

Making Connections:

Facing the Dropout Crisis in Arizona



**voices
for
education**

About Voices for Education

Voices for Education is a coalition of parents, educators and community members working together to improve the educational outcomes of Arizona's children. Voices for Education is currently working to improve parent engagement in schools, increase funding for schools statewide and reduce class size.

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This report and more information on issues facing Arizona's schools can be found on our web site: www.voicesforeducation.org

This report was prepared by Ami Nagle and Robin Hiller.
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Introduction

As has been well documented in the past year, Arizona is in the midst of a major crisis—a ‘dropout crisis’ that questions the quality of our state’s education system, stunts opportunities for Arizona’s youth, and stifles the growth of our state’s economy.

To make matters worse, there are no easy answers as to how to fix the problem.

But fix the problem, we must. Arizona is at a crossroads—either we dedicate substantial attention to addressing this mounting problem or we face even higher dropout rates, greater costs for social services, more demand for remedial education and job training, and further reductions in state revenues.

While there are many specific reasons why youth might drop out of high school, one overarching factor has become abundantly clear: Most students drop out because they become disengaged from school. The process of disengagement may start years before the actual dropout takes place. Research helps us to understand just how important it is to engage students—especially in the early grades—and help them stay connected to school, learning, and educational achievement.

This report outlines the characteristics of Arizona’s dropouts, describes the impact of dropouts on youth and our communities, and explores what causes young people to drop out of school. This report also recommends various policies and programs that will begin to help reduce the dropout rate in Arizona. But, mostly, this report serves as a wake-up call to the people of Arizona: We are in the middle of a crisis—and action is needed now.

... 40% of dropouts 25 years of age and older who worked full-time earned less than \$17,960 a year...

Defining Dropout

While it may seem like a simple concept, there are many ways to define a student who has not completed their high school course work. In examining Arizona’s dropout rate and comparing dropout rates among states and local schools, it is important to know how the rate was calculated.

- **Event dropout rate**—proportion of students in a given age range who drop out of high school in a single year. For example, a school district might calculate a dropout rate for all students in a high school in the 1999–2000 school year. The Arizona Department of Education (ADE) uses an “event” dropout rate to report dropouts in Arizona. According to ADE, the dropout rate includes all students who drop out of school, either during the school year or during the preceding summer.
- **Status dropout rate**—proportion of students in a given age range who drop out of high school, irrespective of time. For example, a state might distribute a survey to all workers ages 25 years and older to identify if they are high school dropouts, regardless of when they dropped out.
- **Cohort dropout rate**—proportion of students in a specified group who drop out at some point over a given period of time. For example, a school district might follow the educational careers of all students who started high school in 2000 to determine how many graduate and how many drop out over the course of four years.
- **High School completion rate**—proportion of all persons of a specified age group who have completed high school, either by receiving a diploma or equivalency certificate.[1]



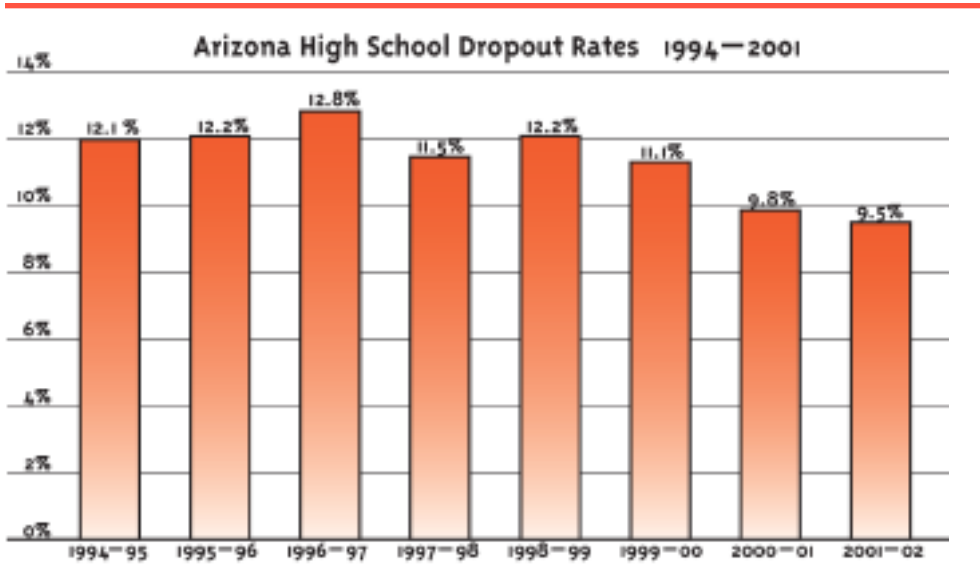
The Problem: Youth Dropping Out of Arizona Schools

