NEW DIRECTIONS FOR FLORIDA EDUCATION



A Task Force Report on Making
Our Public Schools More Productive











PRODUCTIVITY

Working for enhanced government performance on behalf of Florida taxpayers

"Partners In Productivity" is a unique public and private cooperative effort spearheaded by Florida TaxWatch and the Florida Council of 100 to identify, implement and reward major cost savings and performance enhancements in Florida state government. The program operates under an Executive Order of the Governor, a Cabinet resolution and support of the leadership of the Florida Legislature.

"Partners" is a three-tiered initiative aimed at increasing efficiency and reducing waste in Florida government. It consists of a special task force, development of a system for measuring government productivity, and recognition and rewards for outstanding performance.

Productivity Task Force. This group of 39 of the state's top business leaders is charged with developing "big-ticket" cost saving ideas and management improvements for implementation in state government. The key areas of concern are education, transportation, health and social services and corrections, which together spend almost three-fourths of the state's \$21 billion budget.

Productivity Measurement. Florida TaxWatch, the Florida Council of 100 and our government leaders will develop and institutionalize a first-in-the-nation government performance measurement system to ensure that productivity enhancement in Florida government is an ongoing top priority. This measurement system will provide meaningful data for an annual awards program to reward exceptional performance achieved by state workers.

Productivity Rewards and Recognition. As an extension of "Partners In Productivity," monetary and other rewards will be given to state agencies and individuals for cost savings, good management and innovation in the Florida work force.

REPORT CARD

The challenge and opportunity of turning government management around and getting it to focus on output, performance and productivity is crucial to Florida's future.

An important part of the "Partners" effort is an evaluation of the state's success in implementing cost saving ideas and management improvements. An initial government performance "report card" will be prepared in 1989. The final report card will be issued in 1990.

Partners in Productivity is funded by a grant from the John D. and Catherine T. MacArthur Foundation, Chicago, Illinois and an additional investment by Florida TaxWatch Founding Member J.E. Davis and A.D. Davis, Winn-Dixie Stores, Inc. in order to develop more effective systems for measuring and rewarding increased performance in Florida's state government.

NEW DIRECTIONS FOR FLORIDA EDUCATION

May 1989

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Partners in Productivity Task Force

Chairman Dr. J. A. Boyd Harris Corporation Melbourne

Vice Chairman H.L. Culbreath TECO Energy, Inc. Tampa

Executive Director David M. Davis Florida TaxWatch,Inc. Tallahassee

Education Subcommittee

Chairman Robert A. Morris, Jr. Ramar Group Companies, Inc. Sarasota

> A. Gordon Oliver Citizens and Southern Florida Corporation Ft. Lauderdale

Willard Dover Attorney at Law Ft. Lauderdale

H.C. Henry, Jr. Southern Bell Miami

D. Burke Kibler, III Holland and Knight Lakeland

Robert M. Taylor Mariner Group, Inc. Ft. Myers

DuBose Ausley Capital City Bank Group, Inc. Tallahassee

Dr. Barbara W. Gothard **Burger King Corporation** Miami

Pat L. Tornillo, Jr. Florida Education Association Miami

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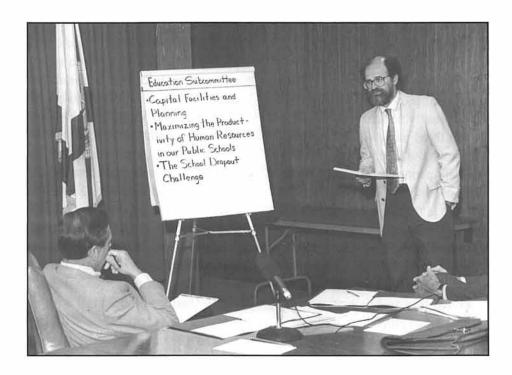
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In fulfilling the duties established by this executive order, the Task Force shall employ modern business management and accumulated management expertise to:

- A. Support innovative and proposed management improvement programs.
- B. Increase efficiency and productivity and reduce the cost of government services.
- C. Identify current opportunities for operational and organizational management improvements that would help redesign the incentive structure of state government for improved productiveness.
- D. Consult with private sector organizations for advice so as to identify and designate specific areas for further indepth management studies.

Governor's Executive Order creating the Partners in Productivity Task Force November 24, 1987

From The Chairman



Probably no institution in America has received more attention in recent years than education. Nevertheless, six years after the National Commission on Excellence published its explosive treatise on education, A Nation at Risk, little progress has been made in implementing fundamental public school reforms. School based management, the application of technology to classroom instruction, and other performance and accountability measures recommended by the Commission and many other groups since are still largely being talked about. Not much has happened beyond some pilot programs to make our educational system more responsive to the demands of today's society, let alone the challenges facing us tomorrow.

Kindergarten through twelfth grade (K-12) public education is the "big business" of state government in Florida, accounting for 23 percent of the annual state budget or \$4.8 billion. School district spending brings the total for public schools to \$6.8 billion. (The State University System and Community Colleges consume an additional \$2.5 billion.) Current projections show K-12 growth peaking at more than 80,000 new students *per year* in 1993. The number of new students will continue to

grow during the remaining years of this century, but at a lower rate (e.g., by about 30,000 in 1999). The cost of building new schools and maintaining existing facilities over the next decade is estimated by the Florida Department of Education to exceed a whopping \$20 billion versus \$6 billion spent during the past ten years.

The very methods by which public education does business in Florida are in urgent need of overhaul. We can no longer afford to cling to traditional classrooms and outdated teaching methods. Major restructuring of the organization of schools and far better use of technology for more effective and efficient teaching and learning are two critical reforms needed to better prepare our youth for the constant changes and demands of our information society.

It probably should not come as a surprise that the education establishment is so rigid. Monopolies are always slow to respond, even though they incur higher average costs than competitive firms under most conditions. For most parents, public education is the only available alternative. Parents are not permitted, for the most part, to select individual schools or even teachers within the system. To make

matters worse, parents do not even pay directly for the service. Since education is a general governmentsponsored activity, it is funded by a third party source – general state and local tax dollars.

As a result, neither the provider nor the user have much incentive to demand greater performance or productivity. In addition, the education lobby can make both the user and the employee who delivers the service happy by continually seeking higher levels of funding from the third party – the taxpayer.

Legislators who impose the budgets and mandate working conditions are prone to influence by the various unions and other organized interest groups in education. The bottom line is that no one has any real vested interest in "rocking the boat" as long as the general populace is not up in arms.

We *all* share a vested interest in the future, and education will have a profound effect on the kind of future we experience. Our future and that of our children are far too important to entrust it, without our participation, to any single institution or system – especially one which is not performing adequately.

This report has a twofold purpose. It presents a vision of how Florida's education system must be restructured and managed better in order to prepare our children to compete in a technologically advanced, increasingly sophisticated world marketplace. It also recommends more than sixty specific ways that K-12 policies, practices and programs can be improved – by a date certain. Our goal is to help local and state decision makers restructure public education to meet and surmount the many challenges facing Florida education now and into the 21st century.

The Partners in Productivity Education Subcommittee examined three broad areas for improvement: capital facilities; human resources; and student dropout. More creative and flexible facilities construction and utilization, and much greater use of technology in the classroom, can make teachers more effective in facilitating learning and providing a higher level of personal interaction. These actions can help reduce student alienation which occurs too often in today's classroom, exacerbating an already serious dropout problem.

The subcommittee emphatically recommends development and implementation of performance measures to help Florida's public school system monitor productivity goals, and to determine whether investments in education are responsive to the needs of our citizens. Enhanced productivity – or its absence – should have consequences to those responsible.

Discussion and debate over how to improve public education in Florida will no doubt continue for a long time to come. A constituency is beginning to develop which promises to bring about meaningful change, but changes are slow to evolve and are not occurring with the necessary level of vigor.

We encourage you to read this report carefully, and think of it as a passport to the higher educational standards that are critical to ensuring Florida's competitive entry into the next century. We welcome your comments and suggestions, and hope you will join the effort to make Florida schools among the most effective in the nation and the world.

The subcommittee wishes to thank Commissioner Betty Castor and her staff for their enthusiastic support and cooperation with this study. Special thanks goes to Dr. Lanny Larson, who coordinated the Department's participation. Appreciation is expressed to Dr. James Schroeer, Mr. Spessard Boatwright, Dr. Ida Baker, Mr. Robert Howell and Dr. Douglas Crawford, former Assistant Director of Public Schools. Their contributions added immeasurably to the development of this report.

The subcommittee is likewise indebted to the highly capable staff of Florida TaxWatch. Particular thanks goes to David M. Davis, who served as principal staff to the subcommittee while concurrently performing the duties of executive director of Partners in Productivity. The subcommittee also recognizes the important contributions made by Thomas Pierce, Karen Hoffman and Catherine Haagenson, communications director of Florida TaxWatch; and Chip Collins, executive director of The Florida Council of 100.

Robert A. Morris, Jr. Chairman

Correcting Florida's Learning Deficit

"All who have meditated on the art of governing mankind have been convinced that the fate of empires depends on the education of youth." Aristotle

In Florida, as in the rest of the nation, an educated citizenry is our most valuable resource. Education represents an investment in tomorrow; an insurance policy for future progress; the most crucial deciding factor in the international technological race.

Public education in America, despite its status as a \$300 to \$500 billion a year enterprise, is several revolutions behind our cultural development. Although the world has experienced an industrial revolution and is now in the midst of the Information Age, kindergarten through twelfth grade (K-12) education is still delivered much as it has been for generations.

Today's schools function on basically the same agrarian calendar of 200 years ago, when most families lived on farms. The delivery system itself, relying on dispensing knowledge through a teacher interfacing with students in a lecture environment, can and should be more efficient and stimulating.

Current statistics illustrate the urgent need for education reform nationally – a need which is reflected in Florida. Our dropout rate is the highest in the nation. Almost 39 percent of Florida students entering ninth grade do not earn a regular high school diploma. For minorities and the poor, the rate is even higher.

Loss of this human capital today may well be converted into tomorrow's liability in the form of public support and corrections costs. Eighty percent of all prisoners in the U.S. are high school dropouts. In Florida, we spend approximately \$13,000 a year (about three times the amount it costs to attend a state university) to house each prisoner.

The Decline of Productivity

Education productivity in the United States has declined significantly. In 1950, we spent approximately two percent of the nation's output to educate 16.5 percent of the nation's population in public schools. By 1986, it took 3.5 percent of our output to educate the same proportion. In constant dollars, expenditures per pupil have more than tripled.

The call for educational reform is also prompted in part by declining U.S. labor productivity. Between 1947 and 1973, non-farm productivity grew at two to three percent per year, helping to boost worker incomes. The primary reason for this higher output was the application of new knowledge and technology in the workplace. However, since 1973 the growth rate of labor productivity has been much lower than in the previous 25 years. Clearly, finding ways to increase productivity once again – in part by improving our ability to learn, innovate or re-learn – is both a critical need and challenge which necessitates immediate action.

Educational improvement does not necessarily imply the need for increased revenues. Public schools, from a national perspective, are an increasingly well-funded institution. From 1970 to 1987, expenditures for both existing and new programs and services increased 407 percent in nominal terms against an inflation rate of 194 percent; a real increase of 73 percent.

Over the last decade, state spending for public schools in Florida has increased from \$1.9 billion to \$4.8 billion, an increase of 147 percent. Florida's public school students grew from 1,613,434 to 1,877,527, increasing average spending per student

from \$1199 to \$2542 or 112 percent in nominal terms. Over the same period, the cost of living increased by 56 percent, thus reducing the increase per student in real terms to 36 percent.

But educational productivity cannot be measured by cost alone. Probably no sector of government requires a system of performance measurement more than public education. Millions of dollars have been spent in trying to develop evaluation models for teachers. Several legitimate methods of integrating accountability into the teaching profession are currently being used: objective testing, supervisory observation and peer evaluation. Yet in addition to meeting with heavy resistance at nearly every level, these efforts have often been rendered meaningless due to below par standards and vested teachers' exemptions.

Improving educational productivity requires, more than anything else, a meaningful system for measuring student performance. Positive results will depend on how successful educators are at getting their students to be actively involved in a task rather than being passive receivers of information. Though it is true that care must be taken in developing comparative standards, measuring the output of individual students remains the bottom line of education.

The future will see students engaging in several different careers during their lifetimes. Information will become obsolete at an ever increasing pace. It is necessary for today's pupils to be more flexible and mentally agile than those of any previous generation in order to meet the challenges they will face as tomorrow's professionals, managers and employees. Clearly, simply pursuing purely vocational training will become increasingly irrelevant.

The Performance Deficit

According to the National Assessment of Educational Progress, published in 1989, U.S. children are among the lowest achievers of 17 countries studied. Our country's ninth graders ranked next to last.

Nationally, in 1987 one million students dropped out of school and 700,000 graduated as functional illiterates. Among 17-year-olds, only 20 percent can write a job query letter.

The 1983 report, A Nation at Risk: The Imperative for Educational Reform, estimated that 40 percent of minority youth are functionally illiterate. Less than one-third know when the Civil War occurred. In a television query of 200 teenagers which recently aired on the ABC television network, two-thirds could not identify Chernobyl and fewer than half knew the identity of Nicaraguan President Daniel Ortega. Recent updates have shown some progress in minority education results, but our competitive position continues to slip.

When compared to other nations, U.S. academic achievement further pales. For example, the average Japanese student exhibits a higher level of achievement in mathematics than the top five percent of American students enrolled in college preparatory math courses.

