



UA POLICY BRIEF: THE CASE FOR STRENGTHENING EDUCATION IN ALASKA

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WHAT IS THE PROBLEM?

Alaska's public education system has been transformed since Alaska became a state. Opportunities for education have been expanded in many ways and many places.

But at every level, from pre-school on up, the education systems in Alaska and the U.S. have serious troubles. Many American children don't have access to early education; can't do math and science as well as those in other countries; can't pass basic reading, writing, and math tests; and don't finish high school. Boys are less likely than girls to go on to college.

And in Alaska, there are fewer early-education programs than nationwide. Elementary and high-school students—especially Alaska Natives and those from low-income families—are falling below U.S. averages.

WHY IS THIS SUCH A PROBLEM?

Alaska needs an educated, productive workforce to keep our economy healthy—and responsible, informed citizens to keep our democracy strong. Parents, communities, and governments have to look for new ways to help all children learn.

WHAT CAN ALASKANS DO?

We asked educators, business people, Alaska Native leaders, and others to suggest possible policy options for strengthening education. The box below summarizes their ideas. Not everyone agrees about what to do—but everyone agrees something needs to be done. We hope this brief paper provides a basis for a community conversation about how to get started.

Public Policy Options to Explore

- Expand programs for pre-school children
- Increase time kids spend in school
- Find new ways to strengthen basic skills for all students
- Improve school accountability measures
- Give families more school choice
- Invest in parent and community involvement
- Expand and coordinate technical training at all levels
- Build public/private partnerships
- Provide need-based college scholarships
- Strengthen teaching by reducing rural teacher turnover and enhancing teachers' development opportunities
- Monitor equity in school funding



We have within our society all the ingredients for Americans to thrive in this world. But if we squander those ingredients, we will stagnate.
Thomas Friedman, *The World Is Flat*

Rank of U.S. Fourth Graders, Trends in Mathematics and Science Study, 2003

(Among 25 participating countries)

Science Test

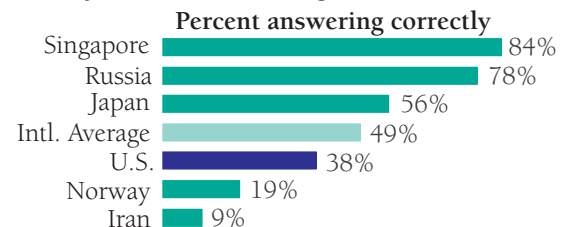
1. Singapore
3. Japan
6. U.S.
14. Italy
25. Morocco

Math Test

1. Singapore
9. Russia
12. U.S.
21. Norway
25. Tunisia

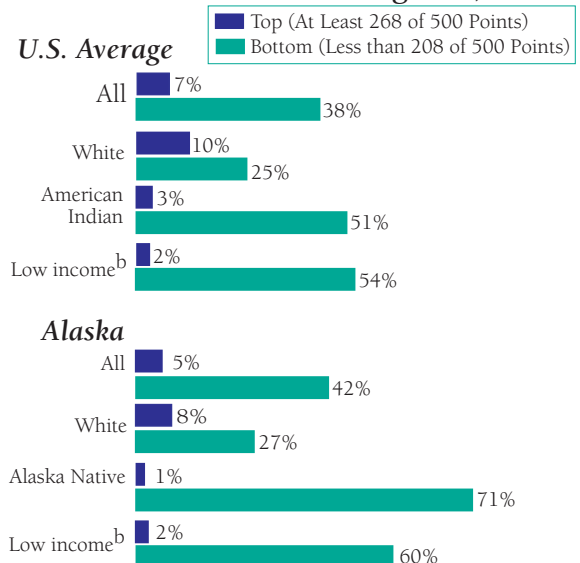
There are 600 balls in a box and 1/3 of the balls are red. How many red balls are in the box?

(Sample math question asked fourth graders in 25 countries*)