More than 28,000 high school students dropped out of Arizona schools in 2001-2002. Over a two-year period, the number of dropouts would be more than 56,000—or, more than the entire population of Flagstaff, Arizona.

According to national data, in 1998, Arizona was tied with Nevada for the highest status dropout rate in the country.[2] While some students who drop out may rejoin school and obtain their diploma, many do not. Nationally, of 8th graders who dropped out in 1988, only 15.5% had returned to school and

received a high school diploma within six years. 28.5% had received a GED within six years, as well.[3]

According to data collected by the Arizona Department of Education, Arizona's 2001-2002 High School event dropout rate was 9.5%. Arizona has had an event dropout rate of between 11% and 13% for the past several years.[4]

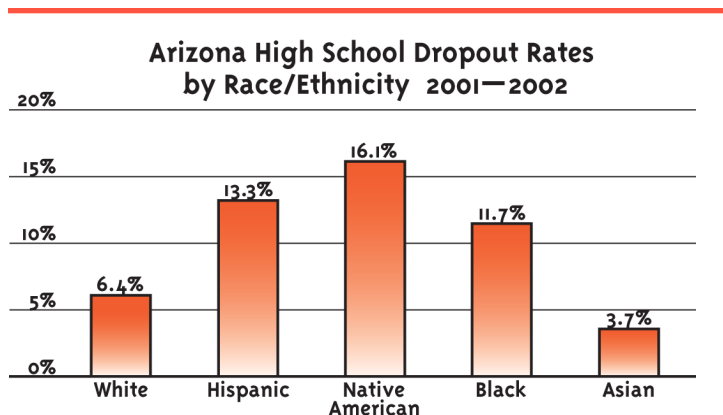


Who is Dropping Out of Arizona Schools?

Not all students are equally likely to drop out of Arizona's schools. In the 2001-2002 school year, for example:

- **Gender:** Male students are 1.23 times as likely to drop out as female students.
- **Geography:** Greenlee County had the lowest high school dropout rate at 3.1%. Pinal County had the highest high school dropout rates at 15.5%.
- **Race/Ethnicity:** Hispanic and Native American students are more than twice as likely as white students to drop out. Arizona's minority students

account for more than 60% of all high school dropouts.



Generally, Arizona's dropout rates are higher than the national average. Nationally in 2000, white students had a 4.1% dropout rate, Hispanic students had a 7.4% dropout rate, and black students had a 6.1% dropout rate.[5] For minority youth, Arizona's rates tend to be about twice the rate as is seen across the nation.

Arizona Dropout Prevention Programs

Recognizing that dropping out of school is a problem, the state of Arizona and the Department of Education has put in place a couple of programs targeted at reducing the dropout rate. Currently there are three main sources of support:

- **Proposition 301**—passed in 2000, Proposition 301 allows school districts to use up to 40% of their sales tax increase funds on dropout prevention or AIMS intervention. According to a survey by the Arizona School Board Association, only 14% of school districts used their funds in this way.
- **State Dropout Prevention Funds**—a dropout prevention fund was established in 1987 and is supported by local property tax revenues. Twenty school districts are currently participant in this \$5.8 million program.
- **AIMS Intervention Dropout Prevention Grants**—the Arizona Department of Education made about \$500,000 available in grant funds for programs working to reduce the dropout rate. Eight school districts are currently participating in this program.[6]

In addition, local school districts have strategies to reduce dropout rates. Some of these programs include alternative schools, counseling, truancy control, and incentive programs. However, few of the programs have been evaluated to ascertain their effectiveness.[7]

Most students drop out because they become disengaged from school. The process of disengagement may start years before the actual drop out takes place.