A recent study by the Educational Testing Service of 24,000 thirteen-year-olds in six countries found that South Korean children rated highest in math proficiency; the United States finished last. South Korea and British Columbia were best in science; the U.S. tied for last.

Florida's 1986-87 Scholastic Aptitude Test scores averaged 893, while the national average was 906. Florida's high school graduation rate that year was 61.2 percent, compared to a national average of 72.4 percent, placing Florida in last place.

Confidence in Public Education Lags

A recent survey by the New York-based Conference Board, an international, non-profit research foundation, revealed that 64 percent of American business leaders polled felt education was the number one problem in our country. That figure is up 22 percent from just two years earlier. A 1986 Florida Chamber of Commerce survey found that 41 percent of all businesses responding reported difficulty in finding qualified professional and technical employees. Nationally, private industry in 1986 spent \$210 billion on training and re-training compared to \$140 billion by public education.

The recent litany of reports and studies critical of this country's education system bear harsh witness to the validity of business complaints. Virtually every major television network and most publications have apparently discovered the vast shortfall between

education reality and expectations. This is not an issue which is going to disappear easily nor should we allow it to slip from the public consciousness. We should also take care that future efforts at education reform don't fall into the "feel good" trap outlined by Xerox Chairman David Kearns.

In an effort to close some of the education gaps confronting them in the workplace, some businesses have formed alliances with the education industry with an eye toward taking up where educators leave off.

But too often these programs have been compromised by business allowing educators to define problems and frame the agenda. While they may have been good public relations vehicles, these alliances have often done more harm than good by lending tacit approval to the system as it is, when in reality radical change is needed. The longer fundamental reform is delayed, the more painful it will be for everyone involved. In the meantime, our educational performance slips farther behind.

Teachers Carry A Heavy Load

One point of agreement among *educators* is that holding teachers alone accountable for student performance is unfair. This is somewhat reasonable when one considers the fact that the vast majority of teachers do not have ready access to modern teaching tools, and some teachers' classes contain disproportionate numbers of lower income, disadvantaged students.

Even among schools of the middle-class, in many instances there is a lack of parental support. In today's environment of the single parent household and "latch key" children, many students spend their afternoons in empty homes, unsupervised, and without much monitoring of their educational progress.

Teachers are increasingly expected to deal with more than providing a good education; they must also contend with the results of society's problems and inequities: drugs, teenage pregnancy, poverty, classroom violence and broken homes.

By 1995, economically disadvantaged children will comprise nearly one-third of the student body. By the year 2000, over one-half of our students will be learning disabled, economically disadvantaged or have other special needs.

Instead of excusing ourselves by complaining about the quality of raw material schools receive, it is incumbent upon us to design a school environment incorporating up-to-date teaching tools and management systems which can deal with external issues and produce graduates who are on par with those of other nations.

High-Tech Schools in A High-Tech World

Despite its impact on every other facet of our lives, the use of technology to promote better quality and productivity in K-12 classrooms has barely been tapped. Wonderful opportunities exist for increases in both quality and efficiency by bringing public education into the Information Age.

Interactive computers can have a tremendous positive impact on classroom restructuring for increased effectiveness and efficiency. Especially in the areas of math, science, language arts and foreign languages, they can free up human resources to expand both the flexible time and location of instruction. In this way, teachers will be able to devote special attention to students having difficulty in these areas, while more advanced students can work at their own speed on the computer. The classroom will be a more effective and productive place when the teacher is relieved of the stress of trying to deliver the same level of education to a roomful of unique learners.

Students need to be involved in real world applications of mathematics, science and computers. Schools must better integrate academic and vocational education if they are to successfully prepare students for life in the Information Age. These opportunities should be publicized and promoted so that students, teachers and parents can take advantage and learn from the successes of others.

Florida's high technology manufacturing marketplace, encompassing the aerospace and software industries, is producing jobs at a rate which is third highest in the United States. This phenomenon will intensify the demand for workers who can interpret, analyze and create solutions to new problems. Computers must be an integral part of the vital training process necessary to meet these new demands.

State Education Leaders Know Business As Usual Won't Work

The rhetoric of reform of recent years has failed to produce meaningful structural change in Florida's education system. There are, however, some encouraging signs on the horizon that this rhetoric is now being supported by a growing number of those in the education establishment.

Education Commissioner Betty Castor, cognizant of the need for streamlining Florida's public school system and improving its performance, is positioning the Department of Education to play a leadership role in school restructuring, find more cost effective ways of financing new facilities and dramatically increase the use of instructional technology in classrooms.

The State Board of Education published a report in February of this year calling for a reduction in paperwork and data processing requirements, and better utilization of high-tech communications systems to enhance information management.

Commissioner Castor has also ordered a reexamination of the entire statewide testing system. A committee charged with studying state mandated tests will count the number of tests required by the state and local districts and check for duplication. Then a determination will be made about the level of learning that the test scores are supposed to demonstrate, and whether they measure more than the most basic skills.

As evidenced by the creation of this committee, educators have come to realize that measuring student performance does not necessarily translate to standardized testing. There is an urgent need for a student performance measurement system which evaluates the ability to reason, while also encouraging students' creativity. Additionally, in today's information society increased emphasis must be placed on developing and testing independent research skills.

Yet, despite these well-intentioned efforts, one thing remains clear: although we are striving to institute better student and teacher testing and raising standards for graduation, the overall education agenda in individual schools remains business as usual.

It's Time For Action

Most of Florida's teachers and administrators are competent, dedicated professionals. Their ideas and active participation in restructuring public schools for improved results is absolutely essential. They, beyond all others, can give life to the urgent need for improved educational effectiveness and productivity.

Clearly, business as usual is not a viable option for the future of Florida's public school system. The enormous problems in our educational system are irrefutable; major reforms are long overdue. We have a responsibility to our children and to ourselves to radically change the methods we use to educate our youth. When we do this, we will at last be able to offer more than merely a service called teaching; we will provide a capability called learning.

Key Recommendations

This report recommends more than 60 specific actions which the state and local school districts can take to move the K-12 reform process forward.

The following key recommendations are substantiated in the body of the report and repeated in the Summary of Recommendations.

Capital Facilities

- The 1990 Legislature should approve a funding formula to promote and reward improved utilization of facilities (i.e., year-round schools and multi-purpose schools).
- By July 1, 1990, the Department of Education and local school districts should determine how much of each district's projected ten-year educational facilities needs can be met through more effective utilization of existing facilities, including yearround schools.
- By December 31, 1990, the Department of Education, in cooperation with local school districts, should develop a comprehensive master plan for K-12 capital facilities over the next decade. The plan should integrate requirements and guidelines for cost-effective design, siting, constructing and financing of new schools, as well as restructuring and greater use of technology in the classroom.

Human Resources

- By September 1, 1990, meaningful school-based management systems should be adopted in selected schools in all school districts, with measurement methodologies established to document improved student performance and teacher/administrator morale. Such an evolution should determine what specific practices work under different conditions – with positive and negative recognition for noticeable improvements in student achievement.
- Each school district should increase the effective use of instructional technology in classrooms by at least ten percent annually over the next five years beginning in the 1989-90 school year, based upon the full time equivalent (FTE) count. Computers and other technology should be used to deliver basic curriculum, not just enrichment.
- Each school district should measurably increase the productivity of its administrative personnel by at least ten percent annually over the next three years. This should be accomplished by removing outmoded mandates, modernizing procedures, exploiting opportunities to computerize operations and introducing other efficiencies.
- A meaningful portion of principals' and teachers' performance evaluations and salary increases (about half) should be tied to their ability to measurably increase student performance and retention.

School Dropout

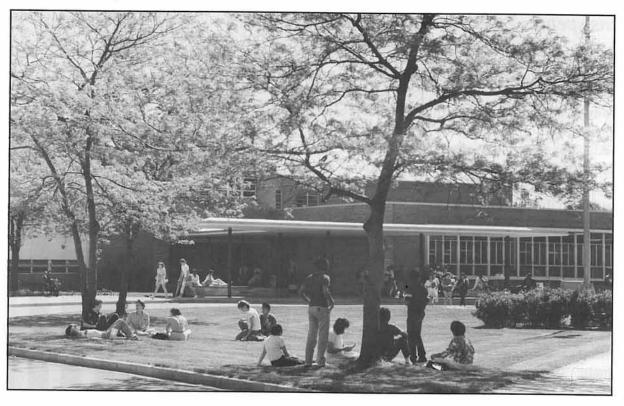
- By March 1, 1990 each school district should carefully review its policies to be sure they do not inadvertently result in students being "pushed" out of school. For example, despite the risk it creates, some school districts require repeating an entire grade if just one subject is failed. Research shows that a student who repeats one grade has a 40 percent chance of dropping out. A student who repeats two years has a 90 percent chance of dropping out.
- By July 1, 1990, the Department of Education should develop a valid student tracking system to measure the dropout rate at the individual school and district levels. This will allow Florida to better define its dropout problem and monitor/measure the success of various programs to help determine the most efficient use of dollars in dealing with this dilemma.
- By September 1, 1990 all school districts should offer programs to assist and recognize teachers who successfully entice at-risk students to remain in school. Currently, many teachers who work with at-risk students see their assignment as punishment and a dead-end.
- By September 1, 1990 a more significant portion of teachers' training should involve methods of providing individualized positive reinforcement for class participation and academic achievement.



"Our aim is to help the student understand and make the transition from school to the world of work. In so doing, we will move toward a school system that has both high standards and a successful product: students that can compete successfully in a world economy."

Commissioner of Education Betty Castor

Meeting K-12 Capital Facilities Needs



The Florida Department of Education estimates that if our kindergarten through twelfth grade (K-12) public education system continues doing business as usual, instructional space equivalent to 758 new schools (475 elementary schools, 184 middle schools and 99 high schools) will be needed over the next ten years. This translates to more than 25,000 new classrooms. The department projects the cost of building these new schools and maintaining current facilities could exceed \$20 billion, a \$14 billion (357 percent) increase over the previous ten years.

Capacity enhancement of our public school system is clearly a major and costly issue. In a high growth state such as ours, expanding facilities with limited resources presents a host of challenges.

The Partners in Productivity Education Subcommittee examined the following major questions concerning Florida's educational facilities needs over the next decade:

- How big is the need?
- How do new schools get built?
- Are year-round schools a realistic solution to the facilities shortage problem?
- What else can be done to make better use of educational facilities?
- What are some cost saving approaches to meeting the net new facilities need?

How Big is the Need?

The Department of Education's estimate that the equivalent of 758 new schools must be built just to accommodate growth during the next decade is based

on a complex model. It makes projections using historical data and birth rate/population growth formulas that have proven to be reliable over the years. This

model assumes a straight line continuation of current levels of facilities utilization and delivery systems *as now conceived and operated*.

"Maintaining the status quo means spending at least \$20 billion for K-12 educational facilities over the next decade."

However, a substantial opportunity for savings lies in *higher* levels of utilization of these facilities for both educational and non-educational purposes. In addition, much greater integration of technology into the learning process will make substantial modifications to the school design program including fewer, larger classrooms, and increased opportunities for learning at home and in other locations outside the traditional classroom.

According to the Department of Education's projections, maintaining the status quo would mean spending at least \$20 billion for K-12 educational facilities over the next decade. This estimate includes new classrooms, auxiliary space, remodeling, renovation, maintenance and repair. It does not cover:

- · Pre-school or handicapped facilities;
- The replacement cost for facilities that are no longer usable, correcting hazardous conditions (asbestos and radon), and safety-to-life (electrical wiring) problems; or
- Legislatively authorized projects such as special facilities construction, community use facilities and joint-use facilities.

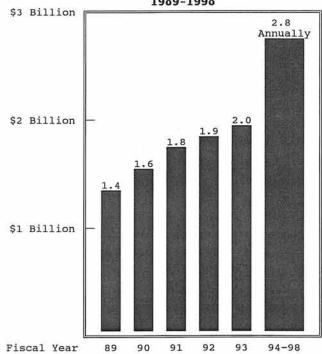
Recommendations

- All school districts should make it a top priority to reduce the Department of Education's projected ten year need for new classrooms. This can be done through higher levels of utilization of current facilities and greater use of instructional technology, which creates flexibility and vast new opportunities for learning in a variety of both classroom and non-school locations.
- By July 1, 1990 state education funding formulas should be restructured to provide incentives to accomplish the above recommendation.

How Do New Schools Get Built?

Department of Education estimates indicate that 71 percent of the additional student capacity needed over the next decade will require new construction. The remaining 29 percent can be absorbed through renovation, remodeling and additional construction at existing schools.

ESTIMATED CAPITAL FACILITIES COSTS 1989-1998



Source: Florida Department of Education, Office of Educational Facilities, April 1989; Florida TaxWatch, Inc.

Before recommending construction of a new school, the department considers the feasibility and cost of refurbishing, remodeling and enlarging existing schools in the area, and/or moving students from crowded facilities to others with unused capacity.

The department takes into consideration the age and condition of a facility, as well as the programs which will be housed there. If the estimated cost of remodeling an older school amounts to 50 percent or more of the cost to build a new one, a new facility is generally recommended.

Determining the pro-rata distribution of monies appropriated by the Legislature for school maintenance is accomplished by using a Public Education Capital Outlay (PECO) formula. This formula is based on a facility's age and number of square feet. Currently, however, no system exists to track and

document actual maintenance needs at specific schools, or to translate those needs into dollar amounts.

