

## DOCUMENT RESUME

ED 420 099

EA 029 070

AUTHOR Keegan, Lisa Graham  
TITLE Plan for Education in Arizona.  
INSTITUTION Arizona State Dept. of Education, Phoenix.  
PUB DATE 1996-07-00  
NOTE 39p.  
PUB TYPE Guides - Non-Classroom (055)  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS \*Academic Achievement; \*Change Strategies; Educational Change; Educational Finance; \*Educational Innovation; Elementary Secondary Education; \*School Restructuring  
IDENTIFIERS \*Arizona

## ABSTRACT

This booklet presents steps Arizona has taken to reform education in order to improve student achievement. This guide is divided into four parts: (1) overview; (2) moving toward a student-centered system; (3) student achievement; and (4) school finance. The importance of having a well-educated work force is emphasized, as is the importance of student achievement. Issues in student achievement that receive special attention include standards, assessment, professional development, reading and math enrichment and recovery programs, parental involvement, and school safety. In the area of school finance, issues of concern include the Emergency Capital Needs fund, the School Debt and Construction Cost Study Commission, "how" to research a "pay-as-you-go" system of capital construction, "how" to redirect resources paid on interest toward classroom instruction, "how" to fund all schools on a real-time basis, the student accountability information system, and "how" to pay for major educational obligations. Twelve tables of figures offer data on school dropouts, math scores, drugs in the schools, expenditures per capita, and other information. (Contains 19 references.) (RJM)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED 420 099



**Lisa Graham Keegan**

Plan for Education in Arizona

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

*L. Edgington*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

ED 420 099

## **TABLE OF CONTENTS**

	<b>Page</b>
<b>I. Overview</b>	<b>1</b>
<b>II. Moving Toward a Student-Centered System</b>	<b>3</b>
<b>III. Student Achievement</b>	<b>6</b>
<b>1. Standards</b>	<b>9</b>
<b>2. Assessment</b>	<b>10</b>
<b>3. Professional Development</b>	<b>11</b>
<b>4. Reading and Math Enrichment and Recovery Programs</b>	<b>12</b>
<b>5. Parental Involvement</b>	<b>13</b>
<b>6. School Safety</b>	<b>15</b>
<b>IV. School Finance</b>	<b>17</b>
<b>1. Emergency Capital Needs Fund</b>	<b>18</b>
<b>2. School Debt and Construction Cost Study Commission</b>	<b>19</b>
<b>3. Research a Pay-As-You-Go System of Capital Construction</b>	<b>20</b>
<b>4. Redirect Resources Paid on Interest Toward Classroom Instruction</b>	<b>25</b>
<b>5. Fund All Schools on a Real-Time Basis</b>	<b>27</b>
<b>6. Student Accountability Information System</b>	<b>29</b>
<b>7. Fund Major Education Obligations</b>	<b>30</b>

## TABLE OF FIGURES

Figure	Page
1. Percentage of Students Who Drop Out of School	7
2. Total Math Scores, Grades 4 and 7	7
3. 1992 NAEP Arizona Scores	8
4. Disruptions by other students get in the way of learning.	15
5. School is safe place.	16
6. Drugs are a major problem in school.	16
7. Statewide Debt Service	21
8. Student Growth Percentages	21
9. Expenditures Per Capita	22
10. Impact on Secondary Property Tax	23
11. Debt Service Per Capita	24
12. Debt Service Forecasts	26

## I. Overview

The United States is in the midst of an enormous move to restructure the public education system. While the debate as to how we can achieve this is intense, few will argue that our current system must remain. Parents, educators, businesspeople, policymakers, and others demand real reform. They recognize that if America is to remain a leader in world affairs, our educational infrastructure must be the best. We must guarantee every student access to an extraordinary education.

Student achievement must, above all else, take precedence in any effort to reform education. According to the National Center on Education Statistics (1995), although mathematics and science scores of U.S. students increased since the early 1980s, they remain low compared to their counterparts in many other countries. In addition, it is reported that minority students continue to score substantially lower than whites in reading, science, and mathematics. Unless we commit ourselves to providing all students with a quality education, they, and we as a nation, will continue to be underachievers in a world with little room for mediocrity.

As a state, Arizona is experiencing tremendous prosperity and growth in all sectors of the economy. We are witnessing an all-time low unemployment rate and a vast number of major companies moving to, or expanding operations in, Arizona. State leaders continue to be quite successful in attracting business development through tax and other incentive strategies. One example of this is the recent expansion of Charles Schwab & Co. operations in Phoenix. It is reported that the firm plans to create 1,400 jobs by the end of 1996 and 2,300 by 1999 (Carlile, 1995). Furthermore, because of our geographical location, we have been able to benefit from developments in international trade. A recent *Arizona Business Gazette* article reports that the state is capitalizing on the North American Free Trade Agreement, estimating a net gain of 2,000 to 5,000 new jobs (Mitchell, 1996). Along with many of these jobs come high salaries. Schwab, for instance, will pay its customer service representatives an average \$30,000 to \$40,000 per year (Carlile).

In spite of these successes, it is clear that if Arizona is to continue to attract and maintain the industries that provide high-paying jobs for our citizens, the state's workforce must have the necessary skills to compete.

#### **Firms Concerned About Lack Of Workforce Readiness**

**"Microchip: How Many Local Jobs? Average Salary \$24 an Hour" Republic/Gazette December 13, 1995**

"City officials have boasted that Microchip Technology Inc.'s new plan to build two new factories in Chandler will bring new jobs to the city. But because of a shortage of qualified applicants, approximately 40 percent of those 2,000 jobs could go to people outside Arizona.

"Sanghi said the main reason for having to look out of state is the shortage of qualified workers in Arizona, because the labor pool has been drained by competition with other high technology manufacturers in the state."

**"Education Woes Knock Arizona Cities Down on List of 'Best'" Phoenix Gazette August 17, 1995**

"All three Arizona cities dropped in national rank in the latest [Money Magazine] annual survey, released Wednesday. Tucson is No. 60, down from No. 19 last year. Yuma ranked as the 74th best place to live this year, compared with 36th in 1994. Phoenix fell to 91st, down from 14th last year. The main reason, said Richard Eisenberg, an assistant managing editor at Money, is that Arizona's cities lagged others in education.

"He said other cities outpaced Arizona in addressing such issues as improving student-teacher ratios and high-school graduation rates. In addition, Eisenberg said, readers told Money Magazine that good public schools are more important than they were a year ago."

Most will agree that our schools have a great desire to prepare our students for the workplace and for all the challenges they will face as adults. Arizona's educators are committed and hard-working. The time has come for the system that supports their efforts to change. We must recognize that education is the foundation on which Arizona's future rests and commit ourselves to its excellence.

## **II. MOVING TOWARD A STUDENT-CENTERED SYSTEM**

The old American educational model no longer fits the new competitive game. Old-style 'general education' does not deliver enough thinking employees for tomorrow's economy. There is a serious mismatch between what the educational system tries to produce and what the job world needs, and the heart of the problem is a mind-set that ignores realities.

Hedrick Smith in  
*Rethinking America*

Rethinking the way we educate our children is a difficult endeavor. There are many factors to consider, but there is one constant: Students have diverse needs. We will succeed only when we embrace the fact that children learn differently, and that they seek different futures.

While this notion is obvious, it is hard to act on. We adhere almost blindly to a myriad of laws and policies that result in a one-size-fits-all approach to public education. It is time to discard the destructive notion that all children can benefit from a single approach, and instead design a system flexible enough to meet every student's unique needs.

We will accomplish this when we are willing to be honest about how much money is available for each student, to make that money visible and available for an individual school's use, to give schools specific information about academic achievement, and when parents recognize their role in choosing and supporting the school of their choice. It sounds simple, because in truth, it is simple.

Students are, in fact, the basis for funding education in Arizona. Every student enrolled in a public school is "worth" a base funding amount, with differences based on the student's need (e.g., students with disabilities receive more funding). Theoretically, in a student-centered system we will reward a school for attracting and keeping a maximum number of students enrolled. If the school believes it is not doing a good job of attracting students, it should have the ability to alter its program to provide more of what students and their parents look for in a school.

This certainly is not today's reality. Through a complicated and inefficient formula, money for education is calculated on the number of students in the prior year, and is delivered through districts instead of being made available to schools. And, though one would expect the district to simply allocate the funding per student (as it was generated), this is not usually the case.

