University of Colorado – Denver
"Crisis of Inclusion"
More Student Success: Why, Who, and How
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Forty-three years ago I chose higher education as my career. I was a 20 year old idealist, I was inspired by my college experience, and I thought everybody should have at least two years of higher education. While many of my age group were in college, most were not. A lot of my high school friends in Ohio had begun making a good living in manufacturing, working for the steel mills, the auto industry, and other local firms. Most Americans believed college was optional.

While to some college is still "optional," those days are gone forever. In the 21st century the American people need to know more and be able to do more. More students need to enroll and succeed in postsecondary education. I imagine every person in the room knows **why** this is true, **who** needs to succeed at higher rates, and **how** we can achieve higher rates of educational attainment. But we don't seem to be quite at the point of making the changes necessary to do what is needed. So let me take ten minutes to review what you already know.

When pressed, those who believe college is "optional" usually are thinking about other people or other people's children. Today 72 percent of high school sophomores aspire to a baccalaureate degree, half of them aspire to a graduate or professional degree, and most of the remaining high school students who have a plan expect to obtain some kind of postsecondary degree or certificate. Many of these high school students may value learning for its own sake, but virtually all of them are responding to the cold realities of a highly competitive global economy and a more challenging world.

The evidence of these changes is all around us. In 1985 Tom Friedman published *The World is Flat,* a cleverly titled book arguing the global economic "playing field" has been flattened by ten forces: the fall of the Berlin Wall, the web browser, work flow software, open sourcing, outsourcing, off-shoring, supply-chaining, in-sourcing, in-forming, and "the steroids:" wireless, mobile, digital communication. (The first of three times I heard him speak about this book was at a fundraiser for the University of Colorado – Denver's School of Public Affairs. I expect some of you were there.)

In effect, technology now enables business to leap over geographical and political boundaries, and most of the world is now pursuing the "recipe" for prosperity employed by the U.S. in the 20th century – a well-educated workforce, the rule of law in commerce, investment in innovation, and a competitive, market economy. Capital investment and jobs are flowing all over the globe in search of competitive advantage.

In 2005 Geoff Colvin observed in *Fortune* magazine, "American workers are enormously more expensive than their peers almost anywhere but in Western Europe. So the most important question of their working lives is: How can they be worth what they cost?" *Source*: "Can Americans Compete?" *Fortune* July 20, 2005.

According to Colvin's analysis, each year the U.S. generates about 1.3 million college degrees, with roughly 70,000 in engineering. In comparison, India generates about 3.1 million degrees (all English speaking), including 350,000 engineers; China will generate 3.3 million degrees, and more than 600,000 engineers. The U.S. needs more scientists and engineers, but we can no longer compete on the quantity of our scientific workforce; we must pay attention to quality *and* quantity. *Source:* "Can Americans Compete?" *Fortune* July 20, 2005.

The U.S. now ranks 9th in the entry rate to baccalaureate education, and 15th in the entry rate to post-secondary technical education. We still are near the top regarding the proportion of our current workforce with a college degree, but we are losing ground rapidly to developed economies in Europe, Asia, Australia, and New Zealand. Perhaps the most disturbing finding is that our younger adults, age 25 to 34 rank tenth in the world in the attainment of an associate degree or higher, and we are one of only two OECD countries where older adults are better educated than the young adult age group. *Source*: OECD *Education at a Glance*.

Our failure to increase the educational attainment of younger Americans is particularly troublesome because the U.S. population is aging. Every year for the next fifteen years, the "over-55" age group will grow by 1.5 million. The 6-24 age group will grow modestly, less than 500,000 each year. Meanwhile, we will see virtually no growth of workers in the prime working years, 25-54. Thus, while the "productive" age group will not increase in numbers, those requiring education and more extensive health care will grow rapidly. *Source*: U.S. Census Data.

The current economic crisis underscores how dependent we all are on the economic activity and productivity of others. Wider and higher levels of postsecondary attainment are essential for a well-functioning world economy, and access to economic opportunity now means access to educational attainment.

The prosperity of states and communities is directly related to the educational attainment of their citizens. The states with the highest per capita income and the states with the strongest, most resilient economies have the highest percentage of citizens with a baccalaureate degree. Colorado is one of those states, but less because of its success in educating its citizens, and more because it is extraordinarily successful in inducing well-educated people to move to this wonderful place.