This lack of tracking can result in disparities occurring between the amount of funding provided and the actual amount needed. Developing a system to track and project maintenance requirements for individual schools would help the department apply maintenance funds to facilities having the most critical need.

Recommendations

- The 1990 Legislature should amend Section 235.06, Florida Statutes, to require development and use of a tracking system which would enable the department to more accurately determine individual schools' annual maintenance needs.
- By January 1, 1991, the Department of Education, in cooperation with local school districts, should develop a comprehensive master plan for K-12 capital facilities over the next decade. The plan should integrate requirements and guidelines for cost-effective design, siting, construction and financing of new schools, as well as restructuring and greater use of instructional technology in the classroom and in non-school locations.
- All school districts should actively involve private sector experts in decision making related to capital facilities planning and design, land acquisition, construction and financing.

Are Year-Round Schools A Realistic Solution to the Facilities Shortage Problem?

The concept of year-round schooling means reorganization of the academic calendar into shorter periods of instruction and vacation spread over 12 months. Year-round schooling can be structured in several different ways. The most common approaches are:

Single-tracking. This plan divides the school year into four nine-week terms, separated by four three-week vacations. Students and teachers would attend school for nine weeks (45 days), then take a three-week (15 day) vacation. Advantages of a 45-15 day calendar over the September-June calendar are:

More consistent pacing of instruction;

- Reduction of learning loss by breaking up the three-month summer vacation, thus keeping students in a learning mode; and
- Flexible time for substituting if a teacher wants to work a longer contract year.

A clear disadvantage of this approach is its failure to coincide with the traditional September to June calendar. While this plan is not generally considered a strategy for increased utilization of existing facilities, it does provide an innovative way to keep students in the learning mode by eliminating the antiquated three-month summer gap which is thought by some to reduce efficiency by up to 25 percent.

Multi-tracking. Under this plan, students are divided into two to four groups, depending on the size of the school. Each group attends school on a different schedule for specific weeks of instruction and specific weeks of vacation. By using the 45-15 single-track concept or several other options, administrators can combine groups of students to better utilize available space by 20 to 50 percent. Multi-tracking is a primary strategy for school districts with high enrollment growth.

"A year-round schools pilot program has been approved in Orange County (Orlando) beginning in July 1990."

In addition to the educational advantages of the singletrack plan, multi-tracking offers the following advantages over the traditional September-June calendar:

- A school's capacity increases by up to 50 percent, depending on the number of tracks used; and
- Substantial savings in both operational and capital outlay costs can be realized.

Like the single-track plan, the multi-track schedule does not coincide with the traditional school year calendar.

During the 1980's, Orange County (Orlando) schools have grown by over 12,000 students. To help deal with overcrowding, a multi-track, year-round education pilot project has been approved for implementation beginning in July 1990. In the opinion of Orange County's Superintendent, students participating in this experiment will perform as well or better academically than those enrolled in schools

For example, greater use of computers to teach math means each student can learn and practice the concepts at his/her individual speed – at school, at home or elsewhere. Students would spend less time repeating skills they have already mastered. Teachers would become less providers of information and more coaches or consultants available for individual counseling.

"In the very near future, entire libraries will be contained on compact video discs for interactive microcomputer use."

This teaching approach has already proven successful in several pilot projects throughout the state. According to the Department of Education's Instructional Support Services, schools in at least 20 districts currently use computers to teach math. As part of this program, elementary schools in Okaloosa and Volusia Counties have implemented Project Child, which utilizes computers for instruction and learning development for K-5 education in math and language arts. Preliminary evaluations are encouraging, revealing improved student test scores compared to traditional teaching methods.

Greatly increasing the use of instructional technology may well alter the size and type of school facilities needed in the future. Constructing multipurpose buildings which are flexible enough to change with the introduction of new technology and patterns of learning is vital. In the very near future, entire libraries – including complete encyclopedias, research and reference books – will be contained on four-inch compact video discs for interactive microcomputer use. This technology should reduce both fixed space/location and time for learning demands on our public schools.

The need for flexible facilities in vocational laboratories and workshops is already easy to justify. After all, five to ten years from now, vocational students may well be learning to repair machines and equipment that do not even exist today. Design flexibility is essential to building school facilities that will serve our needs 20 years from now as well as today.

Making better use of space. Some space

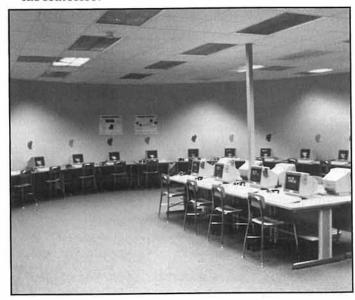
shortages are caused by short-sightedness. For instance, a school may insist that not enough space exists to house the projected student population, when in fact some of its classrooms are used only five or six periods a day. Most schools now have seven or even eight regularly scheduled class periods. Classrooms should be utilized during all periods for class instruction, teacher meetings or administrative purposes. If facilities are not used to capacity, there may not a legitimate need for additional space.

Increasing the use of temporary or leased facilities. Some school districts are considering other available space in the community for classroom instruction.

The Department of Education's funding formula does not distinguish between temporary facilities (such as portables) and permanent facilities that are owned by school districts. Regardless of whether an individual school is using a portable or a permanent facility, its space needs are considered met by the department. However, many districts do not include temporary facilities in their met need.

Recommendations

- By January 1, 1990, the Department of Education's capital facilities model should be changed to provide incentives for school districts to maximize their utilization of schools.
- New schools should be constructed with space that is most suitable for increased use of instructional technology in *classrooms*, libraries and laboratories.



Cost Saving Approaches To Building New Facilities

Although alternatives such as year-round schools and joint facilities use can and must be exploited, the need still exists for hundreds of new schools over the next decade. Gaining public support for added investments can be aided by implementing innovative strategies and techniques to reduce the cost of new facilities and their operation. These include:

Locating facilities on secondary (less costly) sites where dollars can be put into bricks and mortar rather than more costly land. School boards should carefully consider sites based on three characteristics:

- The proposed school must be located on land which is not overly valuable;
- It must be in a populated area and be easily accessible to the student population; and
- Enough acreage must be available.

Using common plans and re-using approved building designs. School districts can save architectural and engineering costs by using the same plans to build two or more schools if the size, grade and site configuration are similar. For example, Broward County saved architectural and engineering costs by building two high schools (Coral Springs and J.P. Taravella) using the same plan. Only minor changes were made in the interior.

"Although alternatives can and must be exploited, the need still exists for hundreds of new schools over the next decade."

Using the same architects on concurrent intradistrict and even inter-district school construction projects when feasible to do so.

Refurbishing existing unused or under-utilized space. The Department of Education estimates that 29 percent of the projected ten-year need for additional classrooms can be met by refurbishing existing space, by better utilizing existing facilities and by adding student stations to existing space.

Fast-Tracking. Fast-tracking is a concept borrowed from the private sector. It involves the

letting of contracts at various times throughout the construction process, allowing for construction to be an on-going process.

Design/Build. Also borrowed from the private sector, this concept combines project planning, design and construction into an integrated process that encourages innovation while saving time and money. Although not yet widely proven to be cost effective in educational facilities construction, use of design/build has been successful in other public and private construction projects. Whereas fast-tracking involves the letting of various contracts for continual construction, design/build may involve numerous parties, but under one contract.

The Dade County school system has used design/build on several projects. The biggest cost reduction has been in elimination of overlapping design and construction processes.

Multi-use land plans and inter-local agreements. For example, Duval and Palm Beach Counties buy land adjacent to schools for parks. Lee and Duval Counties construct public swimming pools on school property.

Joint Use and Community Use. School buildings can and should be used for multiple purposes, the most popular and widely known of which are joint use and community use. Joint use facilities are shared by two or more public agencies for educational purposes during the day. For example, the Department of Health and Rehabilitative Services and other agencies deliver selected services from public schools. This makes these services more readily available and should reduce duplication. Joint use makes good sense as our school population becomes composed of increasingly at-risk, disadvantaged pupils.

Community use facilities are available to public or private groups in the evenings and on weekends. For instance, schools in West Palm Beach are being used for community meetings and law enforcement seminars. Broward County uses many of its schools as community centers for evening or weekend classes, many of which are attended by senior citizens. Community schools can increase support for education by helping to meet the educational and cultural needs of the elderly.

Taking education to the work place. Some large businesses and industries can provide space in their

facilities to teach their employees and even children of their employees. This creative idea for space utilization helps meet communities' public education needs while providing an attractive public service vehicle for the company.

Martin Marietta of Orlando allows vocational schools and community colleges to teach data processing at its facilities at night.

Educational programs for employees have been implemented at American Express, Southland, Walt Disney World, Wal-Mart, Frito-Lay, U.S. Sugar and Marriott Hotels.

Recommendations

- All school districts should carefully consider selling high value land on which aging or dysfunctional schools are located and using the money to build new facilities on less costly land. Districts that do not have an inventory of current market values of existing facilities should develop one.
- Beginning in July 1989, all school districts should, where cost effective and feasible, make a practice of using the same (competitively bid) architectural building designs and plans for intra-district and even inter-district construction of new facilities.
- Beginning in September 1989, the Department of Education should collect, analyze and distribute to school districts all relevant information on innovative construction approaches such as design/ build and fast-tracking.
- By January 1, 1990, the Department of Education should conduct a statewide survey to gather and analyze data on the degree to which individual schools are presently used jointly with other state and local public service agencies, and by community organizations.
- By January 1, 1990, school districts should determine the feasibility of teaching selected academic and vocational classes – especially using computers – in facilities made available by large businesses, plants or factories. This can free up badly needed space in existing schools, exploit opportunities to enhance learning via instructional technology and provide "real world" environment experiences for students.
- Beginning in July 1990, a portion of state funding

to local school districts should be tied to documented increases in the use of existing educational facilities.

Financing New Facilities

To continue doing business as usual, the Florida Department of Education projects a need for 758 new schools over the next decade to house a net increase of more than 700,000 K-12 students. The cost of those new facilities is projected at \$20 billion – of which only about \$6 billion will likely be provided by the state over the next five years.

This will likely leave billions to be raised by local governments, some of which are already "tapped out" on allowable or publicly acceptable property tax levies or "strapped" in trying to catch up and keep pace with service needs fueled by growth (let alone future needs). Moreover, a substantial number of voters seriously question local governments' ability to deal with growth-related problems; therefore, they may be unwilling to entrust it with increased taxes, especially property taxes.

Sources most likely available to fund new school facilities include local ad valorem taxes, local bond issues, state general revenue, the state infrastructure fund, net proceeds of the Florida Lottery, the Gross Receipts Tax and license plate fees.

Any creative and effective method of funding unmet facilities needs should include:

- Implementation of new statutory authorization for the lease/purchase of educational facilities and equipment;
- Use of incentives/matching funds tied to performance and/or improved utilization of existing facilities; and
- Optimum use of long-term bonding (versus funding solely from current operations).

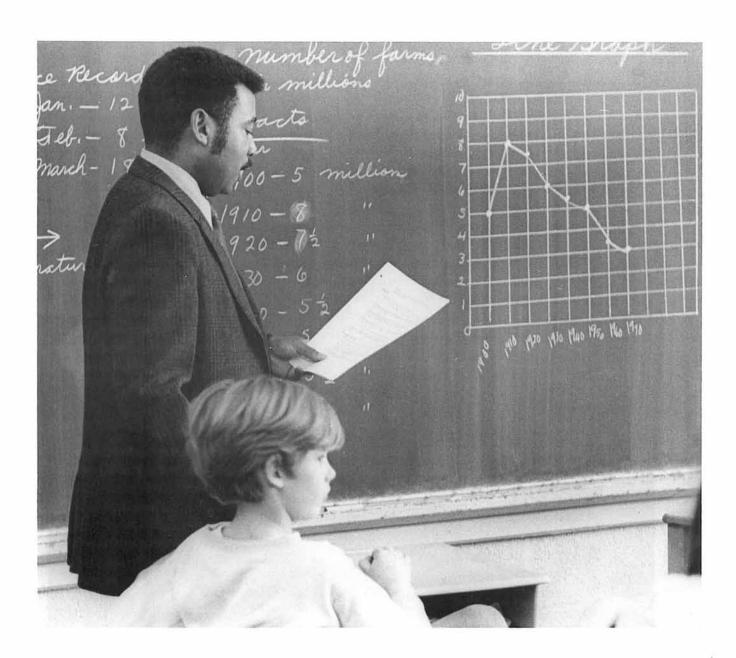
The Commissioner of Education has formed a Facilities Task Force, on which several members of the Partners in Productivity Education Subcommittee serve. Its purpose is to study in more detail methods of financing capital facilities. Even with better utilization of current and future facilities, the needs are far beyond the capacity of current resources.

Recommendations

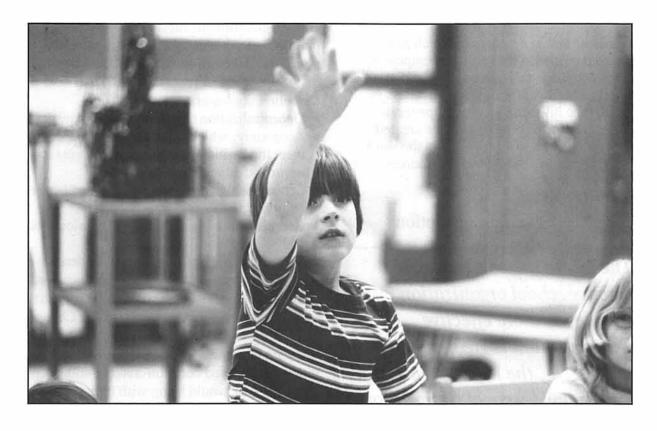
- School districts should use a newly authorized lease/purchase alternative, where it is cost effective, to procure selected educational facilities and equipment.
- By December 31, 1990, the Department of Education and local school districts should – as

part of the master K-12 plan recommended above and in conjunction with the Commissioner's Facilities Task Force – complete an analysis of the most cost effective means of financing new school facilities over the next decade, incorporating many of these "tried and true" cost saving recommendations.





