Improving Achievement and Reducing the Gaps: Principles, Research Findings & Commentary[1]

Colorado Commission for High School Improvement - Committee on Improving Achievement and Reducing the Achievement Gap - Discussion Draft v1 - Prepared by Spud Van de Water – November 11, 2004

The Need to Re-design High Schools. Researchers, educators and policy wonks agree with what students have long known - high schools are in need of re-design. W. Norton Grubb and Marvin Lazerson, researchers from Berkeley and Penn respectively, recently summed up the case for change with this harsh analysis:

> *The rise and fall of the public comprehensive high school is one of the great tragedies of American education. When it took form in the first decades of the 20th century, the high school embodied enormous expectations: preparing youths for a labor market that offered serious jobs, facilitating access to college, and channeling the* Sturm und Drang *of adolescence into productive forms of citizenship. . . Through much of the 20th century, it stood as the centerpiece of America's educational system, the embodiment of the American Dream of getting ahead through schooling.*
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> *No one would make that claim today. The comprehensive high school is a blighted institution, with its academic purpose reduced to preparing some students for vocational study in college and its direct vocational role eliminated by the collapse of the youth labor market. It is now a place to warehouse young people until they move on to somewhere else. . .*
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> *Almost all discussions about secondary education today involve the reality that its only real purpose is to facilitate college entry. And, within that mandate, serious concerns with learning exist only among those few students, perhaps 5 percent to 10 percent, who aspire to highly selective colleges. For the rest, the academic curriculum is something to be endured; the goal is simply to accumulate credits and a minimal grade point average to get into some college. . .*
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> *Most students have become disengaged from learning of any sort. They believe that getting a degree will help them, but they do not associate that achievement with learning, at least not what schools have to teach. What counts in the labor market is the quantity of schooling an individual has completed, not the quality of learning, and so students have an incentive to continue as long as possible without expending more than the minimum amount of effort to pass . . . Despite the century-long hope of "high school for all," dropout rates are high, between 25 percent and 30 percent nationally, and considerably worse in urban districts and for minority students, where they run as high as 50 percent to 60 percent. And despite the efforts of the standards movement to invigorate learning and academic achievement in the high schools, little has been accomplished.*[2]

What should be done? Researchers and educators agree that the underlying causes are complex and cannot be solved by a single silver bullet. Revitalizing high schools requires a multi-pronged strategy set in a wider context that includes preparation for high school on the front end and collaboration with colleges and employers on the back end. This leads to a proposed first principle.

Principle #1. The high school experience is part of an education continuum that must prepare all graduates for their social, civic, and economic roles as adults in a changing society. In the 21st century, this means all students leaving high school must be prepared to enter postsecondary education without needing remediation.

Recurring Themes in Relevant Research. The P-16 literature provides the perspective of education as a continuum from pre-school through a baccalaureate degree. As the Education Commission of the States notes,

> *P-16 is a shorthand term for a student-focused, comprehensive and integrated system that links all education levels from preschool (P) through the senior year of college (16). It is a powerful framework for policymakers to use to improve teaching and learning and thus better prepare students for living, learning and working in a changing world. . . A comprehensive P-16 education system offers clear standards, an aligned and rigorous curriculum, effective assessments, clear expectations and widely shared responsibilities.*[3]

Since the Transitions Committee is examining the P-16 issue, the remainder of this section will concentrate on re-design issues within the high school years.

On the academic side, student success after high school requires greater academic achievement for all students and reductions in performance gaps among groups of students.[4] The research on academic achievement consistently points to a set of basic design features that high schools should exhibit if their goal is creating effective learning environments for young people. Michael Cohen, Senior Fellow at the Aspen Institute summarizes them this way (bold added):

> *Effective high schools have **high standards and expectations** for all their students, **a rigorous curriculum** that prepares them to attend postsecondary education without remediation, and **engaging instructional strategies**—such as in-depth projects and learning that takes place in the workplace as well as the classroom—that help each student learn important concepts and ideas in depth and see their practical applications. They have **well-prepared teachers** who not only know their content and how to deliver it but also how to connect with young people. New teachers are mentored and supported, and all teachers are continuously involved in high-quality professional development.[5]*

The Southern Regional Education Board's *High Schools That Work (HSTW)* initiative has used a comprehensive school reform design to improve student achievement since 1987. Here's what Gene Bottoms, director of the initiative, says about the results:

> *At the outset of the High Schools that Work (HSTW) initiative, almost all career-oriented young people in the high schools we served were low performing. In many instances, the schools themselves could be considered low performing. Today, more than 1,100 high schools in 35 states have adopted the HSTW improvement design and the gains in student achievement are promising. More than 50 high schools that have been in the network since the early-to mid-1990s have 85 percent of career-oriented students meeting performance goals in reading, mathematics and science and at least two-thirds completing the HSTW-recommended curriculum. These schools demonstrate what is possible when educators commit to an improvement design and "stay the course" in pursuing the vision over a period of time.[6]*