* Trends in International Mathematics and Science Study, 2003

Percentage of 4th Graders Scoring at Top and Bottom of NAEP Reading Test, 2005^a



^aNational Assessment of Educational Progress

^bEligible for free or reduced-price school lunch

For much more on education and other topics see: www.iser.uaa.alaska.edu

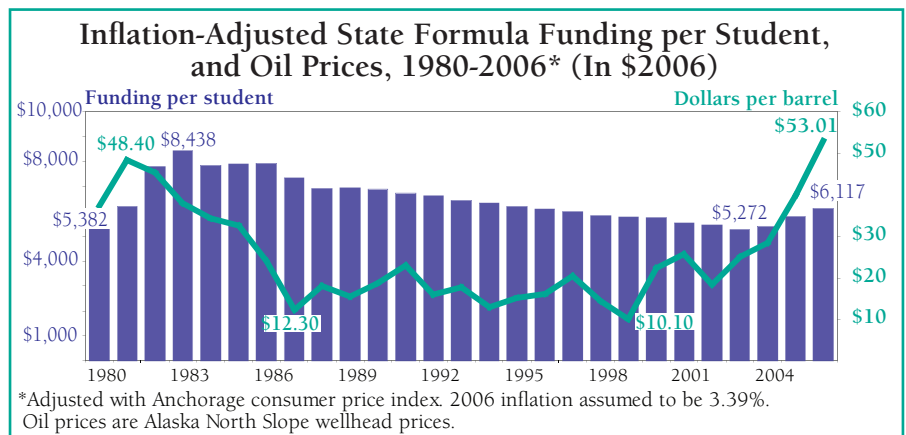
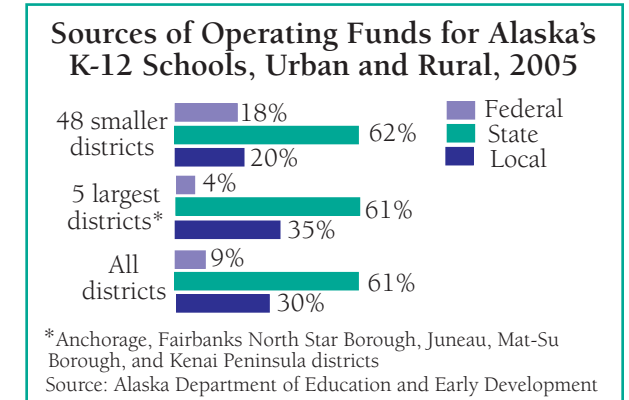
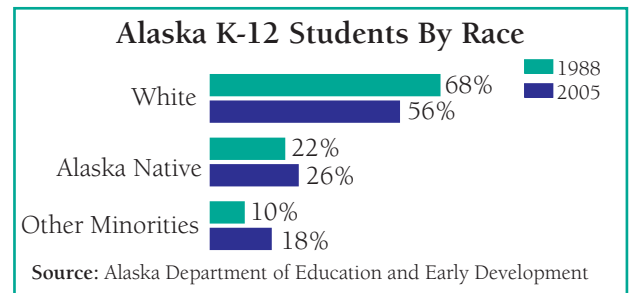
SNAPSHOT OF ALASKA'S PUBLIC EDUCATION SYSTEM

- Public pre-school in Alaska consists of (1) federal Head Start programs for children from low-income families, with current enrollment of about 3,600 in 100 communities; and (2) a federally mandated special education program serving 2,000. Federal money mostly pays for Head Start but the state supplements those funds. Officials estimate 5,000 more children could qualify, if there were funds for expanding or adding programs.
- Alaska's K-12 system has 500 schools in 53 districts, with about 130,000 students. Total enrollment has been flat since 1999, but enrollment has grown in some districts.
- About 60 of the smallest schools have fewer than 20 students; a handful of urban high schools have more than 2,000 students.
- Students are much more likely to be from minorities now than 20 years ago, making up nearly half of all K-12 enrollment. That shift is partly explained by immigration from other states and countries, but also by age. Alaska's white residents are older and less likely to have school children.
- Alaska Natives remain by far the largest student minority. About 110 rural schools have mostly Native enrollment.
- A third of Alaska's K-12 students are considered low-income, based on guidelines for receiving free or reduced-price school lunches. That's up from about one-quarter just a few years ago.
- More than 60% of operating money for all school districts is state aid—which tends to rise or fall with oil prices, since oil revenues are the state's main source of general revenues.
- Local contributions are bigger and federal shares smaller in the largest districts.
- The main source of state school aid is the foundation program, which provides money by formula. Adjusted for inflation, aid per student peaked in 1983 and then declined a third by 2003. Foundation money has increased recently, but virtually all the increase has gone to rising costs of employee retirement and medical plans.
- Alaska's only public university is the University of Alaska, with three main campuses and 12 community campuses. Enrollment is about 30,000. (There are also several small private colleges.)
- High-schools, training centers, and university campuses offer career and technical education programs. About 18,000 Alaska high-school students took CTE courses in 2005, and several thousand more students were in post-secondary programs.

GETTING AN EARLY START

Many people inside and outside the school system argue that the benefits of providing early-childhood education far outweigh the costs. The argument is that children who attend pre-school will learn better, be more likely to stay in school and graduate, and be more successful as adults.

Analysts also point out that public pre-school makes more sense now than it did 50 years ago, because so many more children are growing up in single-parent families or in families



where both parents have jobs. A lot of parents don't have as much time to read to children or help them develop other learning skills—and many can't afford private pre-schools.