By law, elected district governing boards are charged with the oversight of all curricular, financial, and personnel issues for every school in the district. As the sole authority over all aspects of their schools, governing boards decide contentious issues once for the entire district rather than to allow disparities and the predictable disruptions at each school. This largely explains the bitter battles governing board members face over substantive issues. Any person or group with an interest in a particular issue will obviously attempt to get it settled with one ruling from the governing board rather than leaving the issue to be considered at every school. Be it curriculum (whole language or phonics), personnel (retain or fire an employee), or finance (pay raises or materials), all critical issues for as many as 60,000 students in dozens of schools fall to five people on a governing board.

The force in play is obvious. Board members, serving in their free time and with no pay, must do their best for all students, not each student. They must endorse generally sound practice, instead of tailored and student-specific programs. Tradition says to the public that the school closest to them is the school that will provide all their student requests, and the board must make that a reality. Our rules have tied their hands.

Because we have tied the hands of governing boards, the schools' hands are tied as well. Where one might believe that a school should be able to attract more funding because it does an exceptional job of attracting students, it is not necessarily so. Schools do not usually receive funding or even individualized budgets from their districts. Instead, they receive the services the district deems necessary.



To understand the school perspective, you might liken this to having a checking account at a bank. You know there is money in your account, which you have earned. Yet, instead of being able to use those funds yourself, or even to know how much you have earned, every week the bank sends you a grocery basket full of those things it believes you will need for the coming week. It may well be a great basket, and you may have gotten together with other customers to persuade the bank to give out extra chocolate this week, but it is not necessarily what you would have purchased.

How difficult we make it on both schools and their boards to tailor instruction to the needs of students. How unlikely it is, under today's operational rules, that schools will adapt their approaches in an attempt to provide what they know students must have. And how far afield we are from requiring that parents become much more aware of the kinds of educational approaches available to them and their children. It need not be this way.

The advent of charter schools in Arizona clearly demonstrates that if a governing board is charged, not with the intricate operational details of schools, but with determining if schools are providing rigorous instruction and using their funds well, it can indeed oversee a myriad of educational choices. We can see that, given the opportunity to tailor instruction to the benefit of students in their school, teachers excel. And we have watched parents learn to make choices about opportunities for their children, as schools compete for the chance to educate their children.

Though many believe that the jury is still out on whether charter schools will answer many of the problems in public education, there is no doubt that the creation of charter schools allows us to rethink how we should structure laws and policies governing *all* schools. Most education officials agree that the freedoms enjoyed by our charter schools must be given to all public schools. If we simply give schools some flexibility in regulatory matters and then continue to bind them to the same financial structures, we only succeed in giving them a lesser degree of bureaucracy than today. We cannot, on the one hand, blame

teachers and administrators for not meeting the needs of children, and, on the other hand, limit their ability to solve these issues on-site where change can occur most quickly.

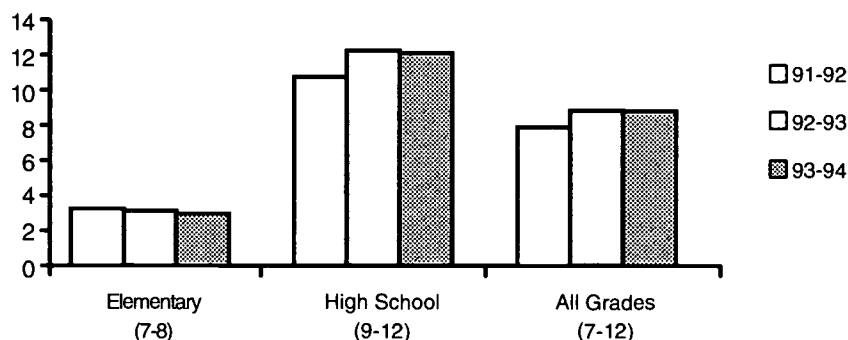
### III. STUDENT ACHIEVEMENT

The development of high academic standards for all students and mechanisms to assess student achievement must be an integral part of any effort to restructure our education system. Once we define what all students should know and what schools will be accountable for, educators and policymakers may then make better decisions as to how this may be achieved.

As part of setting high standards and restructuring our system accordingly, it is essential that we take into consideration the needs of our students. We should no longer try to fit today's students into yesterday's schools. The changing dynamics of our economy and society make it necessary for educators to examine critically the curriculum and instruction our students receive. Such an examination will allow us to make education more relevant to each individual.

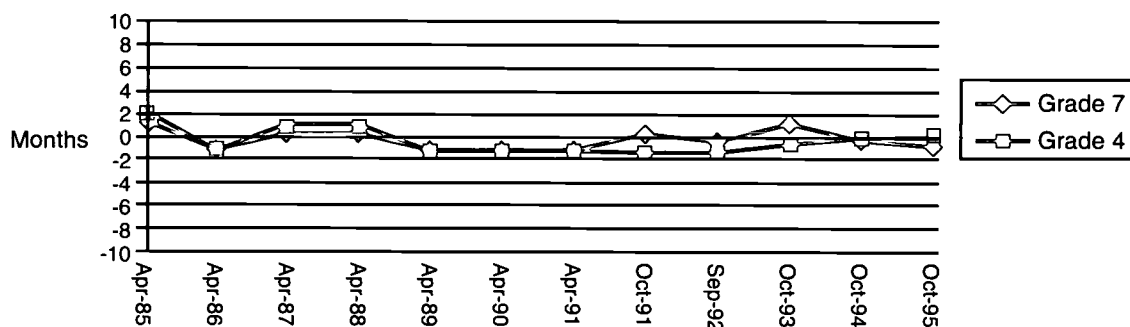
The need to do this is apparent. Only a portion of high school graduates desire to go on to college. Our current academic preparation means that those who do not are likely to enter the job market without any meaningful workforce preparation. We should not be surprised that without relevant preparation, a significant portion of our students are dropping out of school (see Figure 1). In some large urban districts the rate may exceed 40%.

**Figure 1 - Percentage Of Students Who Drop Out Of School**



For those students currently in school, we have scant information regarding their achievement. The only consistent measure of student achievement in Arizona over the last 10 years is performance on the Iowa Tests of Basic Skills/ Tests of Achievement and Proficiency (ITBS/TAP). As can be seen in Figure 2, total mathematics scores<sup>1</sup> for grades 4 and 7 have remained fairly constant around the national average. Scores in reading and language would present a similar picture.

**Figure 2 - Total Math Scores, Grades 4 and 7**



What these data do not tell us is what students are actually learning. Norm-referenced tests (NRTs) are designed primarily for comparative purposes and can tell us only how Arizona students perform in comparison to other students taking the same test. While this is a desirable characteristic of the test -- parents, teachers, administrators, and

<sup>1</sup> Measured as the difference (in months) from the national normed Grade Equivalent (GE) score. (e.g. A fourth-grade test taken in October would be normed as 4.2, or fourth year-second month.) Deviations from 0 represent months above or below grade level performance.

policymakers want and need to know how students are performing compared to similar groups in the state or nation -- it is not sufficient in determining whether Arizona's children are learning the skills they will need to thrive in the 21st century. Whether our students are above or below mediocre does not inspire great confidence in the future.

The National Assessment of Educational Progress (NAEP) scores give us a better picture of how Arizona students are performing, because this is a criterion-referenced assessment reflecting different levels of proficiency.

**Figure 3 - 1992 NAEP Arizona Scores**

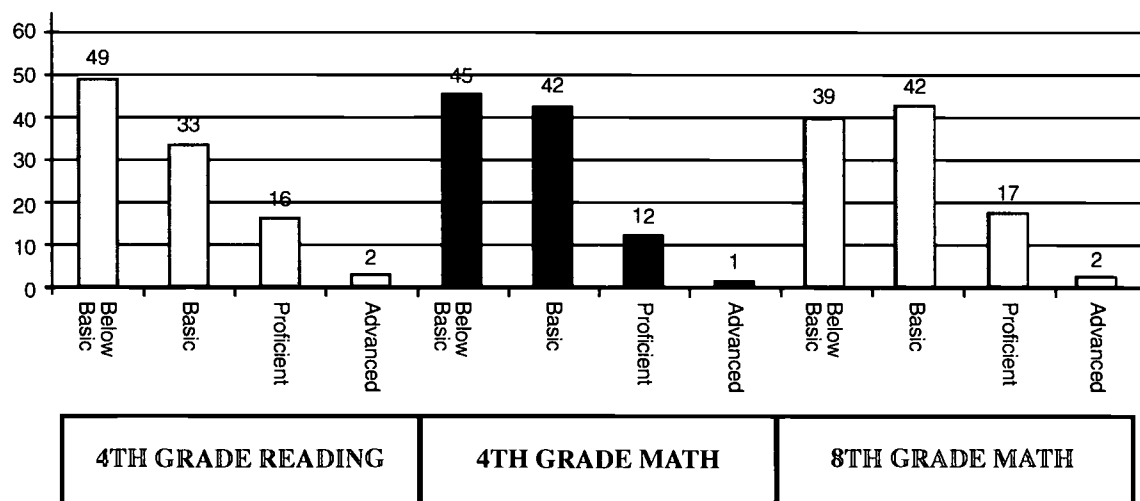


Figure 3 presents an alarming picture. Less than 20% of our students are scoring at the “proficient” or “advanced” levels. Nearly half of all 4th graders fall **below** the basic proficiency levels in reading and math. We know that without major intervention, students achieving poorly in the primary years (elementary and middle school) are likely to continue achieving poorly throughout their academic careers (Rasinski, 1994).