Colorado leaders have been aware of the need to raise achievement levels and close the achievement gap for some time. Governor Owens had this to say in 2001 when announcing Colorado's Closing the Achievement Gap Coalition:

> *"Improving learning for our neediest children must be at the heart of Colorado's education reform. It is not acceptable to say that a poor child or minority child can't learn. They can learn and it is my goal that we leave no child behind."*
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> *According to October 2000 CSAP results, only 48 percent of African American and 49 percent of Hispanic third-graders in Colorado were proficient or advanced in reading. By comparison, 78 percent of Colorado's Caucasian third-graders were proficient or advanced. The number of Colorado students who graduated or completed their high school education in 1999 consisted of 75.4 percent African American, 67.3 percent Hispanic, and 85.5 percent Caucasian.*
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> *The goal of the Coalition is to close the education learning gap between the haves and the have-nots. The achievement gap between these two groups is a chasm that jeopardizes our goal to make sure no child is left behind.[7]*

The Colorado Children's Campaign 2003 report, "A Call for High School Reform", details the "learning gap" in Colorado and the nation before concluding that a great deal of work remains to be done.

> *The problems that create and exacerbate the achievement gap are systemic and complex.*
> *They are bigger than any single school district or state agency can, in and of itself, overcome. However, if we combine the efforts of educators, policy makers, business leaders, foundation representatives, and parents, we can transform the culture of poor achievement and low expectations that characterize current high schooling in Colorado*
> *. . . Sadly, little is currently being done to address the realities pertaining to high attrition and low achievement outlined in this paper. . . The energetic language of the 2001 Closing the Gap resolution has not been matched with similarly energetic funding. . . Closing the Gap resolution, which purports to bite into education inequities in Colorado, is toothless. . . As with any complex issue, there are plenty of reasons and excuses that can be raised regarding why things are as they are. Yet the fact remains: no constellation of policies or strategies exist within Colorado school districts or at the state level targeted at closing an achievement gap that widens as students progress through secondary education.[8]*

Commentary. We know there's a problem with high schools, both nationally and in Colorado. We have the research and experience to guide us toward a solution. We have examples of success in other places.[9] In Colorado, the underlying problem is that secondary school reform is not high on the state's political agenda so the state's political leaders consistently duck any proposed action that would upset the status quo and/or demand additional resources. Assuming the Commission will not be content to simply issue another call for action and disband, its greatest potential accomplishment lies in developing an action plan and successfully selling it to the state's political leadership over the next year.

Principle #2. Policy decisions should be data-driven based on a comprehensive, standardized, timely, accurate, and open education database that follows individual students from entry into public education through participation in the workforce.

Recurring Themes in Relevant Research. Standards-based education systems benefit from sophisticated data support systems based on individual performance cumulated over time. After examining state data efforts across the country in both K-12 and postsecondary education, two researchers commissioned by a national nonprofit came to this conclusion:

> *"Data systems designed for the new century will need to provide a comprehensive foundation for documenting the achievement of students, schools, and colleges, while improving the ability to respond to questions about a state's investment in education. . . Effective and comprehensive systems share several common characteristics. They inform all stakeholders of the condition of education at various levels. They enable states to identify effective educational practices and diagnose problems. They have the potential to increase the commitment among stakeholders to collect, analyze, and use information on student performance. Effective systems also have the ability to identify programs, schools, and students that are successful, in addition to those that need attention and assistance to become more successful. Finally, such systems help K-12 students and teachers focus on the curricula and content that must be mastered to be successful in postsecondary education."*[10]

The authors go on to note that, as of 2002, K-12 systems in 22 states are using an individual student-level record system and 15 more are designing such systems. This movement has been reinforced by the requirements of the federal No Child Left Behind Act that requires that all students be included in a state's accountability system. At the postsecondary level, 39 states currently collect data based on individual student records (known as unit record databases).

Although much data is already available, major data problems remain in building unit record systems capable of tracking students across multiple levels of education and through a variety of geographical locations, including the nature and definitions of data collected, timing of data collection, nature of student identifiers and, particularly between high school and college, linking databases. Florida is a leader among the many states working to resolve these issues. Florida's K-20 data warehouse is designed to support its efforts to create a K-20 system. *"The mission of the Florida Education Data Warehouse (EDW) is to provide stakeholders in public education – including, but not limited to, administrators, educators, parents, students, state leadership, and professional organizations – with the capability of receiving timely, efficient, consistent responses to inquiries into Florida's Kindergarten through University education system."*[11]

Commentary. Having accurate, timely data is good. Using data is better. The Commission has an opportunity to model the kinds of behavior it would like to see political leaders, state agencies, school districts, and colleges employ when addressing difficult education issues.

