

# The Bridge to Higher Learning



A New Vision for Minnesota's High Schools In the Global Information Age

A Report from the Future of High Schools Task Force of the Minnesota Association of Secondary School Principals in partnership with The University of Minnesota's Consortium for Postsecondary Academic Success

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We must sustain the strategies that are helping many students succeed . . .

## The Future of Our High Schools

Are Minnesota's high schools obsolete?

This is how Governor Tim Pawlenty described them in his 2007 State of the State address. He suggested that the performance of Minnesota's high schools threatens the future of our students and our state:

Too many of our high school students today are engaged in academic loitering for much of their high school careers. In too many cases, our high school students are bored, checked-out, coasting, not even vaguely aware of their post-high school plans, if they have any, and they are just marking time. It's costing us a lot of money and it's costing them their future. This is a silent crisis and it has the potential to devastate our future prosperity if we don't fix it.

To support his argument, Governor Pawlenty quoted Microsoft Chairman Bill Gates:

Our high schools—even when they're working exactly as designed—cannot teach our kids what they need to know today. Training the workforce of tomorrow with the high schools of today is like trying to teach kids about computers on a fifty-year-old mainframe. It's the wrong tool for the times.

Are Bill Gates and Tim Pawlenty right? Are our high schools obsolete, and, if they are, what can we do about it?

These are the fundamental questions we grappled with as a Future of High Schools Task Force, convened by the Minnesota Association of Secondary School Principals in partnership with the University of Minnesota's Consortium for Postsecondary Academic Success. Our group included high school leaders from every part of the state, representing schools of different sizes that serve extremely different student populations. Some of our schools are located in rural communities, some are urban, some suburban. Some of these communities are relatively affluent, while others predominantly serve students who live in poverty.

Over the course of our discussions in early 2007, we agreed that the depiction of high schools offered by Minnesota's governor and the world's richest man fails to reflect many of the positive realities of the schools we lead. Each day, we work with talented and dedicated teachers who bring literature, science, math, and many other subjects to life for students—too often while managing class loads of more than 170 students at a time. Their commitment and their successes should be acknowledged and celebrated.

Recent data on student performance also provide reason for optimism about Minnesota's high schools. For example, the National Center for Public Policy and Higher Education reports that Minnesota is one of

## . . . and dramatically improve educational outcomes for students who are struggling.

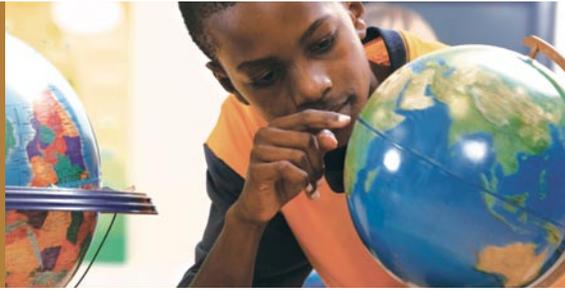
the top states in the nation in the percentage of students who enroll in college four years after they enter high school.<sup>1</sup> Minnesota students consistently score above the national average on the ACT college admissions test and other entrance exams.<sup>2</sup>

But our task force also focused on reports that point to serious problems with high schools in Minnesota and across the nation:

- ▶ According to the Minnesota Department of Education, 80 percent of white students in our state graduate from high school in four years, compared with 40 percent of American Indian students, 68 percent of Asian students, 38 percent of African American students, and 39 percent of Hispanic students.<sup>3</sup>
- ▶ Recent federal research has found that the performance of high school students in mathematics is a key predictor of success in college, and has concluded that the “tipping point” toward successful completion of a bachelor’s degree is “now firmly above Algebra 2.”<sup>4</sup> This poses a problem for Minnesota because during the 2003–2004 school year, just 46 percent of our 9th–12th graders took at least one upper-level math course. In contrast, an average of 64 percent of 9th–12th grade students took an upper-level math course in the five states that performed best on this measure. Twenty-nine percent of our high school students took at least one upper-level science course, while that figure was 40 percent in the top states.<sup>5</sup>
- ▶ The most recent results on the National Assessment of Educational Progress show that the average reading score of U.S. 12th-graders fell six points from 1992 to 2005. The average score of 12th-graders in science fell three points between 1996 and 2005. In 12th-grade math, a new test was instituted in 2005 and so results cannot be compared with previous years. However, the new test showed that less than one-quarter of the students performed at or above the proficient level. Although the 12th-grade results in all three subjects cannot be broken down to show how Minnesota students performed, the overall national trend is not encouraging.<sup>6</sup>
- ▶ On the international PISA exam in 2003, U.S. fifteen-year-olds performed significantly below their peers in other developed countries in both mathematics and science, and scored only average in reading.<sup>7</sup>