Maximizing the Productivity of Human Resources in Our Public Schools



The approaching 21st Century promises to bring with it demands for higher levels of knowledge and skills that are unprecedented in our state, in the nation and around the world. In addition, societal pressures are increasingly forcing public education to deal with and help solve such problems as drug abuse, teenage pregnancy, unemployment and welfare dependency.

The greatest challenge facing Florida educators lies in the need for fundamental restructuring of the state's basic approach to teaching. Continuing to tinker with the current archaic system of the teacher, the blackboard and the textbook is tantamount to patching a horse harness even though there is a car parked in the driveway. It is time to revamp the ways we teach and learn if we are to meet the needs of the Information Age intelligently.

We must begin now to redesign our public education system, embracing modern management techniques to increase human productivity. Approximately 80 percent of Florida's \$6.8 billion K-12 education budget for 1988-89 is being spent on personnel costs. So it follows that the human resources area provides the most promise for improving educational productivity.

The Partners in Productivity Education Subcommittee examined numerous ways to improve public school productivity and individual performance. Most of our recommendations touch on the themes of school entrepreneurship and restructuring; obtaining the greatest use possible of instructional technology in the classroom; and enhancing the teacher corps. Implementing the recommended initiatives can increase the return on public and private education investments by enhancing the performance of students in Florida's public schools.

Entrepreneurship

Public school systems are currently highly centralized, monopolistic structures supported by tax dollars. Students are required by law to be available to receive educational services in a classroom and school chosen for them by the centralized bureaucracy, or to spend substantial private dollars for such services outside the system. Few opportunities exist within the current system for school site personnel to make choices concerning delivery of education services.

It seems clear that in a system in which neither the user nor the provider of the service is empowered to make choices, change will come slowly – if at all. Further compounding the lack of responsiveness is that neither pays the bills; the general taxpayer does that. Hence, an illusion of progress can be created which satisfies both users and providers in the short run, simply by increasing the financial resources devoted to the system.

Parental Choice: An Intriguing Option

"The key to better schools is more effective school organization . . . the key to more effective school organization is greater school autonomy . . . the key to greater school autonomy is school competition and parental choice."

John E. Chubb, the Brookings Institution and Terry M. Moe, Stanford University, in a study on parental choice as a way to improve the nation's public schools.

Introducing the principles of choice and competition into our public education system implies that schools be given much greater decision-making autonomy, independent of centralized authority. This independence should force schools to be more responsible and accountable for their programs and performance. As a result, schools with a genuine community-responsive, market/ customer oriented "mission" would likely succeed. Those without innovative curriculum and instructional methods,

effective discipline, and performance-based hiring and firing of school personnel would be forced to improve. A mission is defined as having strong school goals (usually academically oriented), leadership (strong principals) and professionalism, (principals treat teachers as partners).

In a system offering parental choice, students would not be expected to attend a particular school because of geographic proximity or for administrative purposes. To finance a comprehensive system of choice, government subsidies would be distributed to parents instead of schools through scholarships or vouchers cashed in at the school of their choice.

Supporters of parental choice call attention to the following benefits:

- Decentralization of public school management;
- Autonomy, which causes schools to attempt to meet the legitimate demands of parents for improved education;
- Schools which are more focused and better equipped to meet their mission;
- Recruitment of more highly professional educators; and
- · Better matching of schools and students.

The current system by which educational resources are allocated regardless of demonstrated quality tends to subsidize mediocrity. Changing the method by which schools attract their "customers" and gain resources would make them more attuned to quality. Increased decision-making authority and responsibility would bring with it increased accountability for student performance and results.

However, other considerations must be evaluated. Many experts fear the return of racially segregated schools. Also, there is the controversial issue of whether private as well as public schools should participate in such a subsidy system.

To date, no complete system of parental choice has been implemented in the United States. However, open enrollment systems and magnet schools are being used selectively throughout the nation. Magnet schools admit students on a selective basis. Students may attend school in a zone other than the one in which they live.

Dade County, Florida's magnet schools offer nontraditional curricula in such areas as computer technology, tourism, the visual and performing arts, foreign languages, science and engineering. Throughout the state of Minnesota, parents can choose the school which their children will attend, even if it means sending them across district lines.

Harlem, New York offers 23 alternative schools, each with its own unique program of instruction and specialties. Areas of emphasis include the performing arts, science and the humanities, and health services. Fifteen thousand students are involved in this instructional program, all of whom attend the school of their choice.

This new system has been quite successful for Harlem. A decade ago, it ranked last among the city's 32 districts in overall reading scores. It now stands at 18th. The number of graduates admitted to New York's best schools has grown from 10 to over 250 annually.

Recommendations

- The Department of Education should work with local officials to implement pilot projects on parental choice in at least three districts (urban, rural, suburban) beginning with the 1990-91 school year.
- All school districts should carefully consider allowing parents more choice among schools to promote diversity and greater quality through healthy competition.



Implement School-Based Management

Originally used by the private sector as an approach to decentralizing, school-based management was authorized in Florida under The Accountability Act of 1973 (Section 229.555(1)(b), Florida Statutes). It directs each district school board to utilize its system of planning and budgeting in ways that allow individual schools to become the principal planning units. But not much has happened statewide to implement this important reform.

While the conceptual framework of schoolbased management is diverse, its general themes are:

- Participatory planning and goal setting;
- Shared decision making and team building;
- The use of technology in management and decision making processes; and,
- Parent and community involvement.

Restructuring school leadership through decentralization and deregulation means empowering teachers and administrators to decide for themselves what is important and needed for their schools, and how their budgets can best be spent.

Shared decision-making goes hand in hand with school-based management. Teachers make decisions regarding staffing structures, selection of school personnel and allocation of funds for in-service activities. This is intended to promote accountability, efficiency and greater productivity.

Research shows that ownership of ideas leads to lasting changes. Teachers and other educational personnel must be allowed to help build, defend and implement the school budget – and better understand constraints and pressures on the education system. This principle is accepted in our nation's business and industrial sector; it can also have a significant impact on public education.

"Restructuring school leadership means empowering teachers and administrators to decide for themselves what is important and needed for their schools."

For maximum effectiveness, school-based management and shared decision making (SBM/SDM)

initiatives must include business management training for principals, and problem solving and consensus-building skills for teachers.

In September 1988, thirty-three schools in Dade County began participating in an experiment with onsite SBM/SDM. They have been authorized to bypass several layers of central administrative bureaucracy and have discretion over 80 percent of their budgets.

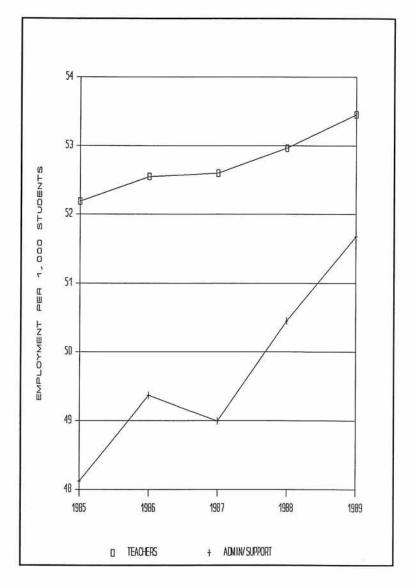
No extra funds have been appropriated to any of these schools. All of the more than 100 waivers requested to an existing collective bargaining agreement have been granted. A preliminary evaluation in March 1989 showed positive improvements in the way teachers participating in the program felt about their schools. Data on the impact of this experiment on student performance is not yet available.

Interviews with teachers and administrators for the March 1989 evaluation prompted the following recommendations:

- Ongoing support for school-based management and shared decision making must come from senior administrators, union leaders and school boards;
- Increased training is needed for teachers, staff, and administrators on an ongoing basis as part of the school-based management and shared decision making program;
- Additional networking programs beyond school improvement conferences are needed to facilitate sharing and exchange of ideas; and
- A district-wide school-based management and shared decision making newsletter publicizing innovations, new programs, and problems is needed to facilitate the flow of information.

Another example of on-site authority is a modest suggestion endorsed by the Commissioner of Education. It would make \$100 available to each teacher annually for classroom improvements. An alternate approach to achieving the same goal while facilitating ease of fiscal administration is to give \$2500 to each school. In addition to allowing teachers to respond to changing materials requirements, having this discretionary fund can help enhance their sense of responsibility and participation in managing school resources.

PUBLIC SCHOOL EMPLOYMENT IN FLORIDA PER 1000 STUDENTS



Recommendations

- Beginning in 1990, the Department of Education should conduct annual training sessions on schoolbased management. They should stress goal attainment, measurement of results and incentives to promote accountability for principals, teachers and selected administrative staff.
- By September 1, 1990, meaningful school-based management systems should be adopted in selected schools in all school districts, with measurement methodologies established to document improved student performance and teacher/administrator morale. Each district should determine which specific practices work under different conditions –

- with positive and negative recognition for noticeable improvements in, or regression of, student achievement.
- Each school district should measurably increase the productivity of its administrative personnel by at least ten percent annually over the next three years. This should be accomplished by removing outmoded mandates, modernizing procedures, exploiting opportunities to computerize operations and introducing other efficiencies.
- Working with local school districts, the
 Department of Education should compile a list of
 state mandates which can be modified or
 eliminated to promote productivity enhancements
 and cost savings. It should be considered and acted
 upon by the 1990 Legislature and the State Board
 of Education.
- No district administrator other than the superintendent should receive a salary higher than that of the higher paid school principals.



Increase Instructional Technology

The use of instructional technology in the classroom is long overdue in Florida's K-12 public education system. Although most public schools currently teach computer science, few use it extensively as an interactive tool to facilitate academic instruction.

Teachers' fears of being replaced by "automated

instructors" still present formidable barriers to widespread acceptance of a more effective and efficient technological approach to learning. Such innovations are more likely to succeed by using a combined "bottom up/top down" approach which incorporates development and implementation by teachers, combined with strategic planning at the district and state levels.

The Department of Education has requested state appropriations of \$16 million for 1989-90 and \$23 million for 1990-91 to buy computer hardware and software rights for local school districts.

Additionally, it is developing a process to integrate private industry's technological knowledge with the educational knowledge of local school districts.

Several leading edge instructional strategies are being implemented in Florida:

A. A program in Citrus County helps high school students improve mathematics skills through the use of microcomputer-based instructional materials and techniques. The package contains approximately 80 software programs geared to six areas of secondary level mathematics including Algebra I and II, Geometry, Trigonometry, Calculus and Applied Math. Some of these programs are tutorials; others are drill and practice or graphic simulations. While students work on the computer, the teacher functions as a resource person providing individual assistance when needed. Every student can be successful at his/her own pace and level of mastery.

"Teachers' fears of being replaced by 'automated instructors' still present formidable barriers to widespread use of instructional technology."

B. Broward County's advanced "Nova" schools recruit students from throughout the county and belong to the Coalition of Essential Schools. The Nova program is based on principles in *Horace's Compromise: The Dilemma of the American High School*, (Sizer, 1984), which is an alternative to the traditional high school structure.

This program requires students to take personal

responsibility for a significant portion of their education and offers a more personal environment in which to learn. The major goals for students are:

- Receive individualized instruction;
- Develop a base for life-long education by being taught "how to learn;"
- · Gain insight into their own scholastic potential;
- · Learn with enthusiasm and imagination; and
- Raise personal expectations

Students participating in the Essential Schools program must demonstrate mastery of skills and content through research papers, presentations and peer teaching and evaluation.

- C. Indian River Community College offers a special program to train mathematics teachers on how to use instructional computer software in the classroom and integrate it into their curricula. Chipola Junior College offers a similar program. Santa Fe Community College provides training in computer assisted instruction for teachers of remedial mathematics.
- D. The Department of Education has developed an employability series on an interactive video disc. IBM, Tandy and Apple have expressed interest in gaining marketing rights. Implementation of this program could enhance existing and undeveloped interest in the application of this technology to student learning.

DOE's Division of Vocational, Adult and Community Education is also exploring the use of interactive video disc technology for high-cost training programs such as commercial truck driving, law enforcement, fire fighting and heavy equipment.

Recommendations

- All school districts should increase students' planned effective use of instructional technology in classrooms and other locations by at least ten percent annually over the next five years, based upon the full-time equivalent (FTE) count. Using an FTE count, the Department of Education should bring about more uniformity among the school districts. For example, a ten percent increase across the board would not mean much improvement in a district that is not doing much to begin with.
- Beginning in 1989-90, the Department of Educa-

- tion's annual school survey should capture accurate data on computer utilization in every public school, including the number of students receiving individualized instruction via computer in regular academic subjects.
- By July 1, 1990 a plan should be in place to replicate state funded pilot projects which have proven efficacious in the utilization of technologybased instruction.
- By December 31, 1990 the Department of Education should have on-line a Florida information data base for all school districts to share innovative ideas, programs and practices, both in this state and throughout the nation.