Commission members might steal a page from The Education Trust's book. The EdTrust is especially good at using data to make the case for school improvement. Most of their work focuses on national data trends but, with some effort, their approach could be adapted to Colorado and reported in the Commission's 2005 report. A recent presentation on "Improving Achievement and Closing Gaps Between Groups" by the EdTrust's Kati Haycock to the Colorado Staff Development Council provides a good example.[12] Another is "Youth at the Crossroads: Facing High School and Beyond", done for the National Commission on the High School Senior Year.[13] The EdTrust's "Education Watch 2004" database provides state-by-state summaries of students' educational achievement and opportunity.[14]

Principle #3. Because <u>all</u> students are expected to achieve at higher levels, support systems must be in place to ensure that students have the resources they need to master the academic material as well as develop the social and civic skills necessary to becoming successful adults.

Adria Steinberg captures the need to go beyond a strictly academic focus when talking about adolescents:

> *The proposed policy solution, to raise the standards for high school graduation and college entrance, fails to take into account the supports and opportunities young people must have if they are to meet these standards. School districts have fallen back on old strategies such as grade retention and mandatory summer school - practices that have been tried and failed before and are unlikely to produce dramatic results or alter significantly the life chances of large numbers of young people. Increasingly, practitioners and policymakers alike are recognizing the need to take positive aspects of the standards movement - in particular the ideal of high expectations for all - and move beyond the limitations of traditional institutional arrangements in order to address other fundamental issues linked to student success.*

This challenge involves designing policies, learning environments, and practices that are responsive to the developmental tasks of the "coming of age" group and particularly to the set of supports and opportunities that will help young people to deal with the transitions, fluidity, and mobility of this period of their lives.[15]

Following a similar line of thought, Michael Cohen writes:

Good high schools are student-centered. They provide caring, personalized environments and make sure each student is known well by at least one adult. Students have a say in how the school is run. In good high schools, students are not anonymous and do not fall through the cracks. Young people get help in developing the array of skills, attitudes, and dispositions that will enable them to make it in mainstream adult society. These include a sense of personal worth and identity, a positive assessment of the future and how to plan for it, a sense of civic responsibility and a commitment to give back to their community, and attitudes of persistence, reflection, responsibility, and reliability.[16]

Successful schools in the *High Schools That Work* initiative have learned that high expectations alone will not get the job done. Gene Bottoms writes that

> *. . . if higher expectations are not accompanied by more intensive support for struggling students, many more will be unsuccessful. The tendency is to either fail students or socially promote them even though they have not really passed. Neither approach is an acceptable alternative for both set the students on a course of failure. The only alternative is a set of intervention strategies that result in students meeting standards.*
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> *Schools that improve mentor, coach and re-teach students to meet higher standards. They find the extra time needed for students to meet achievement goals. Extra help may take the form of a support class with a nurturing teacher who teaches students how to study, organize their time, and learn in teams with other students. Extra help can occur before, during and after school and on Saturday and often involves tutoring and coaching by teachers or advanced students. Effective schools make parents aware of the extra-help program and enlist their support. They also require failing students to participate. These are new concepts for low-performing schools. As long as students take "watered-down" courses, they do not realize they are falling behind. It is only when a school decides to teach all students to the same high standards that students and parents see the need for extra help.*[17]

Commentary. First and foremost, achievement means mastery of academic content to the level specified in state standards. A sometimes overlooked key to success is the support services that permit struggling students to meet demanding standards. The Commission will serve Colorado students well if it emphasizes this critical connection and works to secure the funding necessary to make strong support systems a reality.

Conclusion. Changing an American icon is a daunting proposition. Fortunately for Coloradoans, others – like the *High Schools that Work* initiative and state efforts in Maine, Rhode Island, Vermont and California - have accepted the challenge laid out by research over the last twenty years and blazed the trail.[18]

Building on the work of others eases the Commission's job and allows it to focus on three key questions:

> (1) Can the Commission speak eloquently and clearly about a common vision for re-designing high schools in Colorado?
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> (2) Should the Commission place its work on high schools in the broader context of an education continuum extending from pre-school through the baccalaureate degree?
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> (3) Will the Commission be able to generate the political clout necessary to make a difference?

Affirmative answers to these three questions will put Colorado on a path to significant improvements in overall achievement levels and large reductions in achievement gaps among groups.