Because Minnesota’s high schools have both significant strengths and serious weaknesses, the challenge before us is twofold. First, we must sustain the strategies that are helping many students succeed, and second, we must dramatically improve educational outcomes for students who are struggling.

Recognizing that high schools must address both of these challenges simultaneously is critical. Simply put, if high schools were obsolete for *all* students, then changing them would be easy. But the story is not that simple. The same structures and strategies that are ineffective—even damaging—for some students can actually be beneficial to others. For example, some teenagers thrive in large high schools that offer numerous course options and extracurricular activities. For other students, however, the large school size that makes such a diverse array of programs and activities possible leaves them feeling lost in the crowd.



Our efforts to strengthen Minnesota’s high schools cannot be based on zero-sum logic, which suggests that improving educational quality for some students requires reducing it for others. Instead, like growing the economy while protecting the environment, we must find ways to achieve both excellence and equity in high schools today. To do that, we need to do more than just change the size of our high schools or adopt new teaching strategies, as critical as those reforms may be. We must begin by clarifying and redefining the entire purpose of high school in American life today.

## The Power of Focus

As the old saying goes, if you don’t know where you’re going, any road will do. If we want to make progress on the road of high school reform, we must begin the journey with a clear destination in mind.

Anyone who has read the typical high school course catalog knows that most high schools lack a clear vision for what students will do after graduation. Our task force of principals agreed that the high schools we lead today are often expected to be all things for all students—preparing some for selective colleges, some for high-skill employment, some for jobs that require little or no training beyond high school. Given these diverse expected outcomes, many—if not most—of our schools have developed a bewildering array of courses, programs, and pathways.

As a task force, we believe that the time has come to focus our high schools on a common goal that is powerful and positive enough to motivate students, inform instruction, and promote continuous school-wide improvement. Our goal must be broad enough to encompass diverse student needs, but also specific enough to measure and work toward. And so we suggest this:

**The new vision for Minnesota’s high schools should be to prepare every student to earn a credential or a degree at a postsecondary educational institution—whether it is a technical school, two-year college, or four-year college or university.**

This new vision reaches beyond the goal that has guided many recent high school reform efforts around the country: ensuring that students stay in school and earn a diploma. Although that is clearly an essential objective, graduating from high school is simply not a powerful enough incentive to motivate many students to take their 9th–12th grade years seriously.

The new vision we propose for Minnesota’s high schools also goes beyond helping students gain admission to an institution of higher education. We know from the experience of following the progress of our graduates that too many students start postsecondary careers but do not finish them. This is why our eyes must be on the prize of postsecondary *completion* for all.



Focusing on the goal of postsecondary success for every student makes sense on multiple levels. It will provide **students** with the skills and credentials they need to succeed in the high-skill global economy in which they will live their lives. It will provide **schools** with a clear objective toward which they can align curricula, direct instruction, and support students and families. It will also help high schools decide what to eliminate from among the many competing priorities they are currently expected to address.

For **society**, focusing on postsecondary success for all will promote not just economic growth and productivity, but also equity and social justice. At a time when earning a postsecondary credential or degree is almost a precondition for earning a living wage and realizing the American dream, we cannot sustain the large gaps in postsecondary participation and completion that exist between groups of our citizens. To cite just one example of these disparities, according to the College Board, even among students with the highest math scores in 8th grade, only 29 percent of low-income students go on to earn college degrees, compared with 74 percent of high-income students.<sup>8</sup> This problem is a particularly urgent one for Minnesota, where the numbers of students of color, students whose first language is not English, and students who live in poverty are rising rapidly.