Improve Teacher/Administrator Productivity

Increasing the productivity of teachers and administrators is largely about revamping the system to allow creative and effective approaches that motivate individuals to excel. A major goal is to stop making administrators out of our most talented teaching professionals. We must permit them to continually grow professionally within a management model designed to keep them where they do their best work: In the classroom.

When teachers have more freedom to apply their talents where they are needed, education dollars can be spent more productively for higher priority needs. Building a new system of practical approaches can result in the kind of performance and outcomes which are necessary to garner public confidence and support.

Increasing teacher productivity requires making basic changes in the scope of teachers' work while expanding their levels of responsibility and influence. Teachers must be allowed to use instructional technology and other aids to help them manage their own time more effectively. Less time should be spent on administrative paperwork and more on attaining educational results.

Computer technology and other forms of automation can help expedite administrative information requirements for record keeping and preparing classroom materials. Teleconferencing can aid in training and communication with other educational

entities around the state and nation for the purpose of sharing productive approaches and methodologies.

"When teachers have more freedom to apply their talents where they are needed, education dollars can be spent more productively."

But motivating students to excel involves more than just high-tech facilities and freedom from paperwork. It requires good teaching and enthusiastic personal commitment. Hundreds of published research studies over the past 20 years have shown that student performance in the classroom is *directly* tied to the amount, type and frequency of reinforcement (praise, positive feedback, privileges, etc.). When teachers are specifically trained to identify desirable target behaviors such as completing homework on time, responding to questions and staying on task, and they reinforce those behaviors immediately and often, students invariably show a 50 to 100 percent improvement in desirable behavior.

Yet many teachers do not currently use such Classroom Management methods. Although widespread adoption of positive, consistent reinforcement could help transform American education as we know it, many students are receiving little or none of this feedback from their teachers. Training and encouraging teachers to use this research-based management system can make a positive difference.

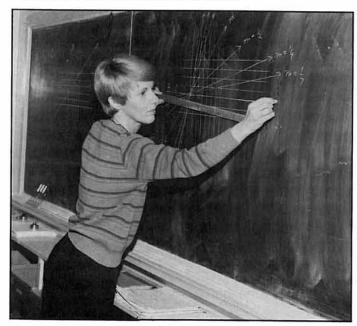
In every case, student performance must be the yardstick for judging success. Teachers who are unable to demonstrate effective teaching and performance enhancement methods should be remediated and/or removed from the classroom expeditiously. The right of each student to receive a competent teacher must be paramount.

One way of promoting teacher flexibility and accountability is by restructuring the system to create different teaching levels to be used in conjunction with a solid feedback and reinforcement model. Senior level teachers would be responsible for larger numbers of students, with more direct supervision being handled by teaching assistants, paraprofessionals, retirees, interns and student tutors. Volunteers would also be used on this level by recruiting

from Florida's talent bank of retired professionals, and tapping the talents and expertise of the business community.

Recommendations

- Working with the Department of Education, by July 1, 1990 all school districts should:
 - Develop policies to empower teachers with greater decision-making authority and related accountability;
 - Create several teaching levels (senior teachers, teaching assistants, paraprofessionals, retirees, interns and student teachers) for greater system flexibility and management accountability; and
 - Equip teachers with instructional technology and other aids to help them use their time more effectively.
- Beginning in July 1990, teachers in each school district should receive in-service training on the effective use of Classroom Management procedures for improving student participation and learning productivity.
- Beginning in July 1990, each school district should be required to report to its taxpayers and the Department of Education on technical, personnel and other initiatives undertaken to increase teacher productivity, including documentation of results achieved. Results should be reported in terms of test scores, college placements, drop-out levels and reduced need for remedial courses.



Recruitment and Retention

The Department of Education projects a need for approximately 10,000 new teachers annually in Florida's public schools through the year 2001. These new teachers will be required both to handle growth and to offset the current six percent annual loss of work force caused by teachers retiring or resigning for other reasons. This annual work force attrition, while it creates an obvious staffing problem, also presents an opportunity to finally establish teaching as a true profession.

The Legislature has adopted standards to ensure the quality of teachers newly entering the system in Florida. The main issue, however, is making certain that standards of excellence are applied to the entire cadre of teachers, not just new ones.

The 1988 Legislature established five university-based alternative preparation centers to train people from other occupational areas who want to teach. However, these training programs currently have certain drawbacks. For instance, although a teacher need not be employed to enter such a training program, requirements for beginning teachers preclude completion of the program unless the recipient is actually teaching.

Recommendations

- School districts should increase the number of retired scientists, engineers and technologists, military and industrial personnel recruited for public school instructional and administrative positions by ten percent annually over the next three years.
- Barriers which prevent persons from other occupations from completing alternative preparation programs to become teachers should be lifted by September 1990.

Career Development Plans

Chapter 231.6125, Florida Statutes, required development of models to pilot the use of professional development plans in selected school districts in 1986 and 1987. The career development plan was part of the Career Achievement Program for Teachers, which sunsetted at the end of the 1988 legislative session due to lack of funding. Currently,

districts are not required to formulate career path plans for teachers.

Recommendations

- By July 1, 1990, all school districts should complete teacher career development plans to:
 - Attract the most able and qualified teachers to Florida's public schools;
 - Assist teachers who are interested in, but not prepared for, a larger role in the teaching profession to gain the skills required to succeed at the level they choose;
 - Assign more responsibility and instructional support personnel to senior level teachers with demonstrated leadership skills and managerial expertise;
 - Increase opportunities for teachers to use their professional judgement and discretion within their areas of expertise; and
 - Provide salary levels that are geared toward the marketplace and performance. These should be commensurate with increased responsibility and measurably improved personal and student productivity.
- The goal of these plans should not be to make administrators out of our best teachers, but to permit teachers to leverage their teaching skills in a management scheme which keeps them in the classroom.
- Teachers should play an active role in designing these career development plans.

Professionalism - Testing and Certification

In order to expect teachers to strive for and accept the role of professionals, they must prepare for such a role as other professionals. Professional training generally consists of three elements: deep grounding in the content of a particular discipline; hands-on experience and practice under the direct guidance of experienced persons; and demonstrated proficiency in the profession through rigorous testing.

Although the Department of Education insists that Florida's certification standards are among the nation's toughest, statistics concerning the qualifications of our teaching force are indeterminate at best. In fact, most of Florida's teachers have never taken a meaningful test within their subject area and

scope of pedagogical (teaching) knowledge.

Since 1985, certification testing has improved, as have programs designed to screen and evaluate the capabilities of beginning teachers. But little or no data exists on teachers who became certified before 1985.

Candidates for new certification must pass the CLAST exam (test of professional knowledge), pass a subject area test, have a 2.5 GPA in the area of specialty and complete a one-year program for beginning teachers.

The system currently in place requires demonstrated specialized skill as a basic tenet of professional standing. But simply labeling teachers as "professionals," while demonstrating good public relations, does not ensure expertise, competence or ultimately the public's confidence in our public education system.

In June 1988, the Department of Education's database became available to all school districts to help improve the process of certification. Districts with a computer terminal, modem, and telephone line can tap into the DOE database. But problems persist. Many districts are finding the database to be vast and overwhelming. The department continues to work on making the certification process simpler and more understandable.

Recommendations

- Florida's certification process should be used to target for remediation those teachers who do not belong in the classroom because they have less than adequate academic backgrounds or an inability to communicate and promote learning.
- By January 1, 1990 the Department of Education should make sure that all districts have access to the certification database and that they understand how to use it.
- By December 31, 1990 the Department of Education should measurably improve its statistics and analysis concerning the level of qualifications of Florida teachers, and better communicate it to the public. It should focus both on teacher knowledge and teachers' ability to teach.
- The Department of Education and local school districts should carefully consider requiring that all new teachers at both the middle and secondary

school levels have a college major in an academic subject – not just education.

Teacher Salaries

Attracting and retaining qualified professional educators may require adjustments in salary levels. These adjustments will have to come, in some measure, from restructuring public education and adjusting teachers' roles and levels of responsibility. Salaries must be commensurate with expanded duties, measurable results and new demands which would encourage teachers to employ greater judgement and more creativity in their jobs. Salaries must also be reevaluated to better respond to the needs of the marketplace. For instance, a current critical need exists for a higher level of expertise in the areas of math and science. Salaries in these areas should reflect that critical need.

Almost every study of organizational productivity initiatives indicates that professional recognition, involvement in school management and special recognition and awards tend to improve teacher performance. Added rewards such as bonuses for documented productivity improvements should complement annual salary increases; and any such increases should be largely based on professional performance.

Recommendations

- A meaningful portion of principals' and teachers' performance evaluations and salary increases (about half) should be tied to their ability to measurably increase student performance and retention.
- By January 1, 1990 the Department of Education should develop a plan to recognize prior experience in other fields in determining the salaries and benefits for professionals entering teaching from other industries.

Gaining Support for Increased Public Education Investments

Public support for raising billions of dollars to pay for hundreds of new schools needed during the next decade can be garnered only if citizens' perception of education undergoes substantial improvements. This will require closer attention to the performance of education personnel, and accountability for results.

An April 1989 report released by the Florida Chamber of Commerce recommends more investments in education as one of the means needed to boost Florida's economy and elevate workers' salaries. The report, entitled "Cornerstone," calls for improving the state's education system by expanding math, science and engineering courses, making technical education more responsive to industry needs and lowering the dropout rate.

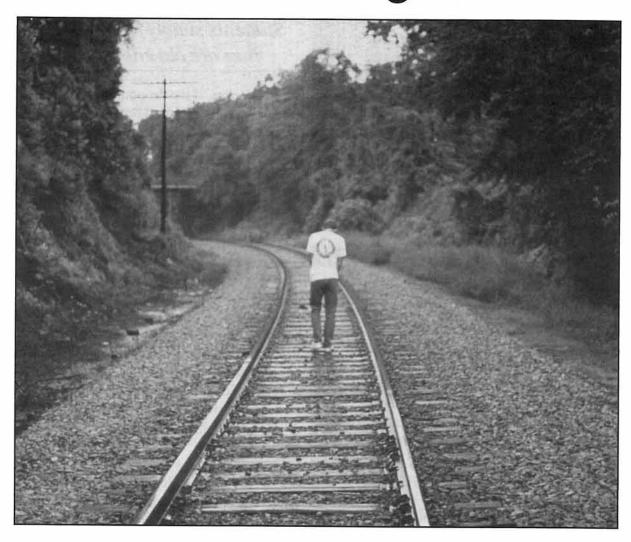
These long-term strategies, along with a higher level of expected performance from educators, will be necessary components in achieving the kind of public endorsement needed to meet the educational challenges of a rapidly growing Florida.

Recommendations

- All school districts and individual schools, working with the Department of Education, should place greater emphasis on accountability, through the development and implementation of a performance and productivity measurement system.
- All school districts and individual schools should place greater emphasis on informing the public of positive documented student performance improvements.



The School Dropout Challenge



In today's technologically advanced society, education is more a necessity than a luxury. Now more than ever before, obtaining a quality education must transcend inevitable changes wrought by economic, social and political conditions. Therefore, it is imperative that we effectively address and correct the school dropout problem.

In an effort to deal with the alarming rise in the number of student dropouts in Florida, the 1978 Legislature enacted the Alternative Education Act. Its primary purpose was to provide new methods for reaching unsuccessful or disruptive students. But since the Act was only designed to react to the problem, it failed to significantly impact the dropout situation. Education officials, lacking adequate data to identify potential dropouts, were unable to effectively attack the dropout dilemma.

The 1986 Legislature passed the Dropout Prevention Act, which seeks to more accurately identify potential dropouts so that preventive steps can be taken before the problem worsens. Only time will tell what kind of impact it will have.

Who Is Dropping Out?

More than 600,000 students between the ages of 14 and 24 drop out each year in the United States. Males currently drop out at a higher rate than females, a reversal of the trend in previous years.

According to the U.S. Department of Education, Florida's dropout rate was the nation's highest for school year 1987-1988. During that year, our state spent \$83 million on dropout and associated instructional programs. It is spending an additional \$49 million in 1988-89 (excluding federal funding).

Dropouts more often than not come from families of low socioeconomic status, are headed by single parents or females, and are large in size. Girls whose mothers were dropouts are 2½ times more likely to drop out than girls whose mothers completed their education. Students who marry and have children drop out at much higher rates. All in all, socioeconomic reasons are equally as important to consider as are academic reasons in looking for probable solutions to the high dropout rate.

"Eighty percent of all prison inmates are school dropouts."

The pernicious effects of the student dropout problem can be felt throughout all areas of society. Presently, students who drop out of high school will cost the United States Government up to an estimated \$200 billion annually in taxes due to their lower earning and spending capacities. The impact of Florida's high dropout rate is evidenced particularly in the area of law enforcement. Dropouts commit six to ten times as many crimes as other individuals. Eighty percent of all prison inmates are dropouts. The annual cost of housing them (excluding the costs of prison construction) in Florida's correctional facilities exceeds \$300 million.

How Serious is Florida's Dropout Problem?

A major issue in studying the dropout problem is the validity of various methods of calculating the dropout population. If "dropouts" include young people of normal high school age who are not in school or have not graduated with a regular high school diploma (not equivalency credentials) Florida's

dropout rate is currently 38.8 percent. In other words, nearly forty percent of our high school age students are not in school – worst in the nation.

"Dropout often actually occurs in the lower grades. Students simply 'wait around' until they are old enough to leave."