Much of the research on pre-school has focused on benefits to children from low-income families. But the National Institute for Early Education Research cites evidence that children from families with average incomes benefit as well.¹

Economists have also weighed in on this issue. In a 2006 paper, the Upjohn Institute for Employment Research argues that "universal pre-school creates more jobs in the long-run" than economic development subsidies, because it helps children grow up to be more productive and to earn more.²

In some industrialized countries, almost all children ages 3 or 4 attend either public or private pre-schools. In the U.S., all states have Head Start programs for children from low-income families and pre-school special education programs. Thirty-eight states also have state-funded programs.

Only about 24% of 3- and 4-year-olds attend public pre-schools in the U.S.; that share is about 19% in Alaska. (Alaska also has a number of private pre-schools.)

Share of Children Ages 3 and 4 Enrolled in Public Education Programs, 2004-05



Source: 2005 State Preschool Yearbook, National Institute for Early Education Research

Efforts are underway to enhance pre-school in Alaska. The Early Childhood Comprehensive Systems Project (federally funded but state-administered) has issued a plan to help build and implement early childhood programs. Also, a special task force—Ready to Read, Ready to Learn—advocates development of an Alaska plan for early childhood education. That task force has members from government, private industry, Native organizations, and non-profits.

COMPARING STUDENT K-12 LEARNING

Some analysts argue that “one-size-fits-all” standardized tests don’t adequately measure learning among students from a wide range of economic and cultural backgrounds. Still, standardized tests are the best current measure.

Alaska students take math, reading, and writing tests almost every year and to get diplomas they must pass the High-School Graduation Qualifying Exam. Those and other tests show:

- American students are not as good at science and math as their counterparts in a number of other countries.
- Alaska’s 4th and 8th graders fall below the U.S. average in reading and math ability.
- Alaska’s minority students—especially Alaska Natives—and those from low-income families score well below white students in reading, writing, and math.

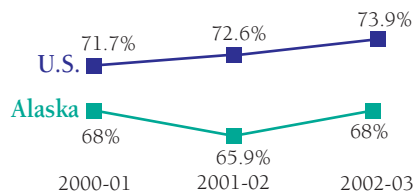
Another measure of school success is graduating from high school—and in recent years, Alaska’s high-school graduation rate has been under 70%. The national rate was somewhat higher, but still under 75%.

The increasing diversity of students and the growing share from low-income families pose new challenges for Alaska’s schools. As we’ve seen here and nationwide, minority and low-income students tend to do much worse on standardized tests and to drop out at higher rates.

The figure to the right makes the economic importance of education plain. In 2005, adults with high-school diplomas earned 40% more than dropouts. Those with at least some college (including, as we discuss below, career and technical education) earned 80% more; those with at least four years of college earned almost three times more.

Alaskans we talked with suggested options for improving learning and increasing graduation rates among children from all economic and cultural backgrounds. Those are listed on the front page and range from increasing the time kids spend in school to finding ways of reducing turnover among teachers, especially in rural schools. In this paper we can’t analyze all the options—but Alaskans concerned about the future of our state and our economy need to discuss them.

High-School Graduation Rates,* Alaska and U.S. Average



*The number of graduates divided by the estimated count of freshmen four years earlier.

Source: National Center for Education Statistics

EXPANDING CAREER AND TECHNICAL EDUCATION

“Career and technical education” covers a broad range of programs offered in Alaska’s high schools and after high school at special schools and regional learning centers; through University of Alaska certificate and degree programs; and union apprenticeships and other industry programs.

CTE qualifies people for construction, transportation, aviation, health care, engine repair, culinary arts, and other jobs that require some post-secondary education but not four-year degrees. In 2005, workers with some college earned a median of \$8,000 more than those with just high-school diplomas.

A recent study by the National Center for Vocational Education reported that high-risk students were much less likely to drop out if they were enrolled in CTE programs.³ Data from the Anchorage School District support the finding that CTE programs help keep more students in school.

But Alaska has fewer high-school CTE teachers and courses than it used to, and enrollment has declined. With school accountability increasingly measured in test scores, schools are putting more emphasis on preparing students for tests.

Alaskans in construction and other industries that require skilled workers are sounding a warning that the state isn’t training enough workers to take the place of those who will soon retire. They say that construction of a gas pipeline would offer a lot of opportunities for Alaskans—but that our current system can’t provide the necessary training.

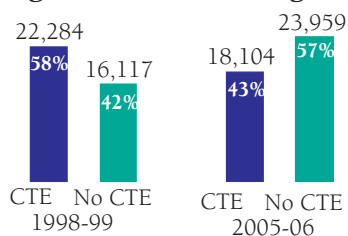
People we talked with said the state needs to expand and coordinate technical training at high-school and post-secondary levels. One effort underway is a consortium of school districts, UA, business and labor organizations, and technical centers—established to link high-school and post-secondary programs and help students get certificates, associate degrees, or other credentials.