## The Arguments Against . . .

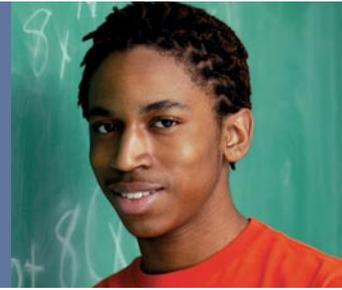
As a task force, we also discussed the fact that some of our fellow educators and other citizens may have serious concerns about our call to make postsecondary success the focus of high school reform. We identified and grappled with two main arguments against moving toward the new vision we have proposed.

First, some of our colleagues will rightly suggest that the vast majority of Minnesota high schools already place a high priority on preparing students for postsecondary education, and so they may conclude that the postsecondary vision we propose would not contribute to their existing improvement efforts. While we agree that many high schools are now very focused on preparing students for college and other postsecondary options, often that focus is on some, rather than all, of their students. In addition, in many cases even our most talented and committed high school educators lack a clear and current understanding of the knowledge and skills that students need not only to enroll in higher education but to succeed once they get there.

This disconnect is illustrated by the divergent responses that high school teachers and postsecondary instructors provided on the 2005–2006 ACT National Curriculum Survey. In that study, researchers found major differences in the instructional priorities of educators at the high school and higher education levels:

We see evidence of differences in high school emphases and postsecondary expectations in each content area surveyed. Many English and writing instructors value punctuation and grammar more than do high school teachers. In reading, instruction in the 11th and 12th grades

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may not prepare students for college-level reading assignments (especially considering the number of college freshmen who enroll in a remedial reading course). A greater emphasis in teaching reading strategies is present in remedial reading courses at the postsecondary level—the same strategies that seem no longer to be taught at the high school level after 10th grade. In mathematics, postsecondary mathematics instructors rate a rigorous understanding of fundamental concepts as more important than exposing students to more content topics, whereas high school mathematics teachers give higher importance ratings to advanced content topics. In science, postsecondary instructors rate science process and inquiry knowledge and skills as most important, whereas high school teachers rate science content as more important.<sup>9</sup>

These differences in the academic priorities of high school teachers and postsecondary instructors are not surprising given that in the United States—much more so than in most other developed nations—secondary and postsecondary education are separate and disconnected systems. For example, after six years of field research, literature review, and data analysis, researchers at Stanford University’s Bridge Project concluded that:

The current organization of secondary schools and postsecondary institutions is such that communication and information dissemination between levels are often difficult. For instance, students—especially those who are economically disadvantaged or whose parents did not attend college—often do not know what colleges expect of them in terms of meeting their admission requirements. Many believe that nonselective four-year institutions and community colleges do not have academic standards. This is not the case, as is evidenced by the widespread use of placement tests for access to credit-level courses. Also, policies across the segments, particularly those concerning the transition from high school graduation to college admission, are fragmented and confusing.<sup>10</sup>

Given this fragmented and confusing system, there is much that schools and school districts can and should do in partnership with institutions of higher education to align instruction and expectations for what happens before and after high school graduation.

The idea of closer alignment between high schools and higher education brings us to the second concern that our task force agreed some people may raise about the new vision we propose for Minnesota’s high schools: What about the students who go directly into the workforce? Would focusing their high school experience on postsecondary education be a waste of time or raise unrealistic expectations?

Our response to this concern is twofold. First, the data clearly indicate that earning a postsecondary credential or degree increases a worker’s wages and income in many diverse fields, so pointing students toward postsecondary education puts them on a better economic path to the future. And second, even for students who do go directly into the workplace after high school, desirable jobs in today’s economy



increasingly require college-level knowledge and skills. For example, a recent study by ACT examined the skills for success in jobs that do not require a postsecondary degree but that still “offer a wage sufficient to support a small family, provide the potential for career advancement, and are projected to increase in the future.” The study concluded that occupations such as electrician, construction worker, upholsterer, and plumber require levels of readiness in reading and mathematics that are comparable to the levels required to succeed in college courses without remediation.<sup>11</sup>

Given the realities of today’s high-skill global economy, even high school graduates who choose not to go on to postsecondary education must be educated to the same high standards as their classmates who do. This is why we believe that making postsecondary education the expected destination for every student benefits even those who ultimately choose to take another road.