According to the Arizona Board of Regents' report, *Academic Performance of Arizona Graduates*, 20.2% (6,135) of the Arizona high school class of 1993-94 enrolled in an Arizona public college or university. Eighty-six percent of these students were “admitted

without academic deficiency,” that is, with no academic deficiency in their high school course work based on a university’s admission standards. Yet, the average first-term grade point average of these students is 2.7 out of a possible 4.0 scale. The universities also report an increasing requirement for remedial coursework in the freshman year.

While the barriers we face in creating an educational system that is standards-driven and needs-based are daunting, they are not insurmountable.

#### 1. Standards

We are all negligent if we continue to produce graduates without knowing whether or not they possess the needed educational skills our industries, institutions of higher education, and society require. We must work toward a system in which parents truly understand where their children are and should be academically at any given time. We must work toward a system in which business has complete confidence in hiring an Arizona graduate because they know exactly how competent that student is. We must work toward a school system that is accountable for the performance of its students.

Much discussion has occurred concerning the subject areas we should emphasize. We must concentrate any statewide criterion-based examination on language arts (reading and writing) mathematics, social studies, science, and work-based skills. Other critical subject areas such as technology, health, foreign language, and the arts are also important components of an Arizona education. However, it is imperative that we first devote our energies and resources to developing a valid assessment for the aforementioned core academic areas.

Statewide standards cannot be adopted until broad public input is given. Arizonans must have a say on the type of standards that we produce.

## 2. Assessment

There are two components to the state test system: a Norm-Referenced Test (NRT) and the Arizona Student Achievement Program (ASAP) assessment of the state academic standards. Both tests provide useful information.

**NRT (Norm-Referenced Test)** - The strength of the NRT is that it measures a wide array of basic knowledge and allows for comparison between Arizona students and the nation as a whole. The drawback of the test is that it provides relative comparisons (i.e., ranking) that do not speak to the question of whether our children are proficient in the skills necessary for a productive life. For instance, if the entire nation was behind other industrialized nations in mathematics instruction, an NRT score above the national average does not ensure that our students could compete in the world marketplace of the 21st century.

If, however, it is used as part of a comprehensive assessment program, the test may serve to pre-screen students with deficiencies in the Arizona Standards. For this reason, norm-referenced testing should focus on subtests that measure a significant portion of the Arizona Standards in grades 3, 5, 7, and 9.

**ASAP Assessment**-The cornerstone of academic improvement in Arizona is the assessments developed to test the state standards. These tests will provide a comprehensive look at student achievement of standards in math, language arts (reading and writing), and skills relevant to the workplace. Student performance will be measured against a fixed standard. Since simply scoring better than most is not necessarily good enough, students will need to demonstrate that they can perform at a competent level.

Assessments will incorporate a mix of items: multiple choice, short answer, and extended writing pieces. All students in grades 4, 8, 6, and 10 will be assessed. Since we will require completion of Arizona Standards for graduation, students failing to demonstrate proficiency at grade 10 will be assessed in grade 11 and 12 if needed.

Through strategic use of both tests, student academic achievement may be continually monitored, allowing modification of instruction for students unable to demonstrate competency. In this way, ASAP becomes an important tool for educators. But without proper training and professional development, the information generated by this assessment system will not be fully utilized.

### 3. Professional Development

Moving to a system that is standards- and performance-driven is a tremendous change in the way many within our education system function currently. We not only need financial and academic structural reform, we also need to support the educators. Any time major institutional change occurs, it is a given that you must provide the training that workers must have to ensure success.

As an example of this, the break-up of the Soviet Union forced the U.S. military to reevaluate its strategy for military engagement. In a post-cold war world our military must look and act differently than 20, 10, or even 5 years ago. Our military undertook a massive retraining of its officer corps to instill the different philosophies and skills they need to have. Though it cost hundreds of millions of dollars, it was an investment in the long-term security of our nation.

Yet another example is the well-known story of IBM. Up until the late 1980s, IBM believed that the mainframe computer was the cornerstone of its business, even though companies such as Apple, Sony, and Compaq were taking away billions of dollars of its business because these companies focused on the burgeoning personal computers market. IBM eventually realized that it had to change the very foundation of its company. IBM subsequently underwent massive retraining and professional development of its employees to ensure that they embodied the new philosophy and direction of the organization. As we undertake long-term education reform we cannot discount the need for professional development for our teachers.

It is important that Arizona provide the resources necessary to ensure that our teachers are the best prepared in the nation.

Twenty days of paid professional development will allow teachers the opportunity to interact with one another, maintain their expertise in a certain field, or pursue new teaching methods and strategies. Teachers must not only have the flexibility to innovate

and respond to the needs of their students, they must be given the time to do so. Just as we are committed to setting high standards for students and creating a structure conducive to meeting them, likewise, we should set high standards for teachers and create a professional development structure conducive to meeting these standards.

The way we certify teachers is another element that we must examine. The current process by which we certify teachers would be scoffed at by most other professions, and dishonors the talents of the teachers themselves. Our teachers should demonstrate proficiency in something more challenging than an 8th grade equivalency examination. We must design a professional examination that is rigorous and reflective of the high standards we will ask of our students and schools.

A residency program is another venue that the state should consider as a prerequisite for certification. Under such a system, a school could employ individuals with bachelors degrees and a desire to teach. The person would obtain a license or certification from the state after completing two full years of teaching, and only if the professionals (i.e., principals and teachers) at the school level deem that person is qualified to teach in Arizona. The state can still require that basic professional standards are met, along with personal background checks to ensure student safety. It is the professionals in the field, however, who would ultimately determine if these individuals should receive state licensure.

Institutions of higher education must recognize that our schools need teachers who understand the changing state, national, and global education needs of students. Teachers colleges can no longer remain faithful to once-effective instructional methods and curriculum in light of the changes taking place.

#### 4. Reading and Math Enrichment and Recovery Programs

Research shows that 3rd and 4th grade children who do not perform at grade level, are not likely to achieve well in the future. For instance, in his summary of the literature, Rasinski



(1994) concludes that longitudinal studies have found that 3rd grade students who are reading below grade level and have failed at least one grade are very unlikely to complete the 12th grade. Rasinski also notes that recovery programs in the primary grades are critical to a student's academic performance in current and future years. This stands to reason; most of the core academic preparation of students occurs during the primary years.

We must, therefore, provide the resources necessary for elementary schools to add, at a minimum, 10 additional school days for both 3rd and 4th graders for math and reading recovery, math and reading enrichment, or other programs our schools deem most critical for their students.

#### 5. Parental Involvement

Parent involvement is our best predictor of student success. Extensive research demonstrates that parental involvement in education leads to improvements in student achievement, grades, test scores, and overall academic performance. Moreover, parent involvement has the added benefit of improving the perceived effectiveness of schools by the local community and by academic evaluators, and positively influencing the dignity, respect, and attitudes of both families and educators (Henderson, 1987 and 1988). As policymakers struggle to find ways to improve the educational achievement levels of students we cannot understate the importance of having parents involved in any attempt to reform education. Parents need to be called upon to instill good learning habits in their children. Hedrick Smith notes of the Japanese culture:

Even in 2nd grade, homework is a regular affair, even if for only a half hour, to inculcate the habit. Often homework requires parental involvement; for example, when the assignment includes reading aloud, either the father or mother has to sign the notebook saying the child had done the assignment (110).