In my view these economic reasons for increasing educational attainment are sufficient, but only part of the justification. The political, environmental, and social challenges in the 21st century to require all the human knowledge and wisdom we can muster. We cannot have too many well-educated citizens in the U.S. or anywhere else.

During the past year the State Higher Education Executive Officers prepared an open letter to the Presidential candidates on national goals for higher education. We suggested that the United States should seek to be second to no other nation in educational attainment, innovation, and the application of knowledge. Of these three goals, we now fail to lead the world only in educational attainment.

Projections developed by my friends at NCHEMS, a higher education think tank in Boulder, indicate that 55% of our workforce will need to have a postsecondary credential by 2025 in order to be second to no other nation. This will require 16 million more postsecondary credentials then we are currently producing, one million more each year for the next 16 years.

The SHEEO staff decided to examine what it would take to achieve this goal. Nationally, if we increase the high school graduation rate by 10 percentage points (roughly from 70 to 80 percent), *then* increase the immediate college participation rate by 10 percentage points (from about 65 to 75 percent), and *then* increase the postsecondary graduation rates by 10 percentage points (30 to 40 percent in 2 year institutions and about 50 to 60 percent in four year institutions), we will get only 30 percent of the way to the goal. In Colorado that will be 1.1 million more degrees from traditional aged students.

The remainder of the goal can be reached only by better serving older adults who did not succeed in completing a degree or certificate or who never enrolled. About seventeen million adults 24 to 45 have some college but no credential and another twenty-three million have a high school diploma and no college. If we can enable about a third of those who have some college and 15% of those who never enrolled to complete a postsecondary credential we can reach 16 million more degrees. This would involve 2.4 million more degrees from older adults in Colorado.

 So **who** must become better educated? This is obvious: those who currently are less-well educated – the poor, the children of the less-well educated, those who for any reason (poverty, race, ethnicity, or recent immigration to the United States) tend not to participate and thrive in postsecondary education.

The college <u>participation rate</u> is high for students from high socio-economic status families, regardless of academic ability and preparation. The college participation rate is substantially lower for students from low socio-economic status families, even when they are high in academic ability and preparation. *Source: Access Denied*, Department of Education, February 2001 (see Figure 1).

The college <u>graduation rate</u> is even more dramatically influenced by socio-economic status. This chart from Tony Carnevale's recent article in *Liberal Education* analyses data from the National Education Longitudinal Study to examine the graduation rate at a BA or higher by SES and SAT score. Low SES students at every level of academic ability obtain the baccalaureate degree at a substantially lower rate than students with higher

SES and comparable SAT scores. ("A Real Analysis of *Real Education,*" Anthony P. Carnevale, *Liberal Education*, Fall, 2008, pp. 54-61.)

The most dramatic and worrisome differences are for average students, those with an SAT score between 800 and 1200, roughly plus or minus one standard deviation from the average of 1000. Roughly 60% of high SES students in the average ability group obtain a BA or higher degree. About 40% of students in the second quartile of SES with average academic ability obtain a BA or higher, and fewer than 20% of average ability students in the lowest quartile of SES obtain a BA or better.

In virtually every state there is a gap between the percentage of minority high school students and the percentage of college completers. The percentage point gap nationally is 13.3; in Colorado it is 14.4 percentage points. The gap is wider in twelve other states, mostly western and highly populated states with a large Latino population. The gap is smaller in 37 other states.

Ten years ago 20 percent of Colorado's high school graduates were minority. Today 30 percent of our high school graduates are minority. Ten years from now nearly half of Colorado's high school graduates will be minority. They haven't been born yet, but in twenty years I expect that more than half of our high school graduates will be Latino, African-American, Native American, or Asian.

Before I turn to the question of how we might increase educational attainment, I'd like to take an historical detour.

Two hundred years ago today, February 12, 1809, Thomas Jefferson was completing his second term as President of the United States and Abraham Lincoln was born. Both played a key role in shaping the American educational system.

In his plan for education in Virginia Jefferson advocated four years of universal education ("universal" meaning white males who could vote.) He believed democracy required voters who could read, so four years of education was essential for democracy.