However, if the dropout rate includes only those students who have failed by their late twenties to receive either a regular diploma or high school equivalency credentials, the rate is somewhat less shocking – 25 percent. Determining the actual level of competence required by equivalency exams would lend more credibility to this statistic. Certainly, it does little to excuse the failure of the K-12 system by including equivalency degrees granted to people in their twenties.

We now know that, in most instances, dropout actually occurs in the lower grades. Students simply "wait around" until they are old enough to leave. Florida's school districts could achieve more success in identifying potential dropouts if each school took appropriate measures to identify their particular problem. Schools could design a dropout identification system similar to one described in Florida Atlantic University's Florida Dropout Identification Project.

Such a system would create a computer database of cumulative records of at-risk fourth to eighth graders. The database would be kept at the school where such information on the student can be used to determine the most appropriate and efficient method of dropout prevention based on the information in the student's file. This would enable the school to target and help correct any causative factors which might exist within the school curriculum.

However the dropout rate is calculated, it is clear that the requirements for survival in today's work place differ from past decades due to greater technological demands and heavier competition for knowledge and skills in the world marketplace. The 1970s and 1980s have seen a dramatic change in the labor market, with fewer low-level, unskilled employment opportunities. As more youths and women have entered the job force, competition for

these jobs has increased. Thus, many dropouts who formerly could find unskilled employment are finding it increasingly difficult to get a job.

Nonetheless, many at-risk students are so disillusioned that they fail to comprehend the value of a high school diploma while they are still in school. This helps explain why nearly half of the 700,000 students who do not complete high school on time eventually realize that a degree is worth earning.

Nearly 40 percent of all dropouts return to school at some time to complete the necessary requirements to earn a diploma or an alternative certificate. The individuals most likely to return to school are male, of higher academic ability and socioeconomic status.

"Florida's trend setting graduation standards should not be compromised to ease the dropout problem."

Florida's dropout rate is also influenced by the level of minimum standards established for graduates. Ours is one of only two states in the nation requiring students to pass 24 courses as well as tests measuring both minimum and basic skills in order to graduate. When a legislatively required 1.5 grade point average (GPA) requirement takes effect in late 1989, Florida will be the only state requiring a minimum GPA above passing to graduate.

While compromising these standards to ease the dropout rate is not a responsible answer, enhancements must be made in the areas of remedial education, tutorial assistance, counseling and alternative programs to assist students who cannot readily meet state standards.

Recommendation

 By July 1, 1990, the Department of Education should develop a valid student tracking system to measure the dropout rate at the individual school and district levels. This will allow Florida to better define its dropout problem and monitor/measure the success of various programs to help determine the most efficient use of dollars in dealing with this dilemma.



Ingredients of Successful Dropout Prevention Programs

Educators and administrators interviewed by the Partners in Productivity Education Subcommittee stated that successful dropout prevention programs result primarily from the strength and dedication of individual school principals and teachers. Essential qualities of dropout prevention leaders include empathy, love and understanding for children, energy, creativity, commitment, and good communications between students *and* parents.

Successfully initiating an effective dropout prevention program, experts say, is often due to the tireless efforts of one committed teacher, principal or counselor. This individual is likely to address the challenge with passion and perseverance, unselfishly and diligently sharing the full spectrum of his or her knowledge and talents.

The attitudes and actions of superintendents and area administrators also affect the success or failure of dropout prevention programs. If they are concerned and open-minded, they can set the stage for problem solving and progress. If they are unconcerned or indifferent, they can prevent a program's success. But ultimately, it takes strong local school leadership to make a dropout prevention program succeed.

A recent nationwide study (Pelavin Associates,

Washington, D.C., 1987) discusses what it calls the two essential ingredients of a successful drop-out prevention program. First, successful programs do not treat male and female students in the same manner. They recognize and administer to inherent differences in psychology and emotional makeup which are critical in any attempt to assist these students.

"The majority of vocationally oriented students do not receive adequate guidance counseling."

Secondly, effective dropout prevention programs appear to have the same characteristics as those found at excellent schools (i.e., energetic leadership by school principals and entrepreneurial management qualities). The most successful of these programs include early intervention, school-to-school linkages, small programs and classes, reinforcement of basic skills, involvement by concerned adults, feedback to the student on his progress, and career orientation.

Effective dropout reduction programs are multidimensional and use a personal service approach. They usually include academic assistance, family counseling, peer counseling and mentoring, plus frequent communication with a respected teacher or advisor.

According to professional educators, the focus of guidance counselors with students is an important indicator of a school's ability to provide the type of attention needed by at-risk students. At present, most counseling efforts are directed toward college-bound students; the majority of vocationally oriented students do not receive adequate counseling.

Many at-risk students choose a vocationallyoriented curriculum. They should be provided more counseling which is tailored to their needs. Starting as early as fourth grade and with increasing emphasis during middle school and high school, counselors should provide special attention to at-risk students in developing a personal curriculum which will keep them in school now and make them more productive citizens later.

Every potential dropout must be offered the opportunity to succeed at his or her own academic pace. This can be best achieved through full imple-

mentation of instructional technology in the classroom. Using computer programs in teaching can enable at-risk students to learn without intimidation and help prevent the discouragement which too often results from too rigorous anj academic pace.

Students who drop out are essentially sending their school system a very telling message: school for them is not a reinforcing, rewarding experience. Procedures which incorporate liberal use of positive reinforcement, delivered by teachers in a personal way, are potent front-line defenses in dropout prevention at every level of education – from elementary through high school.

Recommendations

- Dropout prevention programs should focus on the necessity for students to possess at least a high school diploma in order to survive in today's competitive labor market.
- Dropout prevention programs should differentiate between the academic, emotional and psychological needs of male and female students.
- Starting in the fourth grade and with increasing emphasis during middle school and high school, counselors should provide special attention to atrisk students (especially those who are vocationally oriented) in developing a personal curriculum which promotes success at their own level and pace, thereby helping keep them in school now and make them more productive citizens later.
- Beginning with the 1989-90 school year, procedures utilizing the concept of frequent individualized reinforcement for classroom participation, assignment completion and achievement should be implemented on a routine basis in all classrooms in Florida to help prevent drop-out.
- Beginning with the 1990-91 school year, principals' and teachers' performance evaluations should be based in part on their schools' drop-out program results – using a consistent methodology so that data are not "fudged." Objectives should be established and, if they are exceeded, positive rewards (bonuses or other recognition) should be provided.



Early Intervention Can Help Prevent School Dropout

Florida should dramatically enhance its programs to assist three and four-year-olds from deprived backgrounds. These children begin life with a significant educational deficit; as a result, many never catch up. A cycle of failure begins with their initial educational experience and continues until they drop out of the system.

Florida's prisons are filled with criminals who were once students with a variety of problems. Many came from disadvantaged homes and neighborhoods; others had learning disabilities, used drugs or became teenage parents. Most were also school dropouts.

The investment necessary to provide meaningful programs for three and four-year-olds is small in comparison to the \$12,900 current average annual cost of incarcerating those same individuals ten to fifteen years down the road. The same is true for hard-to-reach students with learning disabilities.

A federal pre-school program called Pre-Kindergarten Early Intervention has demonstrated substantial results and cost savings. Supporters contend that a dollar invested in this program saves eight dollars in services that will not be needed later on. The Department of Education is asking the 1989 Legislature to more than double its current \$23 million grant program to \$49.4 million (funded by Florida Lottery net proceeds) to serve the economic-

ally and educationally disadvantaged in a state Pre-Kindergarten Early Intervention program.

Recommendation

 The 1989 Legislature should approve a Department of Education request to use net proceeds from the Florida Lottery to double its grant program to serve economically and educationally disadvantaged students.

Reaching Potential Dropouts

Students at risk of leaving school require a variety of programs to prevent their departure. Those with disciplinary problems need different kinds of resources than do school-age mothers, slow learners or those who are physically or emotionally challenged.

Research shows that major factors which cause students to lose heart and drop out are: boredom; feelings of alienation; school work that lacks a relationship to real-life issues; lack of reinforcement for class participation and work completed; conflict between school and work schedules; and repeating grades.

"Extending school hours helps at-risk students who must work to support themselves or their families."

Other studies show that the majority of at-risk students do not function well in a rigid school curriculum. They tend to be kinetic (i.e., physically active) learners who respond most positively to action-oriented applications, concepts and principles.

One innovative approach involves expansion of the vocational content of academic courses. Lake Gibson High School in Polk County is a pilot site for Project SAVE (Solutions for Academic and Vocational Excellence), an initiative being implemented in 13 states. Its major purpose is to strengthen the basic competencies of vocational students in the areas of communications, mathematics, science, critical thinking and problem solving.

The project includes courses such as:

 Applied Communications, which is a comprehensive set of learning materials developed

- by the Agency for Instructional Technology (AIT) to help students develop and refine careerrelated communication skills;
- Applied Mathematics, which has curriculum materials developed by the Center for Occupational Research and Development (CORD) to help students develop and refine math skills ranging from basic to trigonometric functions; and
- Principles of Technology, which is an applied physics course.

While the term "vocational training" carries a negative connotation with many academically oriented school administrators, all students – not merely at-risk ones – can be stimulated by applications activities.

Extending school hours helps at-risk students who must work to support themselves or their families. For instance, students in selected Dade and Broward County high schools can attend class in the morning, then work during the afternoon and return to class in the evening. Hialeah Senior High School offers a 14-period day from 7:30 a.m. to 10:00 p.m.

Another strategy is to provide learning opportunities on weekends. For example, Charles P. Drew Elementary School (Dade County) is open on Saturdays to provide special tutoring to its students.

Boca Raton Middle School (Palm Beach County) provides an after school program for its students. Entitled "After School Pals," the program offers a variety of activities such as cooking, golf lessons, roller skating and tennis. Its purpose: to expand the horizons of at-risk children while helping to keep them out of trouble in the afternoons when no one is home to supervise them.

A three-year-old program at the Crooms School of Choice in Seminole County (north of Orlando) has yielded impressive results by offering alternative education to at-risk middle school students. Students in grades six through eight can attend this school and receive counseling for problems involving discipline and under-achievement. Students in grades six through twelve who attend obtain counseling for problems resulting from teen pregnancy. The school also employs a full-time social worker to assist with family-related problems and stresses.

The program provides vocational education by teachers; student-to-student counseling; and twice-aweek sessions with certified teacher/counselors. It also features a flexible curriculum which is tailored to shorter attention spans often associated with at-risk youths. The program is aimed at correcting student behaviors instead of using the traditional punitive approach. During the school's three-year history, only one student has been expelled, and the school has enjoyed an average graduation rate of over 80 percent.

Similar alternative education programs have been operating in Brevard County since 1985. At that time, 14 schools in the district offered such programs; currently, 37 schools are making these guidance-oriented initiatives available to at-risk students.

Strategies for addressing the dropout problem should not be limited to those which seek to keep students in school. Too often, students who have chosen to drop out are forgotten because their names no longer appear on a school's attendance roster. These former students make up a uniquely diversified segment of our society, whom no single strategy of remediation and training can serve.

Recommendations

- Project SAVE (Solutions for Academic and Vocational Excellence) should be expanded. Its major purpose is to strengthen basic competencies of vocational students in the areas of communications, mathematics, science, critical thinking and problem solving.
- School districts should carefully consider extending school hours in selected facilities to help keep students who must work to support themselves or their families from dropping out of school. More flexible hours could also provide day care services for "latch-key" children, who are estimated to represent ten percent of all students.
- Parents should help cover the cost of expanded school hours on a sliding scale according to their ability to pay. Children whose parents cannot afford to pay would still be served.
- Alternative education programs utilizing student-tostudent counseling and certified teacher/counselors to correct negative behavior of at-risk middle schoolers should be initiated in all school districts.

Make the K-12 System More Flexible

It is time for more flexibility and creative options in guiding students through our public education system. Too often, the reaction to student under-achievement is to make the student repeat an entire grade. Experience suggests that this should be done only as a last resort due to the resultant negative emotional and psychological effects. Research shows that a student who repeats one grade has a 40 percent chance of dropping out. A student who repeats two years has a 90 percent chance of dropping out.

"Academic and vocational tracks should not be treated as either-or choices."

Not all underachievers' failures are due to lack of effort. Some merely lack sufficient time to attend a full schedule of classes and study. Careful consideration should be given to the concept of part-time school for students who work or have to support a child, or who could do better with a reduced workload.

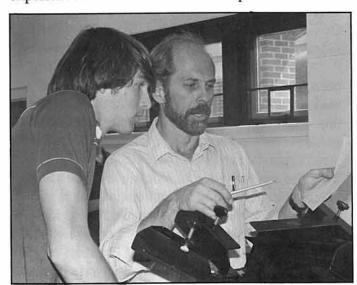
Lightened workloads, resulting in extended K-12 duration, would carry a more positive connotation than now exists with repeaters. Contrast our attitudes in this regard with our view of college, where it is perfectly permissible for students to take less than a full load or to take more than four years to complete a degree.

Academic and vocational training should not be treated as either-or choices. Allowing more vocational courses to be substituted on an equal credit basis for selected academic courses can provide valuable, practical career development options.

Some people learn academic skills much more effectively in a hands-on setting. An at-risk student who stays in school because of his interest in hands-on activities may later decide on post-secondary education. But if he is not retained in school long enough to discover this, or to develop the fundamental building blocks of learning, he may be lost forever.