If parents will *guarantee to spend, at a minimum, 30 minutes a night* doing homework with their children, then the education system in return must guarantee that, not only will

this student graduate, but that he or she will receive an education that meets high academic standards.

Because adult involvement with children is critical, we must continue to create more opportunities for family literacy to occur, lest we allow children from illiterate families to be trapped in a cycle of low educational attainment. The rationale for family literacy programs is that if adults become literate, then they become empowered to pass on literacy to their children. This conclusion is supported by research on the influence of the home environment, shared reading activities, and parents' attitudes toward education (Daisey, 1991).

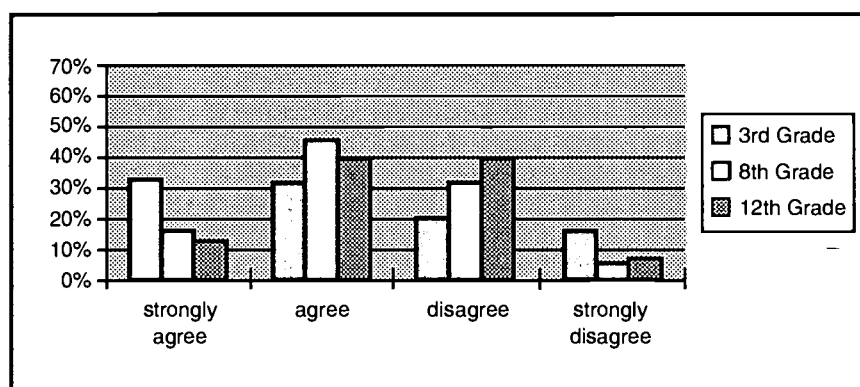
Traditional research has revealed that more highly educated parents have greater success in providing their children with the cognitive language skills that contribute to early success in school than less well-educated parents. A growing body of recent research, however, suggests that the way parents raise their children may be more important than the parents' occupation, income, or educational level. During the past decade there has been growing interest in the notion that educationally disadvantaged parents and children are a learning unit, and that family and family literacy programs can provide parents with needed support in their role as first teachers. Programs which seek to improve parents' literacy and other skills include Even Start, the Kenan Trust Family Literacy Model, and the Intergenerational Literacy Action Research Project. A major implication from the research on the influence of parental literacy is that low-literate parents, particularly mothers, are more likely to exert a positive influence on their children's academic achievement when they are able to enhance their own literacy skills than when they are unable to do so (Benjamin, 1993).

Based on this overwhelming evidence, Arizona must continue, and expand, initiatives such as Family Literacy and Adult Education. Unlike many government programs, we can see dramatic results from these modestly funded efforts. We must commit ourselves to help Arizona's families help themselves.

## 6. School Safety

High standards, professional development, and all other school initiatives are rendered ineffective in a threatening school environment. Understandably, school safety is paramount in the minds of parents, students, and educators alike. The media constantly remind us that youth are subjected to negative influences such as drugs and violence as they never have been before. While we do not wish to respond to exaggerated or distorted images of schools as life-threatening places, we must take action against any threat that impedes students' learning.

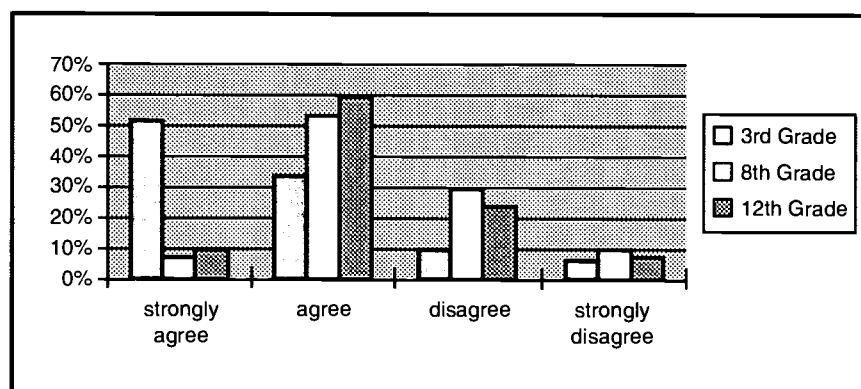
**Figure 4 - Disruptions By Other Students Get In The Way Of Learning**



Source: 1994 Arizona Student Assessment Program Student Questionnaire

Far too many of our students (over 50% of seniors and 8th graders) report that disruptions by other students impede their learning. An alarming number (over 60%) of 3rd grade students indicate that disruptions are a problem, although 85% indicate they perceive school as a safe place.

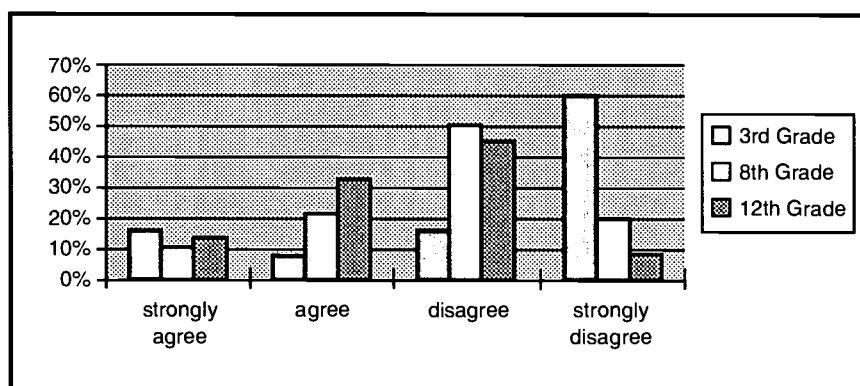
**Figure 5- School Is A Safe Place**



Source: 1994 Arizona Student Assessment Program Student Questionnaire

In total, over 38,000, or 31%, of students in grades 3, 8 and 12 either agreed or strongly agreed that drugs are a major problem in their school. Nearly half of all seniors responding agree that drugs are a major problem.

**Figure 6 - Drugs Are A Major Problem In School**



Source: 1994 Arizona Student Assessment Program Student Questionnaire

What we see reflected in these numbers is that many of our students do not perceive schools as essentially safe places conducive to learning.

Over the past two years the Legislature has appropriated over \$7 million for the sole purpose of allowing schools to hire security personnel. Educators, parents, and students view the Safe Schools Pilot Program (SSPP) as extremely valuable, and data from the

SSPP participating sites indicates the number of disruptive incidences has decreased in the presence of resource and probation officers.

#### IV. SCHOOL FINANCE

One of the most contentious arguments policymakers face is the amount of money we should we spend in order to obtain high quality education. The more productive question would be to ask who controls the money available? There are those who argue that we only need more money in schools; if government provides the resources needed, the need for reform is mitigated. Others argue that we should not throw money at our problems; the need is not for more dollars, but rather for a more effective use of funds. In truth the answer is both. We must increase our investment in public education; however, to do this without substantial reform of the system as it exists not only is a disservice to taxpayers but to the very students we are trying to serve. For example, additional school days per year may have a very positive impact; however, without first critically examining how students currently spend their time in schools such an approach is not good policy. As Allan Odden, co-director of the Consortium for Policy Research in Education notes,

It's time to move beyond these informative, but not so useful debates about the past and get on to the real resource challenge of the future, which is that the education system must figure out how to use its money better -- dramatically increase productivity -- or the goals and aspirations of education reform will not be realized (56).

In 1994, the Supreme Court of Arizona ruled that the state's system of financing schools is unconstitutional (Roosevelt v. Bishop). Although the state and many others disagreed with much of the legal basis of the plaintiffs' case, few disputed that real disequalization occurs across the state. At the heart of the problem is the way capital construction is funded in Arizona. Although our state does have a finance formula to equalize the maintenance and operations funding schools receive, the revenue needed to build schools is raised primarily by the local school district. Districts are able to raise funds for capital projects through their net assessed valuation of property. For instance, if a unified school district has \$100 million in net assessed valuation (total taxable residential and business property wealth), they may hold a bond election to issue bonds, if the residents of district

approve it, for up to 30% of the net assessed valuation, or \$30 million. The residents of that district then have their secondary property tax rates increased to pay for the debt service (annual principal and interest payments) on those bonds.