But Jefferson also believed in a natural meritocracy. So after four years, he proposed the two best students in each local school should be given two more years of free education. From every school of sixth graders, he proposed selecting the two best students for two more years of free education. The process would continue each two years, advancing the top one or two students at every level to the next, culminating in a few scholarships to the University of Virginia. Through this means, Jefferson wrote, "we can rake a few geniuses from the rubble."

Jefferson's story illustrates the original purpose, and still dominant cultural value in American higher education, the education of elites. Things have changed, but sorting and selecting the best and the brightest still gets more attention than building the capacity of every student.

When Abraham Lincoln celebrated his 50th birthday in 1859, the nation was careening toward civil war. We often think of the achievements of the "Great Emancipator" near the end of his career, but it is instructive, I believe, to consider his journey.

You know the broad outlines and many details of the story; most of us have been reading about Abraham Lincoln since elementary school. On a recent long trip, however, I had the opportunity to read Doris Kearns Goodwin's *Team of Rivals*. Afterward, I was motivated to read *Tried by War*, by James McPherson, a great Lincoln historian. I gained a deeper understanding of Lincoln's challenges and his performance. I don't want to push the analogy too far, but Lincoln's story may be instructive for us today as we face the challenge of radically changing the status quo in educational attainment.

Lincoln first opposed just the expansion of slavery. While I expect he thought slavery was morally wrong, that was not clearly his primary motivation as young political leader. He was concerned about economic opportunity for ordinary white Americans, and worried that the expansion of slavery would cheapen the value of labor, cut off opportunity, and eventually make all workers poorer.

When the South left the Union, the departure of its Congressional delegation created some opportunities for Lincoln and his colleagues to pass legislation to open the West for development more rapidly and advance the abilities and opportunities of ordinary American workers. They passed the Morrill Act, which created land grant universities, and the Pacific Railway Act of 1862 which laid the groundwork for building the transcontinental railroad. Their strategy for economic development departed from the exploitive model of slavery and focused on the development of human talent and public infrastructure.

In reading about Lincoln recently, however, I was most struck by his challenges in building a supporting coalition for change. Many people wanted to preserve the Union, but a lot of them didn't like the cost in blood and money. As the war went on things got harder and harder; lost battles were very discouraging. Some clearly wanted to abolish slavery, but a good many people (and seemingly Lincoln early along) were ambivalent, and some were clearly opposed. Recall, for example, that Kentucky, Maryland, and Delaware stayed in the Union as slaveholding states, and the District of Columbia itself was a slaveholding state. Members of Lincoln's cabinet held slaves.

Lincoln's obsession was to preserve the Union while limiting the spread of slavery. Throughout his first term, and especially during the first two years, Lincoln struggled to manage conflicting factions in the north. His cabinet (the "Team of Rivals") included representatives of various factions, including strong Abolitionists and loyalist Union slaveholders. He was deeply concerned with the mid-term Congressional elections, and only after he managed to avoid serious losses and marginally strengthen his support in the Congress, did he have the freedom of movement needed to pursue the war.

Lincoln's biggest problem during the first two years may have been General George McClellan, General of the Army of the Potomac. McClellan was brilliant, clearly a gifted

leader, adored by his troops, and a master at organizing and training an army. He also was a charismatic Democrat, clearly a potential political rival (and eventually Lincoln's opponent in the 1864 election.)

Lincoln was completely convinced that the Union could be preserved only through the unconditional surrender of the Confederate Army. McClellan, however, either didn't clearly comprehend or accept Lincoln's objective. McClellan seemed to have no taste for fighting. His consistently exaggerated the strength of the enemy and his demands for additional supplies and troops were insatiable. It seems from the vantage point of history that he hoped the war could be ended by feints and maneuvers and the accumulation of overwhelming forces, never fully deployed in battle.

After success in the mid-term elections of 1862 Lincoln obtained enough freedom of movement to make the changes necessary to defeat the Confederacy. He fired McClellan. He emancipated the slaves, perhaps partly because it was the morally correct thing to do, but surely because he deeply wounded the Confederacy by doing so. Regiments of slaves abandoned the fields and the supply system of the Confederacy and joined the Union Army.