Recommendations

- By July 1, 1990 the Department of Education and local school districts should complete a review of how dropout may be affected by the way students are processed through the K-12 education system.
 - Each district should carefully review its policies to be sure they do not inadvertently result in students being "pushed" out of school. For example, despite the risk it creates, school districts under some circumstances require repeating an entire grade if just one subject is failed.
 - Careful consideration should be given to authorizing part-time schooling for students who have severe time constraints due to their employment or need to support a child, or who could perform better with a reduced or flexible workload.
 - The concept of an extended school day, school week and school year – allowing students to work, take extra courses or make up courses on Saturdays or during the summer – should be carefully considered as a strategy to positively impact student dropout.
- School districts should allow more vocational courses to be substituted on an equal credit basis for selected academic courses in order to provide valuable, practical career development options for vocationally oriented at-risk students.
- Individualized, interactive computer instruction should be used to enable students to learn and progress at their own pace, reducing discouraging experiences that so often lead to dropout.



Bring The World Into The Classroom

Students, particularly those at risk of dropping out, should be exposed to real world learning opportunities through cooperative education and community service projects. Increased emphasis should be placed on developing skills that business and industry value, such as teamwork, critical thinking and active experimentation.

A vastly under-utilized approach is inviting guest lecturers or volunteer helpers into the classroom. Each school district should develop a volunteer program for qualified professionals and business people to get involved with their local schools. Other resources not being fully utilized include the use of retired executives, talented homemakers and skilled crafts people in each local community. Many schools have a citizens advisory board that can marshal these forces.

One such partnership is the Texas Alliance for Science, Technology and Mathematics Education project. It strives to actively involve the private sector in the daily math and science education of elementary and secondary students. Scientists and mathematicians team up with individual teachers, academic departments and schools to assist in integrating "real world" applications into concepts taught in a given class.

In California, the Energy Source Education Council, a national, non-profit technology-education organization, works cooperatively with industry and educators. The Council's mission is to help public and private school children understand the importance of energy conservation, natural resource management and the negative effects of pollution. Organizations such as this should be encouraged in Florida.

A program called "Explore the Possibilities" has been developed by General Motors to motivate students to take part in preparing for the future. It introduces secondary school students to opportunities in the skilled trades and engineering, encouraging them to pursue careers in these fields.

The state Division of Vocational, Adult and Community Education's Electronics Centers of Emphasis teach an industry-specified core electronics curriculum. These centers were established in response to industry's criticism of Florida's existing programs. The new program has enjoyed up to a

96 percent student placement rate in industry jobs. The dropout rate of participants has been reduced by half in some school districts.

Dade County's *Project Comet* is designed as a dropout prevention program for at-risk fifth graders. In order to be included in the project, these students must be regarded by teachers and counselors as potential future dropouts by meeting at least two of nine eligibility criteria. These include limited English proficiency, low grades and low attendance.

Once enrolled in the year-long program, students become acquainted with the positive relationship between school work and careers. Students are placed in a classroom/laboratory where they concentrate on academic subjects. They also gain experience in a work environment typical of career situations. Students are exposed to such jobs as bank teller and grocery store cashier, using hands-on automation equipment.

Although no definitive data yet exist on the overall effects of this program on students, preliminary results have shown marked improvements in students' motivation, conduct, attendance, and academic achievement.

A program that has shown considerable potential is *The Florida Compact*. Modeled after a similar program in Boston, Massachusetts, *Compact* was established last Fall in four counties (Hillsborough, Brevard, Santa Rosa and Okaloosa). It is designed primarily for at-risk ninth and tenth graders. Schools focus their efforts on five key areas: aggregate student grade point average, semester grades, attendance, suspensions, and credits earned/promotions to the next grade. Businesses guarantee jobs to at-risk students on the condition that they remain in school.

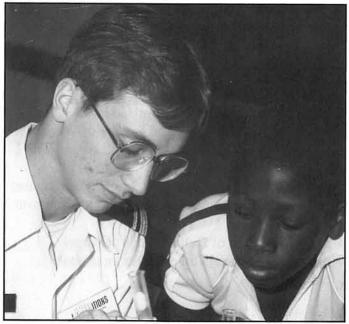
During the 1987-88 school year (before the start of the program) the aggregate grade point average for students identified as being at risk was 1.3 on a 4.0 scale. The first semester grade point average after the program started was 1.7, a 30 percent improvement above the aggregate. Attendance improved and suspensions declined by more than 33 percent. Data on credits earned and promotions will not be available until the first year of the program's completion.

Another well-received initiative began in 1987, when the Florida Legislature authorized the Educational Challenge Grants Program to make statewide

school districts eligible for state funded educational project grants. The program's mission is to provide an avenue whereby the business community can become directly involved in public education. It requires districts to recruit local businesses to fund 60 percent of a project's total cost, with the remaining 40 percent covered by a state grant. It also requires that businesses have the opportunity to become actively involved in the program, both in dropout prevention and teacher education.

Recommendations

- The business community should increase its support of initiatives like The Florida Compact, which guarantees jobs to potential dropouts on the condition that they remain in school. This is a very effective approach that requires no additional outlay of education dollars.
- Incentive programs for business participation should be utilized to a greater extent. For example, under the Educational Challenge Grants Program authorized by the 1987 Florida Legislature, local businesses – which fund 60 percent of the budget– are recruited to become actively involved in dropout prevention and teacher education.
- Early dropout prevention programs stressing career awareness – such as Dade County's Project Comet – should be carefully considered as a tool for motivating at-risk students.



Effective Teaching Impacts Dropout

An old adage in teaching is: "If the student hasn't learned, the teacher hasn't taught." The first responsibility of any teacher is to make the subject interesting. The failure of teachers to meet this criterion is a significant factor contributing to the dropout dilemma. Many administrators and teachers are unsuccessful in communicating enthusiasm for learning; others fail to demonstrate a correlation between academic and vocational subjects and everyday life.

Two commonly accepted models of instruction are:

- The post-industrial factory model which views and evaluates students as products and teachers as workers using easily described skill and effectiveness standards; and
- Learning as an interactive process which relies upon a teacher's personal charisma to capture students' participation.

Most teachers use both the "assembly line" and "performing arts" models. The *primary* ingredient present in the successful classroom, however, is a group of students doing work that they probably would not do unless they are encouraged, forced, led, challenged or inspired.

The teacher is a "peculiar type of executive" who, by whatever means, accomplishes the task of motivating students to expend the energy required to learn. This involves creating an environment where students are productive.

"If the student hasn't learned, the teacher hasn't taught."

Administrators and teachers often do not adequately demonstrate the joy or application of academic and vocational subjects to students' lives. Interested and interesting "BIONIC" ("Believe It Or Not, I Care") teachers – coupled with community-based resources and business monetary and volunteer participation – can help reduce Florida's dropout rate. The end result, hopefully, will be modification of the attitude of many teachers who follow a "teach the best and to hell with the rest" philosophy.

It will take some specifically tailored programs and practices to solve the dropout crisis without sacrificing quality to the majority of students. Increasing positive reinforcement for student participation, work accomplished and academic achievement can result in the retention of more students in the core curriculum without requiring separate dropout programs. Incentives (awards, recognition, bonuses) are needed for teachers who work with at-risk students so that they do not regard it as punishment or a dead-end assignment.

Recommendations

- By January 1, 1990, the Department of Education should develop a special sensitivity/awareness training course to help teachers identify and work with at-risk students.
 - The course should include discussion of how potential dropouts differ from traditional students in their learning styles.
 - It should emphasize applications of instructional technology to motivate "turned-off" students.
 - It should demonstrate teaching techniques to build self-esteem among at-risk students by helping them achieve success at their own level and pace.
- By September 1, 1990 a more significant portion of teachers' pre-service and in-service training should involve methods of providing individualized positive reinforcement for class participation and academic achievement.
- By September 1, 1990 all school districts should offer programs to assist and recognize teachers who successfully entice at-risk students to remain in school.



The Important Role of Parents

The Center for Research on Elementary and Middle Schools at Johns Hopkins University in Baltimore, Maryland has studied thej effects of family environment on students' school achievement. Conclusive evidence has shown that parents' general interest and encouragement in a child's schooling positively affects his/her overall achievement, regardless of the family's socioeconomic background and the child's general ability.

It should be recognized that some parents of atrisk students feel intimidated by school officials, in part because of disrespectful treatment in the past. Many have no transportation, requiring outreach work by school officials.

Examples of actions to increase involvement by parents include:

- In Hollywood, Florida, children are not the only ones going to school. As part of the Model School Adjustment Program (early identification of at-risk students) at Driftwood Middle School, parents of identified students attend special classes at school or at home to improve parenting skills, particularly communications that help reinforce what their children learn at school.
- Miami's Dade Partners, a division of the Dade County School Board, recruits businesses to set up after school programs on school premises, usually encouraging parent involvement. They produce a calendar which lists a daily activity for parents and their children to complete together. An example for a particular day would be for a child to read the television program schedule for his/her viewing hours and classify the shows as fiction or nonfiction.
- Atlanta's Apple Corps, comprised of the PTA, Chamber of Commerce, and League of Women Voters, spends more than \$100,000 annually to promote parental involvement, improve communication between the school and the home, and increase awareness and support by parents on school issues.
- Positive Parents of Dallas brings principals, teachers and parents together for an annual conference.

Recommendations

- By December 31, 1990 the Department of Education, with support from private enterprise and civic groups, should develop a statewide program which emulates those being used in cities like Miami and Atlanta to encourage good parenting, parent involvement in education and increased awareness of school issues.
- Employers should provide reasonable time off from work to allow parents to attend counseling sessions to resolve potential dropout issues.

Inter-Agency Coordination

Several school districts are working with the Florida Department of Health and Rehabilitative Services to target at-risk middle school students.

Brevard County brings in HRS counselors to inform school faculty on proper planning activities for children who are emotionally disturbed due to physical or mental abuse.

In Putnam County, HRS counselors train school faculty to conduct seminars for students on teen alcoholism, suicide, satanic cults and date rape. School officials have also planned tutorial programs aimed at slow learners in order to ease tension in the classroom.

At Brentwood middle school in Escambia County, an HRS counselor works with students of families receiving public assistance such as Aid to Families with Dependent Children (AFDC). The counselor provides a liaison between the family, the school and HRS to focus on the needs of the family before a situation becomes hazardous.

Also at Brentwood, HRS has played an important role in developing a supplement to the academic curriculum. Students are placed in volunteer settings such as day care centers and retirement homes two hours a week, six weeks at a time. During the placement period, in-class studies are designed to accentuate their involvement in the service environment. Students participating in this program have demonstrated a marked increase in enthusiasm for their studies.

Recommendations

· Additional social services, including family

- counseling, financial assistance and emergency assistance, should be brought into schools (or at least made more accessible) for potential dropouts and their families.
- School social workers should be given primary responsibility for developing linkages between their schools, at-risk students and their families, and Florida Department of Health and Rehabilitative Services resources.

The Bottom Line

Improving students' productivity depends largely on the success with which the education community stimulates their desire to learn. Instilling and nurturing that desire is one of the fundamental prerequisites of good teaching. Another critical role is making subject matter as interesting and relevant as possible.

Meeting these basic responsibilities can and does greatly increase the likelihood that the majority of students will learn. It also has an important impact on the attitudes of students who, for a multitude of social and educational reasons, are at-risk of losing heart, losing interest, and dropping out. In fact, studies show that failure to make subjects interesting is one of the key factors in at-risk student failure. All too often, it seems, teens leave school more out of frustration and boredom than lack of ability.

So what is the real bottom line? Florida, like the rest of the nation, has thousands of students who possess the innate and learned intelligence and skill levels to pursue a conventional educational career – just like children have for decades before. Some of these students come from disadvantaged homes; some are ill-behaved; some are using drugs. But most of them have one thing in common: they are educable, they have a right to be educated, and they are not being educated.

"If we don't change our direction, we're likely to end up where we're headed."

Somehow, the basic learning process which we have all taken for granted over the years is no longer

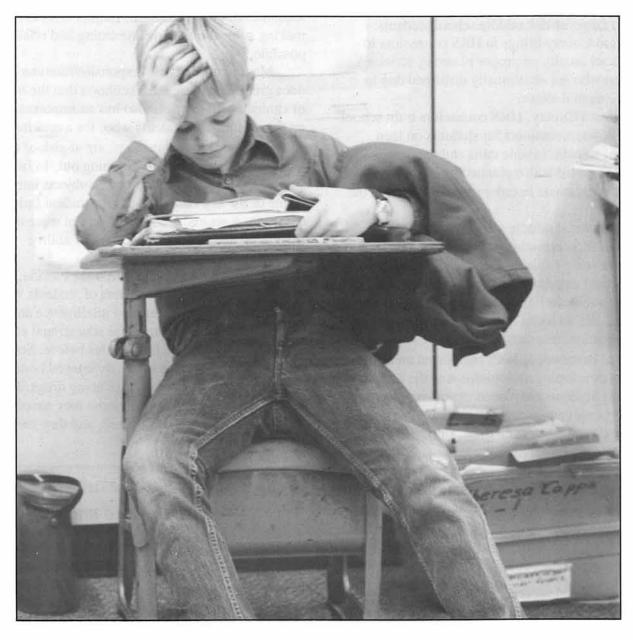
happening. Thousands of students each year leave the very institutions which can shape them into productive adults. When they drop out of school, in many cases they abandon their only opportunity for improvement.

It is incumbent upon us to find a way to reach and positively influence these students. In other words, an all too often impersonal institution – public education – must now personalize its product. Only in that way will the system become responsive to its customers – the taxpayers who support it and the students it strives to educate.