The reason the Supreme Court ruled this unconstitutional is that while one unified district may have \$100 million in net assessed valuation, which would generate up to \$30 million, another unified school district (with the same number of students) may have only \$30 million in net assessed valuation, which can generate only \$9 million. Moreover, a district with a lower net assessed valuation must tax its residents and businesses at a higher secondary tax rate than a wealthier district. For instance, in order for a wealthier district, with \$100 million in net assessed valuation, to raise the same \$9 million as the district with \$30 million in net assessed valuation, they would levy a secondary property tax of \$9.00 per \$100 of net assessed property valuation. The poorer district would have to levy a tax of \$30 per \$100 of net assessed property valuation. This structure led to the reality of having some school districts levy homeowners and businesses between \$.50 - \$1 per \$100 of net assessed valuation, while other districts levy between \$10 - \$15 per \$100 of net assessed valuation.

Arizona must have a clear and concise plan for how we will correct these inequities.

1. Emergency Capital Needs Fund

According to the recent study conducted on behalf of the Joint Legislative Budget Committee, approximately 13% of schools in Arizona have some type of health and/or safety need that we must address. Though many disagree as to the seriousness of these claims, it is imperative we establish a mechanism to guarantee that the well-being of our children is assured. The Legislature should create an emergency capital needs fund to address the infrastructure problems many of our schools face. The funds can consist of monies appropriated by the Legislature acquired through endowment earnings from the permanent common school land trust fund, grants, gifts, and donations from any public or private source.

In order to ensure that we direct funds to the most needy schools we should establish an oversight commission. This emergency capital needs commission must have a mixture of finance, construction, and capital experts who will guarantee funds are allocated according to need. This commission should have responsibility for the following: establishing criteria for the submissions, accepting applications from schools for the loan and/or grant awards, and reviewing applications and making awards. The membership of the commission should, at a minimum, be comprised of the following:

- the Governor or his designee
- the Superintendent of Public Instruction or her designee
- a representative from the State Board of Education
- the president of the Arizona School Boards Association
- the chairman, vice-chairman, and the ranking minority member from the Joint Committee on Capital Review
- three construction experts jointly appointed by the President of the Senate and the Speaker of the House of Representatives
- two county superintendents jointly appointed by the President of the Senate and the Speaker of the House of Representatives
- three school administrators jointly appointed by the President of the Senate and the Speaker of the House of Representatives

While the commission should develop the criteria based on the expertise of its membership, there are specific items the commission must pay particular attention to: 1) the seriousness of health and safety needs, 2) giving priority to the schools identified in the Joint Legislative Committee for Capital Review's assessment that determined which schools have emergency health and safety needs, and 3) access to existing revenue (i.e., local wealth).

Based on the legislative study and according to district reports, the Legislature should allocate a minimum of \$75 million.

## **2. School Debt and Construction Cost Study Commission**

The magnitude and complexity of the state's capital construction finance system demands that policymakers become more knowledgeable on issues surrounding school debt and



construction costs. The Governor, Legislature, and education officials cannot institute long-term financial solutions unless all have a clear and comprehensive understanding of the way capital is funded.

A school debt and construction cost study commission can examine the use of debt by Arizona's school districts and determine if current bonding practice is the most fiscally prudent option for financing school construction and other items currently funded through bonded indebtedness. This commission should be comprised of bond, finance, tax, and construction experts, as well as policymakers and school officials. Such a commission can address and provide recommendations to the state on specific items such as:

- establishing a reporting system to track, record, and aggregate outstanding principal and interest of all school district bonds;
- determining the true interest cost to taxpayers for a representative sample of bond issues and defining the types of services necessary in issuing bonds and the range of fees associated with each service;
- determining if refunding bonds currently outstanding comply with Arizona law;
- determining the payback ability of districts that utilize Premium Capital Appreciation Bonds;
- determining school construction cost ranges and construction management guidelines; and
- determining the amount of annual funding necessary to fund school construction in Arizona without utilizing debt.

### 3. Research A Pay-As-You-Go System of Capital Construction

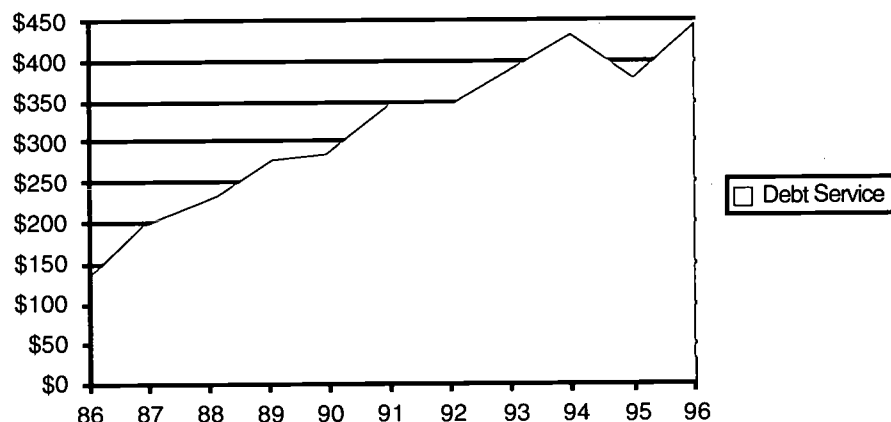
In order to provide a long-term solution to the Supreme Court's Roosevelt v. Bishop decision, we must understand that the dynamics of our current system forces us to construct and then maintain schools by accessing more debt.

While it is understandable that a growing state such as ours might incur high debt to finance new construction, it is not fiscally sensible to ignore other venues of financing capital construction, particularly when hundreds of millions of dollars annually are paid solely toward interest on the debt. Since fiscal year 1986, Arizona's annual debt service increased (from **\$133 million**) at an alarming rate of 228% (to **\$437 million**), for an average annual increase of 13% per year.

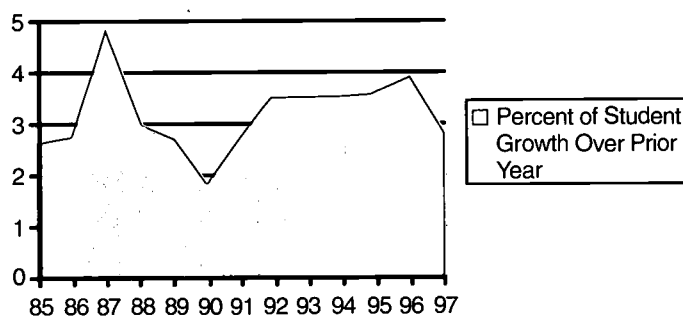


**Figure 7 - Statewide Debt Service**

(In Millions)