Median Earnings of Full-Time Alaska Workers, By Education Level, 2005



Source: American Community Survey, IPUMS⁴

Alaska High-Schoolers Taking CTE Courses*



*Students taking at least one career and technical education course.
Source: Alaska Department of Education and Early Development

ACCESS TO HIGHER EDUCATION

The University of Alaska system has grown and is capturing an increasing share of Alaska high-school graduates—27%, up from 18% in 1997. Other progress and continuing challenges for higher education include:

- Only about 46% of Alaska high-school graduates go directly to college, in Alaska or elsewhere.
- Many students who start don't graduate. At UAA in recent years, about 23% of all freshmen and 11% of Native freshmen seeking 4-year degrees graduated within 6 years.
- A growing share of Alaskans are minorities, but the make-up of UA students has changed little in a decade: 72% of students are white, 13% Alaska Natives, and 16% other minorities.
- Tuition and fees for students seeking 4-year degrees at UA are nearly 30% less than the U.S. average for public schools. But costs for those seeking 2-year degrees are almost 50% above the U.S. average.
- UA promotes access through a scholars program that awards free tuition to students graduating in the top 10% of their high-school classes. But Alaska is one of only two states that provides no need-based student aid.
- In Alaska and elsewhere, more women than men are going on to college. Among adults born in Alaska, the gap is especially large between Native men and women. In 2000, more than 30% of adult Native women had some college time, compared with about 23% of Native men. And in the 2006 UAA graduating class, twice as many women as men received bachelor's degrees. That was true among all races.

Conclusions and Acknowledgments

Since statehood, Alaska's education system has grown and improved enormously. But the remaining challenges are also very big. Alaska has the resources to deal with those challenges, and some efforts are in fact already underway. The question now for all Alaskans—not only educators and parents—is this: how do we come together to create what our state and our children need?

The authors thank all those who gave us ideas and information. Longer papers about education issues will be available later at www.iser.uaa.alaska.edu. Commonwealth North (www.commonwealthnorth.org) and First Alaskans Institute (www.firstalaskans.org) will also host follow-up conversations.

How Well Does UA Attract and Retain Students?



* Average for freshmen starting 1997, 1998, and 1999 and graduating in six years.
Source: University of Alaska, *Performance Measures FY 2005*

How Does University of Alaska Cost Compare with U.S. Average for Public Schools, 2005-06?

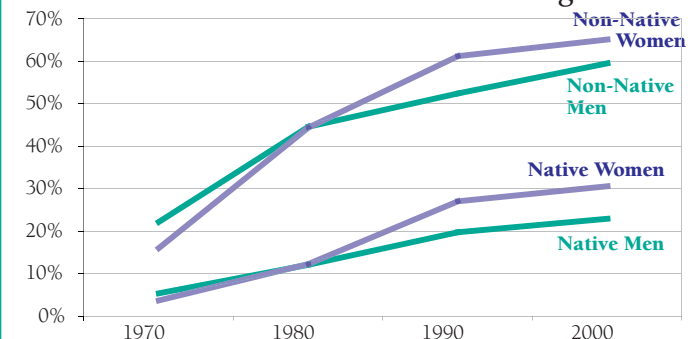
- UA tuition and fees are below U.S. average for 4-year programs, but higher for 2-year programs



- Alaska is one of only two states that has no state need-based aid for students. Nationwide, state need-based aid nearly doubled between 1994 and 2004.

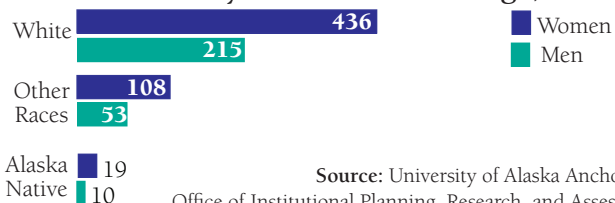
Sources: College Board; National Center for Education Statistics

Alaska-Born Residents over 25 with College Credit*



*Share of adults with at least some college credit. In 2000, about 90% of Natives and 28% of non-Natives had been born in Alaska. Source: IPUMS⁴

Women and Men Receiving Bachelor's Degrees at University of Alaska Anchorage, 2006



Source: University of Alaska Anchorage, Office of Institutional Planning, Research, and Assessment

Endnotes

1. *Debunking the Myths: Benefits of Preschool*. Available online at nieer.org.
2. Timothy J. Bartik, *Preschool and Economic Development*, October 2006.
3. S. Plank, *Career and Technical Education in the Balance*, National Research Center for Career and Technical Education, 2001.
4. Integrated Public Use Microdata Series, Minnesota Population Center.

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