And eventually Lincoln found two Generals, Grant and Sherman, who understood the objective and did not shy away from a fight. Rather than making impossible demands, they used the available resources in troops and supplies (including plundering the Confederacy, of course) to get the job done.

Thank you for indulging my historical detour. I don't want to suggest our challenges are equivalent to Lincoln's, but they are great. Our challenges are to double the degree production rate of the 1960s without compromising quality, to achieve equal rates of college success for students of comparable ability regardless of socio-economic status, and to increase educational expectations and attainment for average ability students.

Charles Murray, in his recent book *Real Education,* which follows from his argument in *The Bell Curve,* argues that only a modest fraction of human beings can succeed at what he considered a "real" college education. I am not an expert on the scholarly arguments on the influence of nature, nurture, and human effort in academic achievement, but I'm willing to stick my neck out and say what I believe. I acknowledge that people differ naturally in their capacity to do certain kinds of work, academic and otherwise, but I don't think we have exhausted, by any stretch of the imagination, the capacity of human beings to learn and acquire higher order skills.

If we are fully committed to higher levels of educational attainment for a much larger fraction of the population, I believe we can do the job. It will take resources, but even more than resources, it will take focus, ingenuity, and persistence.

How can we achieve more student success? I think the only way is to have an educational system that is relentlessly focused on the objective and thoroughly designed to achieve it. Along with our colleagues in a number of other organizations, SHEEO

assembled a series of essays, *More Student Success,* to describe and elaborate the components of such a system. The following extended excerpt from the Executive Summary provides an overview.

> *More Student Success* considers six essential components of a P-20 system designed for student success:
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> 1. Early outreach programs – to encourage parents and students to have high aspirations and learn what is required for postsecondary success;
> 2. Curriculum and assessment systems – to specify the knowledge and skills that students need and to assess their progress;
> 3. High quality teaching – to enhance learning at every level of education;
> 4. Student financial assistance – to enable and encourage postsecondary enrollment;
> 5. Data and accountability systems – to monitor progress and chart paths for improving achievement; and
> 6. Postsecondary policies, programs, and practices intentionally *designed* to increase students' chances for success.
>
> *More Student Success* also explains the interrelationships among these components and argues that educators at every level from pre-school to postsecondary education need to work at common purposes to assure the success of the entire system.
>
> Highlights and recommendations from each of the essays are summarized below.

Early Outreach

Social scientists have long observed that the strongest predictor of participation in higher education is the education of one's parents. Children whose parents have participated in postsecondary education are automatically enrolled in a "program" that, early in life, exposes them to the advantages of higher education and the path to success. Children whose parents have not succeeded in postsecondary education need another way to get this information.

A variety of successful early outreach programs advance this objective. The most successful:

•   Focus on individual students and on what motivates and sustains their learning;
•   Engage young people in the context of their own culture and the community of their peers;
•   Make clear to young people the importance of postsecondary education to their future, and convince them that, no matter their backgrounds or their parents', it is possible to succeed if they do the right things, take the right courses, and work at their studies;
•   Make required academic standards very clear, beginning especially in the middle grades when courses taken and academic performance create or reduce future opportunities;

•   Give students regular feedback on academic strengths and areas needing improvement;
•   Provide high-quality teaching and coaching to help students improve; and
•   Provide convincing assurance (in several states a guarantee) that the cost of higher education will be within reach if a student takes the right courses and adequately demonstrates that he or she can succeed in college.

Early outreach programs must be well informed about the curriculum required for postsecondary success. They must also provide early information and assurance about affordability, actively involve excellent teachers, and draw on data and accountability systems for supportive diagnostic information.

Our most important observation about early outreach programs, however, is that the special, "add-on" programs that have helped many students are not sufficient. Vast numbers of students require early information and on-going coaching and assistance about postsecondary education. The key components of effective early outreach programs need to be completely embedded in the educational system. Every teacher in every classroom needs to be equipped to provide guidance and support to every student. Every teacher needs to have high expectations for student achievement. And every teacher and counselor needs to have the information and diagnostic resources necessary to help students succeed.

Curriculum and Assessment Systems

For more than twenty years research has made it clear that the courses students take in high school are very important to their success in college. In fact, a rigorous college preparatory curriculum in high school has been a better predictor of college success than test scores or high school grades.