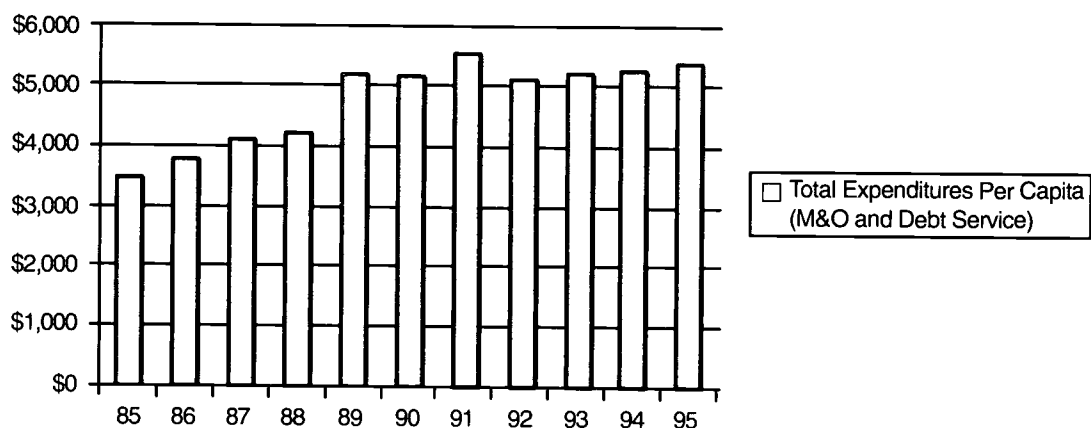


**Figure 8 - Student Growth Percentages**



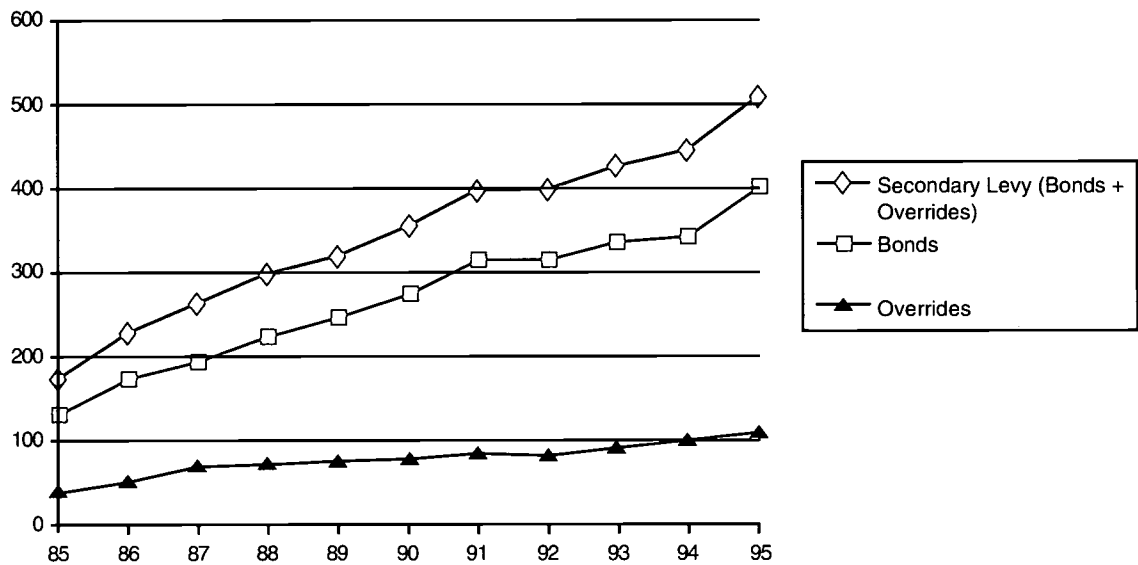
The tremendous growth of debt, which forces tax rates and levies to increase dramatically, causes many to question the amount of money spent on education. Year after year representatives of the education community and Legislature debate over how much money is spent on education. Educators feel that the state is doing little to keep up with the cost of instructing our students. Many legislators, business officials, and taxpayer groups counter that the amount we spend annually is increasing too rapidly. The following chart shows the amount Arizona spends on a per capita basis, including maintenance and operations costs, as well as debt service.

**Figure 9 - Expenditures Per Capita**



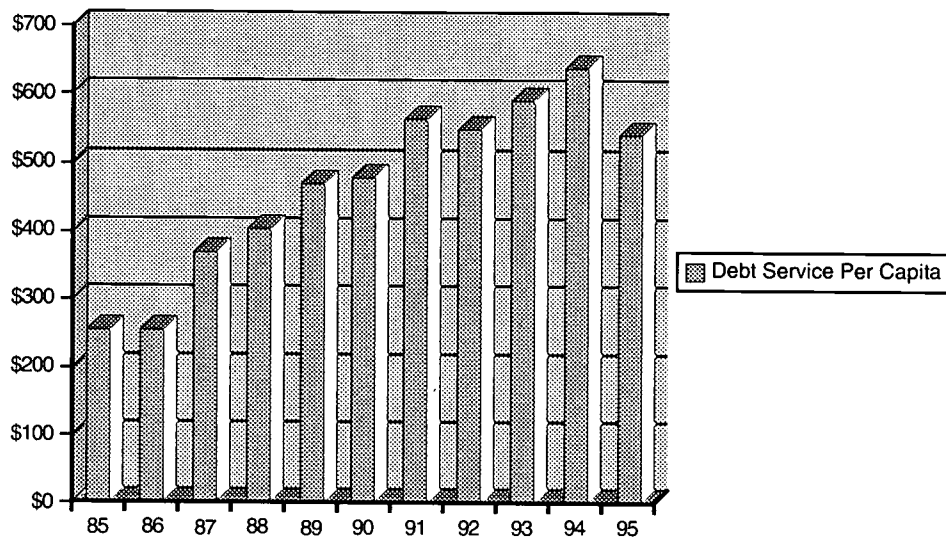
As taxpayers see their property tax rates continue to increase, more and more people become skeptical about spending more money on education. Figure 10 illustrates the amount Arizona's taxpayers must pay to keep pace with debt service. As the graph shows, overrides (taxpayer approved increases to the district budget) increased at a steady but modest annual rate of 5%. The major pressure that increases secondary levies is the use of debt to pay for capital construction and upkeep.

**Figure 10 - Impact On Secondary Property Tax**  
(In Millions)



The fact of the matter is, we are spending too much on capital and interest and not enough on the factors that relate directly to the instruction of students. For instance, since 1985, education per capita expenditures increased by 57%. If we examine the amount that debt service per capita increased during this same period we find that it grew by 117% (Figure 11). Policymakers must examine whether the state is making the best use of its expenditures, particularly as demands on the budget continue to mount.

**Figure 11 - Debt Service Per Capita**



The *Joint Legislative Budget Committee - Fiscal Year 1997 Budget Plan* recommended that in order for the state to pursue “sound fiscal practices” and to keep Arizona “fiscally fit,” the financing of new state buildings should be done on a pay-as-you-go basis. This same logic should apply to our education system. In fiscal year 1996, Arizona will pay approximately \$437 million in debt service (total principal and interest payments). Of this amount, an estimated \$230 million is being used solely to pay the interest on the debt. As historical trends show, this figure will only continue to grow.

Imagine a system where the amount of money that would have normally gone toward interest payments can go toward the kind of reforms that make a difference in student achievement, such as reading and math enrichment and recovery programs, technology in the classroom, and performance-based pay and professional development for teachers. We can do this through a number of ways: capital overrides or income, sales, or property tax changes, etc. For the purpose of beginning public discourse the following details a possible strategy.

First, the state could enact a moratorium on new school construction bonds. The bonds that have already been issued would be paid off by the district where they were approved,

i.e., residents in Flagstaff will not pay off debt incurred in Mesa. New construction would be based on an equitable level of funding. For instance, under this system the state can provide \$10,000 per student, so a new school for 500 students will have access to \$5 million.

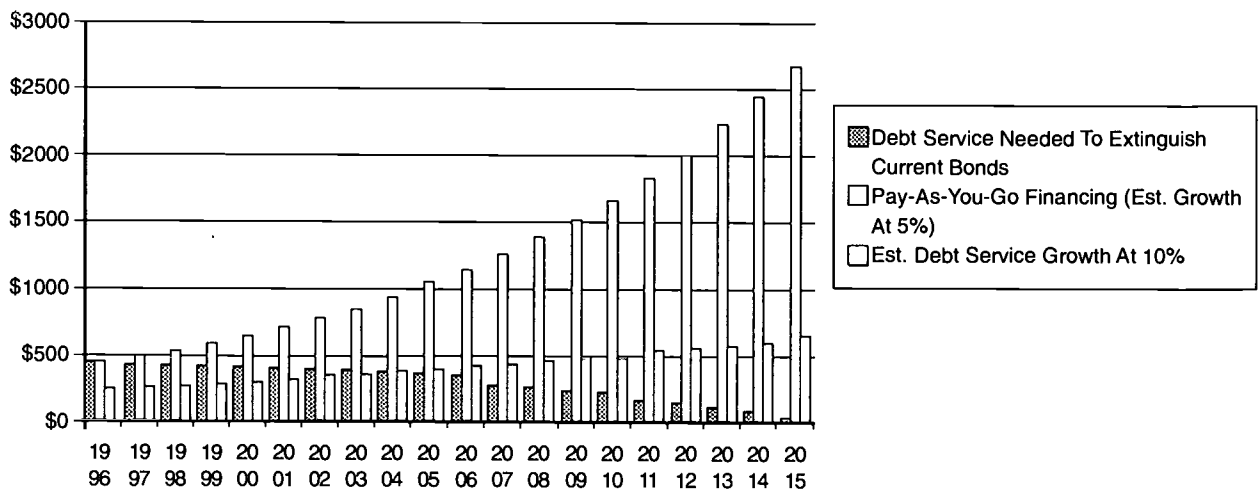
The biggest challenges in moving to a pay-as-you-go system is transitioning from our current system to the new one. We must pay the debt service on the bonds outstanding for the next 20 years; while immediate revenue will be needed for new construction and ongoing capital repair. One solution would be to establish a tax that is dedicated to capital. As noted above, there are many ways this can be done: one proposal is to increase the sales tax by \$.005 which will generate the necessary \$250 million for annual capital construction.