## From Some Students to All Students

In Minnesota, we begin our effort to prepare all students for postsecondary success from a strong starting point. According to a recent report from the Minnesota Department of Education, 65 percent of all high school students who graduated in 2004 attended a postsecondary institution inside or outside the state the following fall. According to the report, the three-year graduation rate at the state’s two-year colleges was 36 percent in 2004. At Minnesota’s four-year colleges and universities, the four-year graduation rate in 2004 stood at 36 percent, and the graduation rate for students who took six years to complete an undergraduate program was 57 percent.<sup>12</sup> It is important to note that within these averages, completion rates vary widely among institutions.

As these statistics make clear, preparing all students to succeed in postsecondary education is an ambitious objective. Achieving it will require far-reaching changes in the ways principals lead, teachers teach, and students learn. Over time, it may result in the creation of high schools that look entirely different from the ones that exist today.

The following chart offers a general sense of the differences we envision between high schools that prepare some students for postsecondary success and high schools that have embraced that goal for *all* students. As principals, teachers, counselors, and other staff members shift expectations and practices from the ones described in the first column to those described in the second, they will require sustained support and ongoing professional development. Only if we give educators time to plan and learn together will they be able to make this quantum leap.<sup>13</sup>

We are confident that if we stay the course and work together over time, we can prepare every Minnesota student for postsecondary success.



Building Blocks	High Schools That Focus on Postsecondary Success for <i>Some</i> Students	High Schools That Focus on Postsecondary Success for <i>All</i> Students
<b>Expectations</b>	Only some students are considered “college material”	The school believes and explicitly states that all students are expected to succeed in postsecondary education
<b>Knowledge and Skills</b>	All students are expected to achieve proficiency on state standards	All students go beyond the basics to master “21st Century Skills” of critical thinking, creativity, and collaboration <sup>14</sup>
<b>Rigor</b>	Many students do not take the courses required for admission to most four-year colleges	Every student completes a core curriculum that prepares him or her for postsecondary education
<b>Relevance</b>	Students often ask, “Why are we learning this?”	Classes are clearly connected to the positive futures that students envision for themselves after high school
<b>Relationships</b>	Many students get lost in the crowd	Every student develops a relationship with at least one adult mentor and is part of a peer group that values academic success
<b>Partnerships</b>	The school largely prepares students for postsecondary education on its own	Partnerships with postsecondary institutions, community organizations, and others weave a web of support
<b>Plans</b>	Students choose classes with no clear goal in mind and little sense that what they do today will influence their future options	Students develop and act upon postsecondary plans that give direction and motivation to their high school careers
<b>Assessments</b>	Tests provide students and teachers with little or no information about readiness for higher education	Tests measure the knowledge and skills needed for postsecondary admission and graduation
<b>Guidance</b>	Students largely navigate the transition to higher education on their own	Students receive sustained support from counselors, advisors, and mentors
<b>Senior Year</b>	Students coast or check out altogether	Students maintain academic momentum and hit the ground running in higher education the following fall



## It Will Take a Village

Our task force focused its work on a new vision for high schools, but enabling every Minnesota student to earn a postsecondary degree will require changes and partnerships beyond our buildings. Junior high schools and middle schools must continue and intensify their efforts to get students ready for upper-level work, and must also provide students with early awareness of how and why they should prepare for postsecondary education. Similarly, institutions of higher education must give students—especially those from underrepresented groups—the support they need to succeed on campus. Over time, we must all work together to create a seamless and aligned system that gives students signals for success throughout their educational careers.

Businesses, nonprofit organizations, and volunteers have indispensable roles to play as well. With the average student-to-counselor ratio in Minnesota’s high schools at 297:1 (and much higher in some schools and districts), caring adults who do not work in schools must step in as mentors, motivators, and models of what is possible.<sup>15</sup>

Over the course of their years in elementary and secondary school, students will spend 4–5 times as many hours outside school as in it (and that’s not counting when they are asleep). Given this fact, parents and families are the first and often the best guides toward higher learning. With support, parents who themselves never attended postsecondary education can play that role as well.<sup>16</sup>

And, of course, in the end it is the students themselves who must determine their own aspirations and direct their own educational journeys. We agree with the authors of a recent federal research study who called for a “change in the language we use in describing what happens to students from a negative rhetoric that assumes passivity to one that respects students as active players, seeking and discovering paths to their education goals.”<sup>17</sup>

Almost by definition, high school principals are both ceaseless optimists and relentless pragmatists. Our perspective on the future of the schools we lead reflects both traits. We are upbeat because we know that Minnesota’s students and schools have tremendous strengths on which to build. At the same time, we know that there are no quick fixes for the problems of America’s high schools, many of which are closely connected to the problems and pressures of being an adolescent in American society today. But we are confident that if we stay the course and work together over time, we can prepare every Minnesota student for postsecondary success. When we have realized that vision, we will have created the high schools that Minnesota needs to succeed in the Global Information Age.