The Impact of Dropouts on Youth and the State

Research indicates that dropping out of high school has definite, negative effects on a young person's employment and earnings. However, the impact of dropping out reaches far beyond the individual student—it also affects economic development efforts and the ability of Arizona to generate enough revenues to meet the needs of its citizens.

Impact on Youth

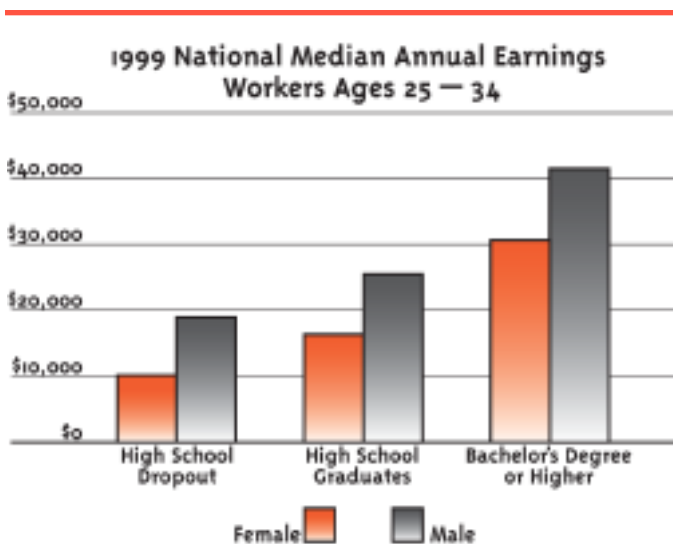
Dropping out of school can have a variety of definite and long-lasting impacts on youth, including employment prospects and earnings.

Employment—the most immediate impact of being a high school dropout is on a youth's ability to get a job. Young people who have not completed high school have higher unemployment and underemployment rates than their peers who have completed high school.

- **Unemployment**—nationally, in October 1998, 28.2% of high school dropouts in the labor force (who had dropped out in the last 12 months) were unemployed. This compares to 18.4% for high school graduates.[8]
- **Underemployment**—even when high school dropouts can find employment, it tends not to be in full-time positions. For example, across the nation only 38.3% of white high school dropouts ages 17-24 were employed full-time as compared to 62.9% of high school graduates.[9]

Earnings—for those who do find jobs, not having a high school diploma has an impact on their ability to earn a living wage.

- Nationally, in 1999, 14.3% of high school dropouts were earning an income below the poverty line. In comparison, 6.0% of high school graduates and 1.3% of college graduates were earning below poverty level wages.[10]
- In 2001, nearly 40% of dropouts 25 years of age and older who worked full-time earned less than \$17,960 a year, the poverty threshold for a family of four.[11]
- Over the last 20 years, the earnings level of college graduates has tripled, while it has only doubled for high school dropouts, a trend that is likely to intensify in the future.[12]



Impact on the State

Having a large proportion of dropouts also affects Arizona—in terms of job creation, revenue generation, and service resources needed by our growing population.

Job Creation—there is a delicate relationship between the capacity of a workforce and the ability of a state to create jobs or attract jobs to an area.

Research indicates that a well-educated, highly trained, and highly skilled workforce is an essential component of economic development and job creation strategies. A study by the Brookings Institution found that 41% of the nation's economic growth between 1929 and 1982 was due to improvements in education.



Indeed, companies are willing to relocate to improve their chances of finding well-educated workers. A study of real estate professionals found an educated workforce was the 2nd highest ranked factor in a company's decision to relocate .[13]

Revenue Generation—the state generates revenues to support services from a variety of sources, including income and sales taxes. In fact, about 58% of Arizona's revenues come from these sources.

The “undereducation” of a state's population has a direct impact on the kinds of jobs and incomes individuals are likely to earn. When employees have low earned-income, it means that the state can generate little from income and sales taxes. For example, a family earning \$15,000 will pay about \$81 in state income taxes as compared to a family earning \$150,000 who will pay about \$3,735 in state income taxes. Simply put, when a family is earning higher wages, they are able to provide the state with more revenues.

Similarly, research indicates that while families with lower incomes spend a larger portion of their incomes on taxable goods—clothing, appliances, dining out—they purchase a lower amount of goods, thus generating less sales tax revenues for the state.