#### 4. Redirect Resources Paid On Interest Toward Classroom Instruction

Figure 12 clearly demonstrates the need to examine this issue thoroughly. It shows the estimated growth of debt service for the next 20 years -- the estimated growth rate of 10% is conservative, particularly since debt service grew by an average of 13% per year over the prior 10 years (see Figure 7 - statewide debt service). It also illustrates the amount of money needed to pay off the existing debt outstanding, as well as the resources Arizona will need if we implement a pay-as-you-go policy. As we can clearly see, Arizona would benefit tremendously in the long-term if such a system of finance were adopted.

**Figure 12 - Debt Service Forecasts**

(In Millions)



A major reason why debt is so difficult to keep track of is the use of Premium Capital Appreciation Bonds. As discussed earlier, funding for the state's school construction is controlled entirely at the local school district level through the use of bonds. A school district asks voters in its boundaries to approve the sale of general obligation bonds for school construction, to be paid off through the levy of a tax on secondary net assessed property value within the district. The district then sells the bonds, producing a pot of money used to build the school. Over time, a maximum of 20 years, the school district pays the bondholders the principal amount borrowed to build the school, along with semiannual interest payments in return for the use of the money -- similar to the way a typical homeowner purchases a house. As a particular bond is paid off, the property tax on business and residential secondary net assessed property valuations declines.

Prior to 10 years ago, the school district voter could feel at ease with this method of debt financing because the Arizona Constitution sets debt limits for school districts (15% of secondary net assessed valuation in elementary or high school districts and 30% in unified districts). The debt limits are a mechanism to prevent school districts from taking on debt in excess of their ability to repay it (in other words, this prevents bankruptcy) and to

protect taxpayers from exorbitantly high property tax rates. However, in the late 1980s and early 1990s, when student growth rose and property values declined (causing debt limits to remain constant or fall), a debt financing instrument called a Premium Capital Appreciation Bond provided a way for school districts to effectively exceed their debt limits in order to build the schools they needed to keep up with student growth.

An interesting point about Arizona's Constitutional Debt Limit for schools is that the interest paid to bondholders is not considered "debt." When it comes to calculating how close a school district is to its limit, only the principal amount borrowed to build the school counts towards the debt limit. Premium Capital Appreciation Bonds allow school districts to set the "principal" amount, no matter how much the district borrows in principal or must pay in interest. For example, say a school district has a debt limit of \$10 million, and its current debt outstanding is also \$10 million. Let's assume the district needs \$5 million to build a school. The district can refinance \$6 million of the existing debt through the sale of \$6 million in Premium Capital Appreciation Bonds. The school district can then define only \$1 million of the \$6 million Premium Capital Appreciation Bonds as "original principal," thereby leaving the remaining \$5 million as interest. By refinancing through Premium Capital Appreciation Bonds, the school district has created \$5 million in capacity under their debt limit, and they can now sell \$5 million in general obligation bonds to build the school. As can be seen from this simplistic example, the school district is in debt for \$15 million, the \$10 million that is within its debt limit plus the \$5 million in "interest" that is outside the limit.

##### 5. Fund All Schools On A Real-Time Basis

The maintenance and operations side of school funding in Arizona also needs significant modifications if Arizona's students are to reach high levels of achievement. In order to realize why Arizona's current equalized maintenance and operations funding formula hinders classroom flexibility and innovation, it is important to understand how funding follows the student right now. In short, it does not. The money does not follow the student to the school he or she attends.

Under our current school finance law, when a student shows up at the school door, the school district cannot count the student for funding purposes until the following academic year. In the year after the student actually shows up for school, the school district, not the individual school itself, receives, on average, \$4,000 for that student. Moreover, although the student has generated \$4,000 for the school district, the law does not allow the school district to pass that money along to the student's school. Instead the district must decide what services each school under its jurisdiction receives, even though every student in each school generates the same amount of funding.

If true innovation and accountability is to occur in our schools, dollars must follow the student. If a school provides an educational setting that attracts students, the school must be able to access the dollars associated with those students immediately. Conversely, if a school is not providing the education desired by specific students and they choose to go elsewhere, a school should not reap the rewards of money for students that have long since gone. Through the use of a Student Accountability Information System (see following subsection), we will track students at their school of attendance so that funding can be paid to the schools on a monthly basis.

Another issue that is intricately tied to funding in real-time is funding at a real-cost rate. It is time to admit that cost increases are a reality for our schools. For example, the biannual Special Education Cost Study completed by the Arizona Department of Education (1995) found unmet special education costs in the amount of \$38 million, resulting from our current funding formula and the unique costs associated with educating these students.

In the past, inflationary increases for education were widely debated by policymakers. Some were uncomfortable using the Gross Domestic Product Implicit Price Deflator as a measure of inflation in Arizona because our economic cycle does not mirror national



averages. Others had significant problems with how dollars provided for inflation were ultimately spent by school districts.

The answer to this debate is to develop an Arizona Cost of Education Index to analyze a market basket of goods unique to education, which will reflect geographic variations in resource costs due to factors beyond schools' control. Some examples of items that should be included in the development of the Arizona Cost of Education Index include textbook costs, plant maintenance costs, and employee health insurance costs.

By calculating an Arizona Cost of Education Index, the Legislature will be able to adjust the statutory per-pupil funding amounts on a periodic basis to keep pace with inflation and, more importantly, through the use of a Student Accountability Information System, legislators, taxpayers, and parents will know what these funding adjustments are intended to cover.

#### **6. Student Accountability Information System**

The discussion over school finance reform leads policymakers to an undeniable fact: we do not have accurate and timely information on our state's academic and financial status. We cannot continue to make policy decisions in a vacuum. For instance, when the Arizona Department of Education, in conjunction with the State Board of Education, held a school finance summit in the summer of this past year, top school finance experts presented on the condition of Arizona's education system. They estimated at the time that total debt service was nearly \$3.5 billion over 20 years, when in fact after an exhaustive study by the Department of Education, it was shown to be nearly \$6 billion over 20 years! Yet another example is when the Joint Legislative Committee On School Finance Reform discussed the need to move to a current-year funding system, analysis by the Governor's Office, the Joint Legislative Budget Committee, and the Department of Education all led to different conclusions as to how much money this would take. The reason for these discrepancies is the lack of an integrated information system that can track student enrollment and fiscal figures on a real-time basis.

In a era when technology allows individuals to gain immediate access to their bank accounts from all over the world, it is unconscionable that we cannot provide the public with information about how we educate students or how we spend education dollars. Moreover, it does not make sense for schools to continue to be burdened with bureaucratic and antiquated reporting systems that use paper and pencil when computers can do this instantly.

We should invest the needed \$6.5 million in an information system that will allow us to follow funds down to the student level. Currently, parents have access only to district-level budgets that are extremely difficult to understand. There is no clear way for the public to determine how much is spent at the school level, nor is it clear how a parent can assess the school's academic information. The people of Arizona, particularly parents, have a right to, and a need for, this information so that they may effectively participate in and contribute to our children's education.

#### 7. Fund Major Education Obligations

There are many important educational issues with significant budgetary implications that face our state's lawmakers in this year's legislative session. The Legislature must decide whether or not we will fund increased special education costs, move to a real-time funding system, provide emergency capital funds for low-wealth schools, and cover the growth of our student population, just to name a few issues.

We cannot deny our responsibility to the children of this state. The Legislature will act very responsibly if it funds the areas where we know major deficiencies exist. Funding requests for these items were included in the Arizona Department of Education's Fiscal Year 1997 Budget Request and were outlined at recent budget hearings at the Legislature.

- \$34 million, to supplement the \$26 million proposed in legislative and Governor's Office requests, to move to a real-time funding system (see Section IV, subsection 6).
- \$38 million in state aid to meet special education costs (see IV,5).
- \$6.5 million to develop a Student Accountability Information System (see IV, 6).

- \$4 million to expand Family Literacy and Adult Education programs (see III, 5).
- \$2 million to supplement the \$5 million proposed in legislative and Governor's Office requests, to expand the Safe Schools initiative (see III, 6).
- \$.5 million to create the Bond and Construction Cost Study Commission (see IV, 2).

The Arizona Supreme Court said it best:

There are doubtless many ways to create a school financing system that complies with the constitution. As the representatives of the people, it is up to the legislature to choose the methods and combinations of methods from among the many that are available. Other states have already done so (Roosevelt v. Bishop, 1994).

