Idaho and 3 from other states (Colorado and Arizona).

Oregon's attendance understandably represented the largest number of individuals: 34 various corporate and business representatives, 16 teachers from public secondary/elementary, 9 from private schools, 7 university faculty and administration, 19 local school administrators, 5 State Board of Education representatives (reimbursed), 4 State Department of Education officials (reimbursed), 13 legislators (reimbursed), 2 Board of Higher Education members (reimbursed), 15 parents and 4 members of the Gray Panthers.

Idaho's attendance: 1 business person, 3 local school administrators, 3 legislative representatives (reimbursed), 1 Department of Education representative (reimbursed), 2 State Board Representatives (reimbursed), 3 local board representatives and 1 higher education representative.

Washington's representation included: 5 legislators (reimbursed), 11 business representatives, 4 Department of Education representatives (reimbursed), 6 school administrators, 1 post secondary (community college) administrator, 2 from the Governor's Council on Post Secondary Education (reimbursed), 6 parents, 5 teachers from secondary/elementary and 2 representatives from the Council on Economic Education.

California representation was comprised of: 2 members of the Department of Education (reimbursed), 7 local school administrators (1 reimbursed), 6 legislators (reimbursed), 2 County School Superintendents (reimbursed), 3 faculty from higher education, 5 business representatives, 1 university president (reimbursed), 2 members from Governor's staff (reimbursed), 5 School Board Members (2 reimbursed) and one PTA president.

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Executive Committee  
Gwen Ericsson  
Executive Director

**FOUNDER**

Ira Kallor



Dr. Paul Cawine

Page -2-

Not included in the 225 were members of the press. Three local television stations, 2 radio stations and 3 daily newspapers were there from Oregon. Washington coverage was fed to them through KGW, Channel 8, a subsidiary of King Broadcasting out of Seattle. In addition, material was requested and sent to weekly community newspapers and to several national publications, previously identified.

The 3 individuals from Colorado and Arizona were from the Western Interstate Commission for Higher Education (WICHE) and the University of Arizona. All of which were reimbursed for a portion of their travel expenses.

A recap of reimbursements to policy decision makers shows disbursements to:

<u>Legislators</u>	<u>State Department of Ed</u>	<u>State &amp; Local Boards</u>	<u>Other</u>
27	14	16	3

totalling 60 individuals.

We printed and distributed 375 copies of the publication to conference attendees, legislators, legislative education committees and to others who heard of our Conference but could not attend, including parents, teachers, business people, state superintendents of public education, etc.

As I mentioned to you in my past communication, FORE hopes to host an additional forum to address the areas of special concern (private vs. public, high tech, the high school/college connection) expressed by conferees. Until funding for this type of follow-up is available, we are unable to develop the programs further.

This information should satisfy your requirements, but should you have questions, please give me a call.

Sincerely,



Gwen Ericcsen  
Executive Director

GE:j



February 17, 1983

Dr. Paul Cawine  
National Institute of Education  
1200 19th Street N.W.  
Washington, D.C. 20208

Dear Paul:

Enthusiastically encouraged would best summarize my thoughts on  
FORE's successful October 25, 1982, regional conference entitled;  
*"Our Children's Education: A Time for Reform."*

The conference attendees; a mixture of educators, school administrators,  
business and industry, state and local school board members, government,  
parents and policy decision makers, were unanimous in their agreement  
that education in America must be strengthened. Conference speakers  
were articulate and well prepared, adding depth to the Question and  
Answer period that followed each presentation and provided extensive  
"food for thought" among conferees.

As the conference publication will demonstrate, a consensus existed  
among the speakers: Economic restraints demand that education leaders  
do more, with less; academic achievement must be increased; schools of  
education and others involved in teacher proficiency must work to  
improve their "productivity level", and, instruction delivery methods  
must be re-examined for cost efficiency.

The "Business Learning Center" received wide acceptance as one possible  
solution that works. It's program is not new to government or industry,  
nor to educational communities for that matter. Its potential savings  
of educational instruction costs are staggering. Resistance to change  
is the only reason this program is not more widely used.

Conference follow up has revealed that four school districts have begun  
to duplicate this highly successful program. They are Reynolds, Banks,  
and Corvallis school districts in Oregon, as well as Menlo Park in  
California. Several districts in Idaho have requested additional data  
on the program, but have not made a commitment at this writing.

Media coverage, both electronic and print, was extensive. Education  
Week, Education U.S.A. and several state school board associations have  
published articles on the Conference, as well as requesting that they  
be informed on any follow-up seminars, workshops, etc.

One superintendent asked FORE to do further forums on exploring why  
private schools have been successful doing more, with less. His  
interest and request goes beyond the obvious; a need to review strategies  
and programs that the public sector could duplicate.

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Bill June  
Portland General Electric

Dr. Harold A. Kleiner, Ph D

Fred C. Menke, Jr  
Van Rich Casting Corporation

K Peter Morrie  
Boise Cascade Corporation

Carl E. Peres  
First Interstate Bank

Dr. Paul Reiling, Ph D

Lawrence L. Rennett

John L Schwabe  
Schwabe, Williamson, Wyatt,  
Moore and Roberts

Jack Stiles  
Pacific Power & Light

Malarkey Wall  
Longford Fiber, Inc

Samuel C. Wheeler

Mike Whiteley  
Safeco

Karen Whitman  
Karen Whitman Company

Bill Wyatt  
Association Portland Progress

Executive Committee

Gwen Ericssen

Dr. Paul Cawine  
Page -2-

FORE is currently developing a program that would provide this information. I have spoken with James Coleman, University of Chicago, whose research in this area is well known about addressing the forum. His research and perspective would be invaluable.

Recognizing that we have a "problem", was the first hurdle; defining the problem, the second. Now we must provide the opportunities for constructive change. With NIE's assistance, we have a good start. The cooperation required is in place between the tri-powers of government, business and education.

Constructively, FORE's next conference will offer more workshops and dialogue. The exchange of detailed viewpoints and program analysis is vital at the next juncture.

Working cooperatively with each other and exploring the alternatives won't necessarily be easy, but together we can make a difference. The end result will be an enhanced education program.

Sincerely,



Gwen Ericcsen  
Executive Director

GE:j

Enclosure