Indeed, Arizona, which is already heavily reliant on the sales tax to generate state revenues, felt the severity of the last recession quickly as families limited purchases of taxable items and therefore limited the amount of sales tax revenues sent to the state.

It is estimated that Arizona loses \$47.8 million annually in tax revenues due to lower incomes earned by dropouts. This translates into approximate \$4.1 billion in tax revenues lost to the state over the working lifetime of these dropouts.[14] With fewer tax dollars, Arizona has an even harder time meeting the health care, education, transportation, and quality-of-life needs of its residents.

Increased Need for Public Services—at the same time that state revenues are declining because of a poorly educated workforce more public services may be necessary. Research indicates that those with lower education levels tend to be more involved with crime, rely more heavily on welfare, and require more public health services. For example:

- In Arizona in 2001, 48.3% of prison inmates had not graduated from high school. Only 34% had received a GED.[15]
- In Arizona in 1998, 44.2% of adults receiving welfare (Temporary Assistance for Needy Families [TANF]) had not graduated from high school.[16]
- Nationally, in the early 1990s, individuals who had not completed high school had a Medicaid participation rate of 18.5%, which is more than double the rate for high school graduates (7.0%) and more than 4 times the rate for individuals with some college (4.1%).[17]

Impact of Boom Economy on Dropouts

During the last part of the 1990s, the United States experienced unprecedented economic growth. This growth led to an expansion in the number of jobs and a decrease in unemployment and under-employment.

This period of growth meant that even many of the hardest to employ—those without a high school diploma or with little job experience—were able to secure jobs. In fact, in 1999 the unemployment rate of high school dropouts had fallen to approximately half the rate seen in 1992. In addition, the wages of the lowest paid workers were rising faster than inflation—something that had not happened in decades .[18]

Unfortunately, because of the lack of education and skills and their short time on the job, these hard-to-employ individuals are the first to lose their jobs when the economy slows down. Without education and skills training, these individuals quickly return to the ranks of the unemployed.

Disconnected: Characteristics of Dropouts and Causes of Dropping Out

The factors that contribute to a student dropping out of school has been one of the most heavily researched issues in American educational policy. The research shows that there is no simple answer. Young people drop out of school for a variety of complex reasons having to do with individual student characteristics, family issues, and school-level factors. Together these factors act to “push” and “pull” students out of school.

However, what has become clear is that students drop out because they are not firmly connected to their school or learning environment. While this may not be the first factor that leads a youth to drop out, it most certainly becomes a pattern along the way to dropping out. Some studies indicate that dropping out of school is but the final stage in a dynamic and cumulative process of disengagement.[19] Some see this as a long-term process that often begins in the student’s earliest years.

Student Factors

Research indicates that a variety of student characteristics and actions make some students more likely than others to drop out of school.

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- **Absenteeism and Tardiness**—research indicates that one of the strongest predictors of dropping out is absenteeism. Based on the 1988 National Education Longitudinal Study nearly half of dropouts missed at least 10 days of school in the year they dropped out. In addition, one-third of these students cut classes at least 10 times and one-quarter went to class late at least 10 times.[20]
- **Poor School Performance**—children who present academic problems—even as early as the third grade—are at greater risk of dropping out.[21]
- **Disciplinary Problems**—according to national data, one third of dropouts were suspended during the school year.[22]
- **Grade Retention**—retention and ending “social promotion” have been in the news recently as ways to improve student performance. While some studies have found a positive relationship between retention and academic achievement, other research indicates that students retained in first through eighth grades are four times more likely to drop out of school between 8th through 10th grades than students who were not held back.[23]
- **Disengagement and Expectations**—alienation and lack of engagement in school can lead some students to drop out. For some, the process of alienation and disengagement can start early in their educational career and cumulates in dropping out of school. According to national data, dropouts tend to believe that they don’t have control over their lives, that chance and luck are important, and that something always seemed to stop them from getting ahead. In comparison, graduates felt that they had a great deal of control over their lives.[24]

Family Factors

A child's future and the decisions youth make are deeply affected by family conditions and characteristics. Many researchers believe that family background is the single most important contributor to success in school.