Despite the evidence, many states have not required or encouraged students who aspire to college to take rigorous courses in high school. Also, many colleges have been lax in informing high schools and prospective students that the high school curriculum is crucial to college preparation and success. Even worse, some students have been "steered away" from rigorous courses because of stereotypes about their ability to succeed or because they have had some difficulty in the past. All too often the educational system has taken the expedient route, lowering students' expectations rather than helping students rise to the challenge of greater achievement. In too many cases a shortage of qualified teachers for college preparatory courses has contributed to this problem.

Fortunately, however, the accumulation of knowledge about this issue is beginning to overwhelm complacency and accelerate change. In 2005 a National Education Summit on High Schools, sponsored by Achieve and the National Governor's Association, outlined "An Action Agenda for Improving America's High Schools." The "American high school is obsolete," declared Bill Gates in a keynote speech at the summit, and the Bill and Melinda Gates Foundation, joined by other donors, has

provided direct support for reform initiatives in twenty-two states as well as for organizations that support state policy improvement.

The first item on the "Action Agenda" focused on restoring value to the high school diploma by aligning standards to the requirements for success in work and postsecondary education, upgrading high school coursework, and developing appropriate assessments for college and work readiness. A number of states are making significant progress on this issue. The most promising state efforts have:

• Made the college preparatory curriculum the "default" curriculum rather than the "honors" curriculum for high school graduation;
• Made the college preparatory curriculum a condition of eligibility for basic scholarship assistance or for merit scholarships;
• Forged agreements between K-12 and postsecondary institutions about the requirements for college-level study;
• Clearly aligned high school assessments of student ability with the qualifying examinations used by colleges and universities – particularly in the critical areas of mathematics and English language skills; and
• Incorporated end-of-course assessments to help assure consistent rigor and essential content across classrooms.

Twenty-nine states have joined Achieve's American Diploma Project (ADP) Network, which aims to strengthen high school standards, curricula, assessments, and data and accountability systems. Twenty-four states (16 of which are also ADP states) are participating in the State Scholars Initiative, a partnership between business and states to motivate high school students to take a rigorous curriculum. The California State University system developed, in collaboration with K-12 leaders, an Early Assessment Program that builds on existing high school assessments to help students close any gaps in their preparation for college work while in high school. Nine states are collaborating to develop and use a common Algebra II exam to improve instruction and give students a valid indicator of their preparation for additional work in mathematics. Other states and assessment organizations are working to design and implement end-of-course exams and other assessments to assure that students aspire to meaningful learning standards and that teachers provide the necessary instructional support. These efforts, when fully implemented in the states, will go a long way toward preparing high school graduates for work and postsecondary education.

The most common objections to such policies are: (1) More students will drop out of high school if all are forced to take difficult courses or pass high-stakes, end-of-course tests. (2) Students who are interested in technical or vocational postsecondary education may not need the college-preparatory curriculum. (3) It is not possible to recruit enough qualified teachers for widespread enrollment in college-preparatory courses. (4) High-stakes exams are discriminatory and punitive, especially when many students have had inadequate opportunity to learn.

While these worries are discounted by many analysts, such concerns clearly must be addressed. The bottom line, however, is even more clear: stronger curriculum and assessment policies must be implemented – and implemented widely--to achieve necessary levels of educational opportunity and achievement.

High-Quality Teaching

Widely accepted research now indicates that good teaching is perhaps the most important factor in increasing student learning. Most states are concerned with this issue, both because they want to increase the capacities of their teachers and because many face a serious shortage of teachers in the near future.

All of the usual reasons for being concerned about teaching capacity are compounded by the higher educational aspirations we have for the next generation. We have no reason to expect that the next generation of students will have greater academic aptitude than earlier generations – they will almost surely resemble their parents. But we want and need them to be better educated. This cannot happen without more effective, more engaging teaching.

Good teaching is a particularly salient P-20 issue because it is a joint product of the elementary-secondary and postsecondary systems. Postsecondary institutions are responsible for assuring that teachers: know the content they are responsible for teaching, know the research on effective teaching, understand the connection between curriculum and assessment, can use assessment to improve learning, and have acquired the basic skills required for effective teaching. Postsecondary and K-12 systems should be jointly responsible for giving prospective teachers an extensive period of well-supervised practice to help them hone their skills in real classroom settings and for continuing the professional development of teachers.