## Endnotes

1. The National Center for Public Policy and Higher Education, *Measuring Up 2006: The State Report Card on Higher Education, Minnesota*. Accessed at [http://measuringup.highereducation.org/\\_docs/2006/statereports/MN06.pdf](http://measuringup.highereducation.org/_docs/2006/statereports/MN06.pdf).
2. Accessed at <http://www.act.org/news/data/06/pdf/states/Minnesota.pdf>.
3. Minnesota Department of Education, *Taking Minnesota Students from Nation-Leading to World-Competing: Setting a Course for Success in the 21st Century* (Roseville, MN.: Minnesota Department of Education, April 2007), 27.
4. C. Adelman, *The Toolbox Revisited: Paths to Degree Completion from High School through College* (Washington, D.C.: U.S. Department of Education, 2006).
5. The National Center for Public Policy and Higher Education, *Measuring Up 2006: The State Report Card on Higher Education, Minnesota*. Accessed at [http://measuringup.highereducation.org/\\_docs/2006/statereports/MN06.pdf](http://measuringup.highereducation.org/_docs/2006/statereports/MN06.pdf).
6. U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP). *The Nation's Report Card: 12th Grade Reading and Mathematics 2005 and The Nation's Report Card: Science 2005*. Various years. Accessed at <http://nces.ed.gov/nationsreportcard>.
7. Organization for Economic Co-operation and Development, Programme for International Student Assessment, *Learning for Tomorrow's World: First Results from PISA 2003* (Paris: OECD, 2004).
8. College Board, *Education Pays: 2005 Update*, 9, fig. 7. Accessed at [http://www.collegeboard.com/prod\\_downloads/press/cost05/education\\_pays\\_05.pdf](http://www.collegeboard.com/prod_downloads/press/cost05/education_pays_05.pdf).
9. ACT, Inc., *ACT National Curriculum Survey 2005–2006*, 32. Accessed at <http://www.act.org/path/policy/pdf/NationalCurriculumSurvey2006.pdf>.
10. Michael W. Kirst and Andrea Venezia, eds., *From High School to College: Improving Opportunities for Success in Post-secondary Education*. (San Francisco: Jossey-Bass, 2004), 3.
11. ACT, Inc., "Ready for College and Ready for Work: Same or Different?" (2006). Accessed at <http://www.act.org/path/policy/pdf/ReadinessBrief.pdf>.
12. Minnesota Department of Education, *Taking Minnesota Students from Nation-Leading to World-Competing: Setting a Course for Success in the 21st Century* (Roseville, MN: Minnesota Department of Education, April 2007), 33–37.
13. For a summary of the changes that research suggests need to occur in high schools and institutions of higher education to realize the vision of postsecondary education for all, we recommend Patricia M. McDonough, *The School-to-College Transition: Challenges and Prospects* (American Council on Education, 2004). A free electronic version of the report is available at [www.acenet.edu/bookstore](http://www.acenet.edu/bookstore).
14. For a framework that the task force found promising, see Partnership for 21st Century Skills, "Results that Matter: 21st Century Skills and High School Reform" (March 2006). Available at [www.21stcenturyskills.org](http://www.21stcenturyskills.org).
15. American Counseling Association, *Data from the U.S. Department of Education, National Center for Education Statistics, October 2006 (2004–2005 school year)*. Accessed at <http://www.counseling.org/PublicPolicy/TP/ResourcesForSchool-Counselors/CT2.aspx>.
16. For a synthesis of effective strategies for extending learning beyond the school day, see the Minnesota Commission on Out-of-School Time Final Report, *Journeys into Community: Transforming Youth Opportunities for Learning and Development*, (2005). Accessed at [www.mncost.org/MNCOSTfinal\\_report.pdf](http://www.mncost.org/MNCOSTfinal_report.pdf).
17. C. Adelman, *The Toolbox Revisited: Paths to Degree Completion from High School through College* (Washington, D.C.: U.S. Department of Education, 2006), xxvi.



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