Some of these factors include:

- **Socioeconomic Status**—the likelihood of dropping out tends to be greater for students from low-income families than those from higher income families. Children growing up in poverty are more than twice as likely as their non-poor peers to drop out of school.[25]
- **Education of Parents**—research indicates that a child's educational attainment is closely correlated with the educational attainment of their parents. Research has found a very strong connection between a mother's educational attainment and her child's educational attainment. A student whose father is a high school dropout is 1.4 times more likely to drop out than his peers.[26]
- **Mobility**—children who move during the school year are more than 3 times as likely as their peers who do not move to drop out of school.[17] This research notes that children who move from school-to-school are less likely to be engaged in the academic or social aspects of their environment, and thus have fewer disincentives to drop out. Interestingly, some research finds that family moves when children are young (ages four to seven) appear to have greater impact on dropping out than do moves during the teenage years.[27]
- **Parent-Child Relationship**—research indicates that students whose parents provide supervision, are involved in their child's schooling, encourage independent decision making, and provide emotional support are less likely to drop out of school.[28] Research indicates that parental involvement in children's learning activities positively influences their levels of motivation to learn and achievement.[29]
- **Family Structure**—the family structure—namely, the adults in the household and their relationship to the student—can have an impact on student achievement and connection to a school. A 1989 study found that the percentage of high school graduates living in two-parent homes was 83%, while the percentage of high school dropouts living in two-parent homes was 69%. The relationship between family structure and dropping out is not as determined as it may seem. While dropouts are more likely to live in a single-parent home, the majority of high school dropouts are from two-parent households.[30]

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School Factors

Research indicates that certain features of school structure and environments also can make some youth more likely to drop out of school. Some have found that school factors can account for approximately two thirds of the differences in average school dropout rates.[31]

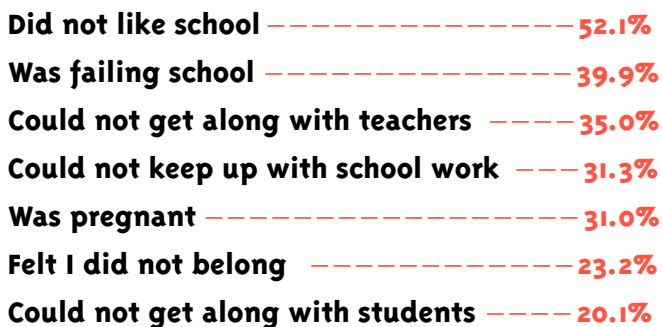
- **Class Size**—one of the most well-researched educational policy interventions has been the impact of class size reduction efforts. While many states have undertaken class size reduction, the most comprehensive study of this is the state of Tennessee’s STAR Study. Research on Tennessee’s landmark class size reduction effort found that children who went to school in small classes (13-17 students) in Kindergarten through third grade performed better on standardized tests than children in large classes. This research followed these children and charted their performance in subsequent years. Researchers found that those students who were in smaller classes in grades K-3 continued to outperform their peers, even after returning to larger classes in the fourth grade and beyond.[32] In fact, researchers found that students who had been in smaller classes in grades K-3 were less likely to drop out of high school than their peers who did not have the opportunities provided by smaller class sizes.[33] Further, two other studies found that the pupil/teacher ratio had a positive and significant effect on high school and middle school dropout rates even after controlling for a host of individual and contextual factors.[34]

Reducing class sizes seems to have the greatest impact on minority students. Princeton University Economist Alan Krueger examined the differences in achievement among children of different races participating

in the STAR study. Krueger found that of students who were in small classes in grades K-3, black students experienced a seven-to-ten percentage point increase in test scores and white students experienced a three-to-four percentage point increase in test scores. While the gains diminished slightly for all groups over time, Krueger found that if all students were in small classes in grades K-3, the black-white test-score gap would fall by 39 percent in grades K-3 and by 18 percent thereafter.[35]

Teachers with reduced class sizes were able to build a strong connection with students. This connection helped teachers to know their students better, provide them with one-on-one instruction, and to identify any educational problems early, before they blossomed into more significant problems. The end result was improvement in student achievement and declines in dropout rates.