No state has done all it needs to do in this area, but the most effective state policies and practices:

• Bring arts and sciences faculty, education faculty, and practicing teachers together to define curricular standards for student learning and teacher preparation;
• Prepare K-12 teachers in the subject matter they will teach as well as in basic principles of pedagogy and children's cognitive development;
• Give prospective K-12 teachers substantial apprenticeship teaching and mentoring opportunities to prepare them for challenges they will encounter in their own classrooms;
• Provide adequate funding to ensure that apprenticeship – like the clinical training of medical practitioners –is a core component of the training program rather than a weakly-funded afterthought;
• Use assessment data to gauge student learning, and use feedback to improve teaching, teacher education, and curriculum;

- Incorporate technology into curriculum and instructional practices on university campuses, helping ensure that future K-12 teachers experience directly the capacity of such tools to enhance teaching and learning;
- Often use "soft money" for start-up initiatives that lead to sustained progress in building a culture of quality teaching in a state;
- Align key policies and practices with prevailing standards for students and teachers.

The success of early outreach, the definition and implementation of curricular standards, and the success of students in meeting those standards depend fundamentally on the quality, capacities, and practices of teachers in the classroom.

Student Financial Assistance

Unlike K-12 education in the United States, postsecondary education is not free, and the price has been rising. We will not be able to increase participation in postsecondary education successfully and substantially if low-income students cannot afford to attend. Nor will participation increase if students with limited financial resources do not believe, early in their school career, that college is affordable. Unless low-income students know well in advance that adequate aid is available, we cannot expect them to put forth the effort required to prepare for postsecondary education.

The federal government provides grants and loans for students, but without a state commitment, federal student aid does not assure affordability. Some states have attempted to assure affordability by keeping tuition and fees low, but this strategy is becoming less and less viable as enrollments and costs rise faster than state revenues.

Many states are experimenting with student assistance programs, often quite creatively. In addition to removing economic barriers facing poor students, they have used student assistance to motivate and reward academic achievement, to encourage able students to enroll in state institutions, and to encourage stronger academic preparation for college. All of these are legitimate goals, and targeted student assistance may help advance them. But given many goals and the expense of student financial assistance programs, states need to be certain that they are effectively and efficiently advancing the goals of greater participation and success in higher education.

The best examples of student assistance programs:

- Motivate students in grades K-12 to set high achievement goals and choose challenging courses;
- Are well-funded and highly visible – particularly to low-income students and their parents, who are most likely to be discouraged by the perception that a college education is beyond their means;
- Are well integrated with and complement federal and private aid programs;
- Reliably receive additional appropriations to cover increases in student costs;

- Fit the financial circumstances and educational goals of a wide range of students, including the most needy;
- Describe clearly the kinds of support that they provide students as well as the information that students and their parents will need to supply during the application process;
- Allow students reasonable freedom of choice and enable them to transfer from one institution to another without major impediments;
- Are accountable and appropriate to the goals they serve and can be evaluated by policy goals that are clearly defined and well understood among state policymakers.

Some states have approached student assistance by creating many small programs with complex rules. These usually fail to add up to the total need, and they also are,expensive to administer and confusing to parents and students. Such approaches are likely to hinder rather than help states reach the goals of greater participation and success in postsecondary education.

Recently a number of states have created or expanded programs that consider high school academic achievement and taking a college preparatory curriculum as criteria for receiving financial aid. The federal government has reinforced these efforts by providing additional aid to Pell Grant recipients who have taken a rigorous high school curriculum. Such efforts to stress the importance of academic effort and achievement can play a very useful role in building the foundation for a successful P-16 system. It is vitally important to recognize, however, that both affordability and adequate preparation for college must be widespread in order to meet the educational aspirations of the American people. States will need to strike a balance among their investments in different types of student assistance, their investments in the quality of educational programs, and their financial capacity.

Colleges Designed for Student Success

The surest pathway toward student success begins early and covers all the bases – early aspirations for college, familiarity with college "folkways," solid academic preparation, adequate financial support, and a single-minded focus on academic success. But many students who *can* succeed don't have all the bases covered. Many first generation students find college an unfamiliar world, where it is easy to lose one's way. Adult students encounter obstacles in the form of inflexible institutional policies and practices that make it difficult to get in and stay "engaged" as they struggle to balance work and family responsibilities with the demands of an academic program. Other students have to overcome inadequate academic preparation in order to do college level work.