This document provides the legislature with a thorough examination of methods that will establish an education system that is not only equal, but will provide all students with access to an extraordinary education.

## REFERENCES

- Arizona Board of Regents. (1995). Academic performance of Arizona's high school graduates 1993-94. Phoenix, AZ: Author.
- Arizona Department of Education. (1995). [Safe schools pilot program: Evaluation data submitted for spring semester 1994-95]. Unpublished raw data.
- Arizona Department of Education. (1995). Special education cost study. Phoenix: Author.
- Benjamin, L. Ann. (1993). Parents' literacy and their children's success in school: Recent research, promising practices, and research implications. (Eric Document Reproduction Service No. ED 363 441)
- Carlile, William H. (1995, October 4). Schwab expansion a 'winner' for state brokerage firm to hire 2,300 workers by 1999. Phoenix Gazette. p. E1.
- Carlile, William H. (1995, August 17). Education woes knock Arizona cities down on list of 'best'. Phoenix Gazette. p. A1.
- Curtin, Josephine. (1993). The effectiveness of the reading recovery program on reading achievement. (Eric Document Reproduction Service No. ED 363 863)
- Daisey, P. (1991). Intergenerational literacy programs: Rationale, description, and effectiveness. Journal of Clinical Child Psychology, 20, 11-17.
- Henderson, A. (1987). The evidence continues to grow: Parent involvement improves student achievement. Columbia, MD: National Committee for Citizens in Education.
- Henderson, A. T. (1988). Parents are a school's best friend. Phi Delta Kappan, 70, 148-153.
- Mitchell, L. A. (1996, January 11). NAFTA costing few jobs in state, filings indicate. Arizona Business Gazette. p. 1.
- National Center for Education Statistics. (1994). The Condition of Education 1994. Washington, DC: U.S. Government Printing Office.
- Odden, Allan. (1996, February 7). Productive discussions about the education dollar. Education Week. p. 56, 44.
- Padak, Nancy, & Rasinski, Timothy V. (1994). Family literacy programs: Who benefits? (Eric Document Reproduction Service No. ED 369 887)

Rasberry, Quinn. (1992). The extended school year: Is more necessarily better? (Eric Document Reproduction Service No. ED 353 657)

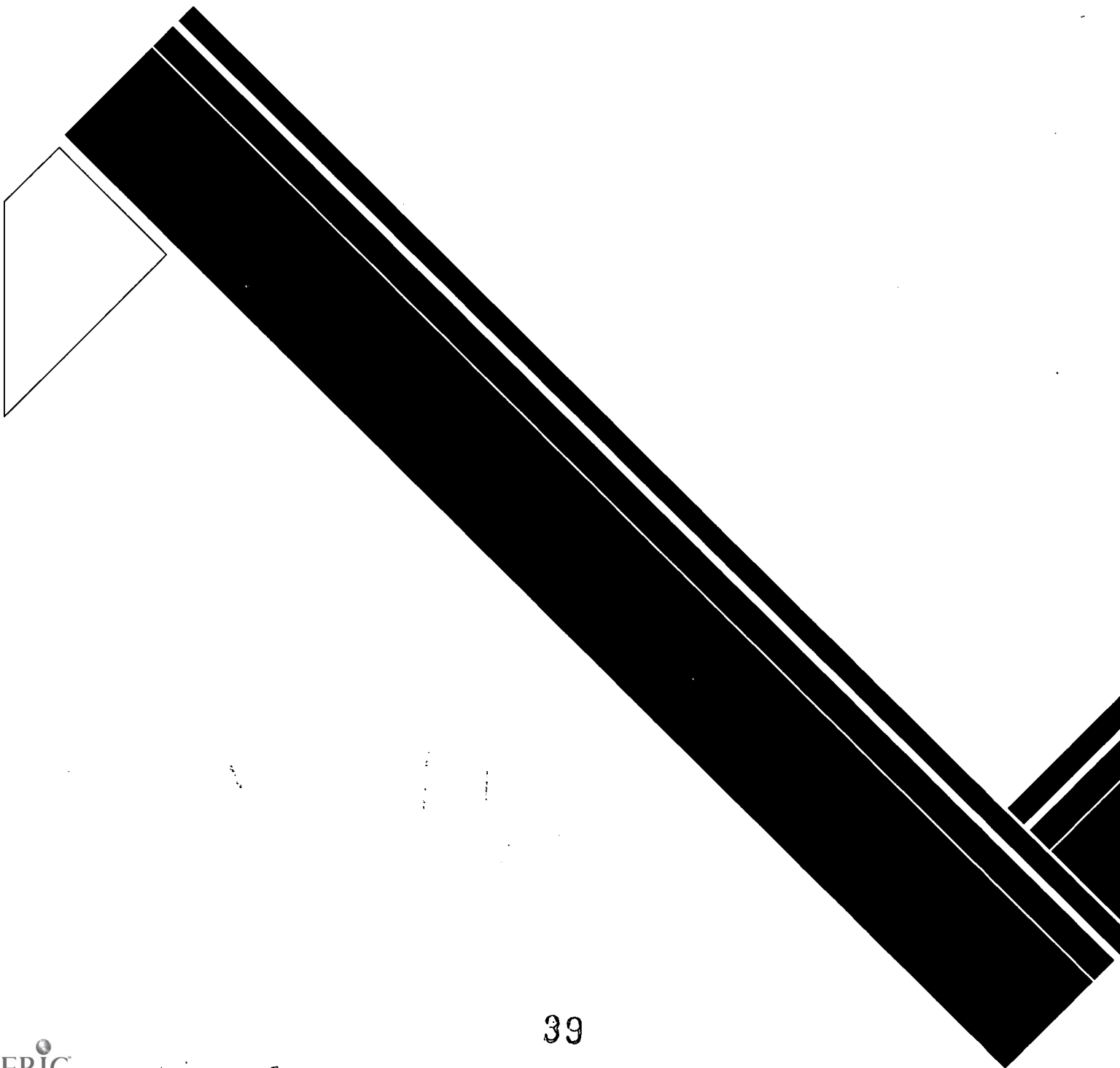
Rasinski, Timothy V. (1994, November). Fast start: A parental involvement reading program for primary grade students. Paper presented at the Annual Meeting of the College Reading Association. New Orleans, LA.

Roosevelt v. Bishop, 179 Ariz 233, 877 P.2d. 806, 816 (1994).

Sanchez, Roberto. (1995, December 13). Microchip: How many local Jobs? Average new salary \$24 an hour. Arizona Republic/Phoenix Gazette. p. 1.

Smith, Hedrick. (1995). Rethinking America. New York: Random House.







U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)



## REPRODUCTION RELEASE

(Specific Document)

### I. DOCUMENT IDENTIFICATION:

Title: <i>Plan for Education in Arizona.</i>	
Author(s): <i>Keegan, Lisa Graham</i>	
Corporate Source: <i>Arizona Department of Education</i>	Publication Date: <i>July 1996</i>

### II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.



Check here  
For Level 1 Release:  
Permitting reproduction in  
microfiche (4" x 6" film) or  
other ERIC archival media  
(e.g., electronic or optical)  
and paper copy.

The sample sticker shown below will be  
affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

\_\_\_\_\_  
\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

Level 1

The sample sticker shown below will be  
affixed to all Level 2 documents

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS  
MATERIAL IN OTHER THAN PAPER  
COPY HAS BEEN GRANTED BY

\_\_\_\_\_  
\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

Level 2



Check here  
For Level 2 Release:  
Permitting reproduction in  
microfiche (4" x 6" film) or  
other ERIC archival media  
(e.g., electronic or optical),  
but not in paper copy.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign  
here→  
please

Signature: <i>Linda Edgington</i>	Printed Name/Position/Title: <i>Linda Edgington, Librarian II</i>	
Organization/Address: <i>Arizona Dept. of Education 1535 W. Jefferson, Bldg 48 Phoenix AZ 85007</i>	Telephone: <i>602-542-5416</i>	FAX: <i>602-542-5467</i>
	E-Mail Address: <i>ledging@mail1.ade.state.az.us</i>	Date:



III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS DER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:
---

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility  
1100 West Street, 2d Floor  
Laurel, Maryland 20707-3598  
  
Telephone: 301-497-4080  
Toll Free: 800-799-3742  
FAX: 301-953-0263  
e-mail: [ericfac@inet.ed.gov](mailto:ericfac@inet.ed.gov)  
WWW: <http://ericfac.piccard.csc.com>