Reasons Students Give for Dropping Out:



Source: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1998—First Follow-up Study, 1990.

Class size reduction efforts undertaken in other states emphasize the connections that can be made between teacher and student in smaller classes. For example, the state of Wisconsin reduced class sizes in grades Kindergarten through three to a ratio of 15 students per teacher in 30 schools around the state. In research conducted by Arizona State University Professor Alex Molnar of the SAGE program in Wisconsin, teachers report that they have “greater knowledge of each student, they have more time for instruction resulting from reduced time spent on discipline, and they have greater enthusiasm for work.”[36]

- **School Size**—similar to the connections that can be built in small classes, research indicates that students in small schools come to class more regularly and are less likely to drop out than their peers. The effect is even greater for low-income and minority students. Teachers in small schools know their students well and have high expectations for them. Students in small schools report that they have a greater sense of belonging and are more satisfied in school.[37]

In addition, small schools have increased parent involvement leading to greater satisfaction among parents and a stronger sense of community between students, parents and the school. Teachers in small schools report they are more creative, recommitted to teaching and utilize a broader range of strategies to engage students.[38] Small schools are defined as elementary schools serving fewer than 350 students and high schools serving fewer than 600 students.

- **Public versus Private**—studies have found that dropout rates in private schools are lower than in public schools. This difference has been attributed by some scholars to the highly structured curriculum in private schools and less flexibility in course offerings.[39] However, when a private-school student is having difficulty the student typically transfers to public schools instead of or before dropping out.[40]
- **High Stakes Testing**—in recent years testing has evolved as a major tool of policymakers for the governance and regulation of education. While achievement and standardized tests might give teachers an educational tool and policymakers a tool for reform, they have also been used to prohibit children from moving from one grade to another or graduating from high school. These “high-stakes tests” have gained popularity in some areas, but so, too, has the number of critics. Critics argue that high-stakes tests, especially at the high school level, may encourage some students to drop out. For example, since 1991, passing the Texas Assessment of Academic Skills (TAAS) has been a prerequisite of receiving a high school diploma in Texas. Researchers examined dropout rates to explore the relationship between high-stakes tests and dropouts. They found a significant decrease in high school completion in the year the TAAS was introduced.[41]

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Making Connections: Addressing the State's Dropout Crisis

How do we prevent students from dropping out? There is no easy answer. Research indicates that there is no single factor that drives young people to drop out of school. Thus, there is no simple solution to this problem—no single program or policy change that will in-and-of itself solve the dropout crisis in Arizona.

However, we do know that helping students feel connected to schools and the educational process would substantially improve the likelihood of school completion. Further, there are policies and programs that can be put into place that have been proven to help reduce dropout rates, especially among at-risk students.

While there are a wide variety of kinds of interventions and programs that may work to reduce the dropout rate, this report focuses attention on some of the preventive efforts that should be adopted to ensure that our school system is strong for all our children.

What Public Officials Can Do—from the Governor to individual school board members, public policymakers must take a leadership role in calling attention to the dropout problem and identifying and implementing solutions.

1. Summit—state policymakers should hold a statewide summit to develop a short- and long-term strategic plan to address the dropout crisis in Arizona. The summit should bring together state leaders, educational officials, parents, researchers, and officials from other states that have begun to successfully tackle this problem. In addition, this public dialog should be taken to communities across the state so that educators, parents and community members can work together to identify locally-appropriate solutions.

2. Allocate Funds—Arizona is facing a serious dropout crisis. To turn these statistics around, a substantial infusion of financial resources must be made available to the Arizona Department of Education and local school districts. These resources must be directed at programs that are proven strategies to reduce the dropout rate, including the programs and strategies detailed as follows.

Does Money Matter?

While some argue that resources do not impact the quality of education nor student success^[41], more recent research has found that resources directly affect the environments that students are in and their educational achievement.^[42] Additional resources are essential to implementing policies and programs proven to improve learning, including reducing class sizes, establishing reading improvement programs, and attracting and retaining talented teachers.^[43]

For the last several years, Arizona has ranked among the bottom of states in terms of spending per pupil. In 2001, Arizona's \$5,006 per-pupil spending gave it the rank of dead last in comparison to other states. Arizona would need to spend an additional \$2000 more per-pupil just to spend the national average, \$7,079.^[44] The state with the highest per-pupil expenditures (New Jersey) spent about \$9,362 per-pupil or 54% more per-pupil than Arizona. New Jersey has the fourth lowest status dropout rate in the nation.