Every year thousands of students withdraw from postsecondary education without completing a degree or certificate program. Many more of them would persist and succeed if colleges and universities deliberately and strategically re-designed

themselves to promote greater student success. The key components of a campus geared for student success include:

- Making student success a prominent feature of the institutional mission;
- Setting performance standards at high but attainable levels, and helping students reach them;
- Teaching first-year students how to use college resources, without delay;
- Building "communities of learners" that are organized around the classroom;
- Developing networks and early warning systems to support students needing help;
- Connecting *every* student to meaningful activities and positive role models;
- Finding and removing obstacles to student success; and
- Making successful practices widely available, rather than "boutique" programs which help just a few students.

While each of these practices can help more students succeed, their potential will be unfulfilled unless they become integral parts of a campus culture focused on successful student learning. Campus reward systems and policies must value undergraduate education and support student achievement. Residual attitudes and beliefs that dampen academic expectations and discount student potential must be replaced with high aspirations for all students and a commitment to experimenting with teaching approaches and policies that promise to yield better learning outcomes.

In the end, more student success depends both on a system that better prepares students for postsecondary education *and* a postsecondary system that serves more effectively those students who enroll.

Data and Accountability Systems

In many states the data and accountability systems for both K-12 and postsecondary education are poorly designed for the challenges of the twenty-first century. For most of the twentieth century student achievement was optional from the state perspective – those who achieved moved on to higher education and those who did not found reasonably well-paying, lower-skilled jobs. Consequently, states rarely collected information about students and student achievement; that was left to the individual efforts of schools and colleges.

As educational aspirations grew late in the twentieth century, the K-12 standards movement and postsecondary education performance reporting substantially increased state-level data collection. Most states began by collecting aggregated information about students enrolled in particular schools. Aggregated information has been used to identify issues and problems, but it has not been very successful in improving performance. The strongest state systems for data and accountability (see the full article for details on Florida, Maryland, Texas, and California's Cal-PASS system) now give leaders better tools for monitoring student progress over time and improving system performance. With the help of various national initiatives,

especially the Data Quality Campaign (DQC), more and more states are measuring their own capabilities against desirable benchmarks and improving their data systems.

Exemplary state data and accountability systems:

- Establish standards for K-12 achievement that lead naturally and seamlessly toward the standards required for admission and success in postsecondary education;
- Track the performance of individual students throughout their educational career (including into postsecondary education) in ways that:
- Permit teachers to diagnose and address learning gaps;
- Enable school leaders to assess the performance of a school in terms of the later success of its students;
- Enable school leaders to identify especially successful teaching techniques that merit broader use;
- Enable postsecondary leaders to assess their effectiveness in preparing teachers and school leaders; and
- Enable policymakers to assess system-wide performance in order to find paths for improvement.
- Increase the commitment among stakeholders to collect, analyze, and use information on student performance.

The best accountability systems are much more than reporting mechanisms. Good systems assess and improve K-12 and postsecondary achievement and lead to more students meeting the standards of admission and success in postsecondary education. They can also help K-12 and postsecondary partners align learning goals and educational strategies at each stage of the educational system.

Conclusion

These essays articulate what state educational systems can do, and perhaps what they must do, to enable the next generation of American youth to reach their educational goals. Collectively, they argue what is perhaps obvious: success in postsecondary education can become widespread only if the entire educational system – from early childhood through elementary school, high school, and college – is geared toward preparing and enabling students to become successful learners and workers at a high level of achievement.

Although these essays encourage systemic thinking and integration, they do not suggest a single "model" for each state situation. Effective state systems exhibit enormous variation in structure and detail, and bureaucratic uniformity has rarely produced educational excellence. If P-16 educators and policymakers agree on fundamental, substantive issues, states will be able to make real progress within their own traditions and structures. These essays do challenge states to make significant changes in policy and practice. But they do not suggest the impossible. Every state has the capacity to provide high-quality educational opportunities to every child and young person. We owe them no less.