In the meantime, the dropout crisis remains one of the most painful and foreboding symptoms of an

ailing educational system. Of all the factors affecting education, dropouts must be regarded as a signal to cease business as usual. Because business as usual has resulted in a multitude of dispirited, uninterested, ignorant kids who lack learning skills and the knowledge to become responsible citizens. What is worse, few of these students know enough to care. Caring, then, is our job.

The need for revamping our approach to education is more than just obvious; it is screaming for attention. Or, as one educator recently put it: "If we don't change our direction, we're likely to end up where we're headed."



Summary of Recommendations

Meeting K-12 Capital Facilities Needs

Improved Utilization Of Existing Educational Facilities

- By January 1, 1990, the Department of Education's capital facilities model should be changed to provide incentives for school districts to maximize their utilization of existing schools.
- By March 1, 1990, the Department of Education and local school districts should determine how much of each district's projected ten-year educational facilities need can be met through more effective utilization of existing facilities, particularly via year-round schooling.
- The Department of Education should develop a funding formula to promote and reward improved utilization of facilities (i.e., year-round and multipurpose schools.) The 1990 Legislature should approve this formula.

The Need For New Schools

- By January 1, 1991, the Department of Education, in cooperation with local school districts, should develop a comprehensive master plan for K-12 capital facilities over the next decade. The plan should integrate requirements and guidelines for cost-effective design, siting, construction and financing of new schools, as well as restructuring and greater use of instructional technology in the classroom and in non-school locations.
- New schools should be constructed with space that is most suitable for increased use of instructional technology in *classrooms*, libraries and laboratories.
- All school districts should make it a top priority to reduce the Department of Education's projected

- ten-year need for new classrooms. This can be done in part by better utilizing current facilities and increasing the use of instructional technology to create flexibility and vast new opportunities for learning in both classroom and non-school locations.
- By July 1, 1990, state education funding formulas should be restructured to provide incentives to accomplish the above recommendation.
- The 1990 Legislature should amend Section 235.06, Florida Statutes, to require development and use of a tracking system which would enable the department to more accurately determine individual schools' annual maintenance needs.
- All school districts should actively involve private sector experts in decision making related to capital facilities planning and design, land acquisition, construction and financing.

Cost Saving Suggestions For New and Existing Facilities

- All school districts should carefully consider selling high value land on which aging or dysfunctional schools are located, using the money to build new facilities on less costly land. Districts not having an inventory of current market values for existing facilities should develop one.
- Beginning in July 1989, all school districts should, where cost effective and feasible, make a practice of using the same (competitively bid) architectural building designs and plans for intra-district and even inter-district construction of new facilities.
- Beginning in September 1989, the Department of Education should collect, analyze and distribute to school districts all relevant information on innovative construction approaches such as design/ build and fast-tracking.
- By January 1, 1990, the Department of Education should conduct a statewide survey to gather and

- analyze data on the degree to which individual schools are presently used jointly with other state and local public service agencies, and by community organizations.
- By January 1, 1990, school districts should determine the feasibility of teaching selected academic and vocational classes – especially using computers – in facilities made available by large businesses, plants or factories. This can free up badly needed space in existing schools, exploit opportunities to enhance learning via instructional technology and provide "real world" environment experiences for students.
- Beginning in July 1990, a portion of state funding to local school districts should be tied to documented increases in the use of existing educational facilities.

Financing New Facilities

- School districts should, where appropriate and cost-effective, use a newly authorized lease/ purchase alternative to procure selected educational facilities and equipment.
- By December 31, 1990, the Department of Education and local school districts should – as part of the master K-12 plan recommended above and in conjunction with the Commissioner's Facilities Task Force – complete an analysis of the most cost effective means of financing new school facilities over the next decade.

Maximizing the Productivity of Human Resources in Our Public Schools

Parental Choice

- All school districts should carefully consider allowing parents more choice among schools to promote a wider variety of educational choices and to enhance quality through healthy competition.
- The Department of Education should work with local officials to implement a pilot project offering parents choices of schools and/or curricula in at least three districts (urban, rural, suburban) beginning with the 1990-91 school year.

School-Based Management

- Beginning in 1990, the Department of Education should conduct annual training sessions on schoolbased management. They should stress goal attainment, measurement of results and incentives to promote accountability for principals, teachers and selected administrative staff.
- By September 1, 1990, meaningful school-based management systems should be adopted in selected schools in all districts, with measurement methodologies established to document improved student performance and teacher/administrator morale. Each district should determine which specific practices work best under different conditions. The success of these practices would be evidenced by improvements or declines in student achievement.
- Working with local school districts, the
 Department of Education should compile a list of
 state mandates which can be modified or
 eliminated to promote productivity enhancements
 and cost savings. It should be considered and acted
 upon by the 1990 Legislature and the State Board
 of Education.
- Each school district should measurably increase
 the productivity of its administrative personnel by
 at least ten percent annually over the next three
 years. This should be accomplished by removing
 outmoded mandates, modernizing procedures,
 adopting opportunities to computerize operations
 and introducing other efficiencies.
- No district administrator other than the superintendent should receive a salary higher than that of the higher paid school principals.

Instructional Technology

• All school districts should increase students' planned effective use of instructional technology in classrooms and other locations by at least ten percent annually over the next five years, based upon the full-time equivalent (FTE) count. Using an FTE count, the Department of Education should bring about more technological uniformity among the school districts. For example, a ten percent increase across the board would not be a meaningful improvement in a district that is not doing much to begin with.

Beginning in 1989-90, the Department of Education's annual school survey should capture accurate data on computer utilization in every public school, including the number of students receiving individualized instruction via computer in regular academic subjects.

- By July 1, 1990, a plan should be in place to replicate state funded pilot projects which have proven efficacious in the utilization of technologybased instruction.
- By December 31, 1990, the Department of Education should have on-line a Florida information data base for all school districts to share innovative ideas, programs and practices, both in this state and throughout the nation.

Teacher/Administrator Productivity

- Working with the Department of Education, by July 1, 1990 all school districts should:
 - Develop policies to empower teachers with greater decision-making authority and related accountability;
 - Create several teaching levels (senior teachers, teaching assistants, paraprofessionals, retirees, interns and student teachers) for greater system flexibility and management accountability; and
 - Equip teachers with instructional technology and other aids to help them use their time more effectively.
- Beginning in September 1990, teachers in each school district should receive in-service training on the effective use of positive reinforcement methods to improve student participation and learning productivity.
- Beginning in July 1990, each school district should be required to report to its taxpayers and the Department of Education on technical, personnel and other initiatives undertaken to increase teacher productivity, including documentation of results achieved. Results should be reported in terms of test scores, college placements, drop-out levels and the status of remedial needs.

Recruitment and Retention

School districts should increase the number of

- retired scientists, engineers and technologists, military and industrial personnel recruited for public school instructional and administrative positions by ten percent annually over the next three years.
- Barriers which prevent persons from other occupations from completing alternative preparation programs for teaching should be lifted by September 1990.

Career Development Plans

- By July 1, 1990, all school districts should complete teacher career development plans designed to:
 - Attract the most able and qualified teachers to Florida's public schools;
 - Assist teachers who are interested in, but not prepared for, a larger role in the teaching profession to gain the skills required to succeed at the level they choose;
 - Assign more responsibility and instructional support personnel to senior level teachers with demonstrated leadership skills and managerial expertise;
 - Increase opportunities for teachers to use their professional judgement and discretion within their areas of expertise; and
 - Provide salary levels that are geared toward the marketplace and performance. These should be commensurate with increased responsibility and measurably improved personal and student productivity.
- Teachers should play an active role in designing these career development plans.

Professionalism — Testing and Certification

- Florida's certification process should be used to target for remediation those teachers who do not belong in the classroom due to their less than adequate academic backgrounds or an inability to communicate and promote learning.
- By January 1, 1990, the Department of Education should provide all districts with access to the certification database and make certain they understand how to use it.

- By December 31, 1990, the Department of Education should measurably improve its statistics and analysis concerning the level of qualifications of Florida teachers, and better communicate it to the public. It should focus both on teachers' knowledge and their ability to teach.
- The Department of Education and local school districts should carefully consider requiring that all new teachers at both the middle and secondary school levels have a college major in an academic subject – not just education.

Teacher Salaries

- A meaningful portion of principals' and teachers' performance evaluations and salary increases (about half) should be tied to their ability to measurably increase student performance and their willingness to stay in school.
- By January 1, 1990, the Department of Education should develop a plan to recognize prior experience in other fields in determining the salaries and benefits for professionals entering teaching from other industries.

Gaining Support for Increased Public Education Investments

- Working with the Department of Education, all school districts and individual schools should place greater emphasis on accountability by developing and implementing a performance and productivity measurement system.
- All school districts and individual schools should place greater emphasis on informing the public of positive, documented improvements in student performance.

The School Dropout Challenge

How Serious is It?

 By July 1, 1990, the Department of Education should develop a valid tracking system to measure dropout rates at individual school and district levels. This will allow Florida to better define its dropout problem, monitor/measure the success of various programs, and help determine the most efficient ways of solving this dilemma.

Ingredients of Successful Dropout Programs

- Dropout prevention programs should focus on the necessity for students to possess at least a high school diploma in order to survive in today's competitive labor market.
- Dropout prevention programs should differentiate between the academic, emotional and psychological needs of male and female students.
- Starting in the fourth grade and with increasing emphasis during middle school and high school, counselors should provide special attention to atrisk students (especially those who are vocationally oriented) in developing a personal curriculum which promotes success at their own level and pace, thereby helping to keep them in school now and make them more productive citizens later.
- Beginning with the 1990-91 school year, principals' and teachers' performance evaluations should be based in part on their schools' drop-out program results – using a consistent methodology to prevent misrepresentative data. Objectives should be established and, if they are exceeded, positive rewards (bonuses or other recognition) should be provided.

Early Intervention To Help Prevent Dropout

 The 1989 Legislature should approve a Department of Education request to use net proceeds from the Florida Lottery to double its grant program which serves economically and educationally disadvantaged students.

Reaching Potential Dropouts

- Project SAVE (Solutions for Academic and Vocational Excellence) should be expanded. Its major purpose is to strengthen basic competencies of vocational students in the areas of communications, mathematics, science, critical thinking and problem solving.
- School districts should carefully consider extending school hours in selected facilities to help keep students who must work to support themselves or their families from dropping out of school. More flexible hours could also provide day

- care services for "latch-key" children, who are estimated to represent ten percent of all students.
- Parents should help cover the cost of expanded school hours on a sliding scale according to their ability to pay. Children whose parents cannot afford to pay would still be served.
- Alternative education programs utilizing studentto-student counseling and certified teacher/ counselors to correct negative behavior of at-risk middle schoolers should be initiated in all school districts.

A More Flexible K-12 System

- By July 1, 1990, the Department of Education and local school districts should complete a review of how dropout may be affected by the way students are processed through the K-12 education system.
 - Each district should carefully review its policies to be sure they do not inadvertently result in students being "pushed" out of school. For example, despite the risk it creates, some school districts require repeating an entire grade if just one subject is failed.
 - Careful consideration should be given to authorizing part-time schooling for students who have severe time constraints due to their employment or need to support a child, or who could perform better with a reduced or flexible workload.
 - The concept of an extended school day, school week and school year – allowing students to work, take extra courses or make up courses on Saturdays or during the summer – should be carefully considered as a strategy to positively impact student dropout.
- School districts should allow some vocational courses to be substituted on an equal credit basis for selected academic courses in order to provide valuable, practical career development options for vocationally oriented at-risk students.
- Individualized, interactive computer instruction should be used to enable students to learn and progress at their own pace, reducing discouraging experiences which too often lead to dropout.

Bring The World Into The Classroom

- The business community should increase its support of initiatives like The Florida Compact, which guarantees jobs to potential dropouts on the condition that they remain in school. This is a very effective approach that requires no additional outlay of education dollars.
- Incentive programs for business participation should be utilized to a greater extent. For example, under the Educational Challenge Grants Program authorized by the 1987 Florida Legislature, local businesses – which fund 60 percent of the budget – are recruited to become actively involved in dropout prevention and teacher education.
- Early dropout prevention programs stressing career awareness – such as Dade County's Project Comet – should be carefully considered as a tool for motivating at-risk students.

Effective Teaching Impacts Dropout

- By January 1, 1990, the Department of Education should develop a special sensitivity/awareness training course to help teachers identify and work with at-risk students.
 - The course should include discussion of how potential dropouts differ from traditional students in their learning styles.
 - It should emphasize applications of instructional technology to motivate "turned-off" students.
 - It should demonstrate teaching techniques to build self-esteem among at-risk students by helping them achieve success at their own level and pace.
- By September 1, 1990, all school districts should offer programs to assist and recognize teachers who successfully entice pre-identified, at-risk students to remain in school. Currently, many teachers who work with at-risk students see their assignment as punishment or a dead-end.

The Important Role of Parents

 By December 31, 1990, the Department of Education, with support from private enterprise and civic groups, should develop a statewide program to encourage good parenting, parent

- involvement in education and increased awareness of school issues.
- The Department of Education should publish material encouraging employers to provide parents with reasonable time off from work to attend counseling sessions to resolve potential dropout issues.

Inter-Agency Coordination

- Additional social services, including family counseling, financial assistance and emergency assistance, should be brought into schools (or at least made more accessible) for potential dropouts and their families.
- The Department of Education should make school social workers primarily responsible for developing linkages between their schools, at-risk students and their families, and Florida Department of Health and Rehabilitative Services resources.

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111 N. Gadsden Street Tallahassee, FL 32301 Phone (904) 222-5052