What School Systems Can Do—institutional factors encourage some youth to fall through the cracks and eventually drop out. It only makes sense that institutional changes can help make sure that the school environment that youth are in is the most productive and best able to catch problems before they worsen.

3. Engage in Self-Study—each school system should examine why students are dropping out of these schools, paying particular attention to population characteristics and elementary-middle-high school feeder patterns that can help identify at-risk students long before they drop out.

4. Reduce Class Sizes—especially important in the early grades, smaller classes can improve achievement and student engagement as well as help teachers identify problems that may drive youth to dropout later in their educational careers. Arizona should work towards a maximum of 18 students per class in Kindergarten through third grade.

5. Establish Smaller School Environments—policies, programs, and approaches designed to increase the connection between school personnel and individual students is a way to meet the individual education needs of students, particularly those at-risk. There are a variety of ways to go about this including creating smaller autonomous schools within a larger school, career academies, team teaching, having the same teacher over a period of years.

6. Interventions For At-Risk Students—developing early intervention programs for students who may be at-risk of dropping out, including academic assistance, tutoring, social services, employment services, parent engagement, flexible scheduling and alternative schools.

7. Extend Learning Time—for some students, increasing class time helps to improve their academic achievement and re-engage them in school. Extending learning time could include block scheduling and additional classes for students not performing at grade-level. However, this should not come at the expense of educational enrichment classes—such as art and music—or physical education and recess.

8. Decrease Barriers to Parental Involvement—research indicates that having parents involved in schools increases student achievement. However, many parents face barriers at the school house door, including their own lack of education, lack of experience in educational policy and program decision-making, and reluctance among teachers and administrators to find ways to effectively include parents.

9. Reduce Teacher Load—high school teachers often teach five classes a day with 30 (or more) students in each class. Class loads should be lowered so that teachers are able to connect with individual students and have enough time to individualize instruction, when necessary.

Class loads should be lowered so that teachers are able to connect with individual students...



What Communities Can Do—our schools and communities have much to gain from reducing the dropout rates. School systems do not have to fight the dropout problem alone. Community organizations can be valuable partners in the effort to prevent youth from dropping out. Schools should work with community institutions—libraries, religious institutions, community organizations, businesses—to improve community conditions and engage parents. Together, they can help to create the infrastructure that supports and promotes learning.

10. Community-School Partnerships—by combining the strengths of what schools and community organizations can offer, students have a better chance of getting the support and services they need to succeed. By working together school and community groups reduce replication of service and can build a safety-net around children to prevent youth from dropping out.

11. Engage Universities—Arizona’s universities and community colleges should be engaged to help build and support a world class education system. Universities, especially Schools of Education, need to become a resource and an active participant in school reform.

Parents need to work together to ensure that their children—as well as other children in their community—are receiving the best education possible.

What Parents Can Do—parents play a key role in making sure that their own children succeed in school. Parents need to work to ensure that their children—as well as other children in their community—are receiving the kind of educational experience that will enable them to stay in school, go on to higher education, and reach their personal goals.

12. Parent Involvement—parents need to be aware of their child’s educational progress, the goals being set by teachers, and ways to make improvements. Parents should work with teachers and school administrators—even if they are reluctant to work with parents—to ensure that their child is getting the best education possible.

13. Become a Leader—because what happens with their individual child, as well as all children in the school, is dependent on state, school district, and school policies and procedures, parents need to be engaged in setting the direction for schools. There are many ways for parents to get involved in shaping school policy—through site councils, PTAs, school board meetings, meeting one-on-one with school officials, and educating other parents.

14. Vote and Monitor Key Decisions—elected officials—from local school board members to the Governor—all make decisions that impact the education of our children. Parents need to learn where the candidates for public office stand on key educational issues and vote for those that will best represent their interests as parents. After election day, parents should join with other parents and community members to monitor the decisions of elected officials.

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P.O. Box 44200
Tucson, AZ 85733
520-324-0881
602-241-1911
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