End Notes

[1] This paper builds on recent conversations of the Colorado Commission for High School Improvement's committee on improving achievement and reducing achievement gaps. It is designed to stimulate dialogue among Commission members as well as summarize important research on student achievement issues. Data on Colorado's achievement levels and gaps is not reiterated here. Good summaries may be found in the Colorado Children's Campaign publication, "A Call for High School Reform", March 2003, and the Bell Policy Center's report, "No Excuses" (forthcoming).

[2] W. Norton Grubb and Marvin Lazerson, "Is the Comprehensive High School Doomed?", commentary in Education Week, September 22, 2004 (Vol. 24, Issue 04, Pages 42,52). The full article is available on the web at http://www.edweek.org/ew/articles/2004/09/22/04lazerson.h24.html. For others' analyses of the need to re-design high schools, see the Aspen Institute Series on transforming high schools (free downloads available at http://www.aspeninstitute.org/bookstore.asp?i=92), American Youth Policy Forum's report on High Schools of the Millennium (http://www.aypf.org/publicatons/HSchools_round_3.pdf) or Colorado Children's Campaign, "A Call for High School Reform", 2003. On the web at http://www.coloradokids.org/PDF%20files/A%20Call%20for%20High%20School%20Reform.pdf.

[3] Carl Krueger, Terese Rainwater, and Spud Van de Water, "The Case for P-16: Designing an Integrated Learning System, Preschool Through Postsecondary Education", Denver: Education Commission of the States, 2002 (on the web at http://www.ecs.org/ecsmain.asp?page=/search/default.asp).

[4] Excellent summaries of current conditions may be found in the reports of The Education Trust (www.edtrust.org). A summary of their latest study, "Measured Progress: Achievement Rises and Gaps Narrow, But Too Slowly", may be found on the web at http://www2.edtrust.org/NR/rdonlyres/F1C402F7-AB53-49ED-A9DC-27A41AA6E7E5/0/MeasuredProgressSumma99F.pdf.

[5] Michael Cohen, "Transforming the American High School: New Directions for State and Local Policy", The Aspen Institute, December 2001 (available as a free download at http://www.aspeninstitute.org/bookstore.asp?i=92). See also, Scott Joftus, "Every Child a Graduate: A Framework for an Excellent Education for all Middle and High School Students", Alliance for Excellent Education, September 2002 (on the web at www.All4Ed.org).

[6] Gene Bottoms, "Raising the Achievement of Low-Performing Students: What High Schools Should Do". Paper prepared for the Office of Vocational and Adult Education, U.S. Department of Education. April 2002. Note: in HSTW parlance "career-oriented" means any student not going on to a highly selective postsecondary institution. In other words, about 95% of all high school graduates.

[7] From Governor Owen's press release, February 21, 2001 (on the web at http://www.state.co.us/owenspress/02-21-01a.htm).

[8] Colorado Children's Campaign, "A Call for High School Reform", 2003 (on the web at http://www.coloradokids.org/PDF%20files/A%20Call%20for%20High%20School%20Reform.pdf).

[9] See Robert Rothman, "Closing the Achievement Gap: How Schools are Making it Happen", The Journal of the Annenberg Challenge, Winter 2001/2002 (Vol 5, No. 2) (on the web at http://www.annenbergchallenge.org/pubs/cj/cjv5n2.pdf). See also Sonia Jurich and Steve Estes, "Raising Academic Achievement for America's Youth: A Study of 20 Successful Programs", American Youth Policy Forum, 2000 (on the web at http://www.aypf.org/RAA/index.htm).

[10] Hans P. L'Orange and Richard A. Voorhees, "Data and Accountability Systems" in Student Success: Statewide P-16 Systems. State Higher Education Executive Officers (SHEEO). Denver. 2003. Order from SHEEO, 700 Broadway, Suite 1200, Denver, CO 80203.

[11] For more information visit the Florida Education Data Warehouse site at http://edwapp.doe.state.fl.us/doe/.

[12] Download a free copy at http://www2.edtrust.org/edtrust/Product+Catalog/recent+presentations.

[13] Download a free copy at http://www2.edtrust.org/edtrust/product+catalog/reports+and+publications.htm.

[14] See Colorado's summary at http://www2.edtrust.org/edtrust/summaries2004/Colorado.pdf.

[15] Adria Steinberg, "Coming of Age in 2001", a paper prepared for Jobs for the Future's *From Margins to Mainstream* initiative (on the web at http://www.jff.org/jff/approaches/youthtrans/showcase/margins_coming_of_age.html). See also, Jobs for the Future, "From the Margins to the Mainstream: The Five C's: Essential Supports and Opportunities" (on the web at http://www.jff.org/jff/approaches/youthtrans/showcase/margins_FiveCs.html).

[16] Michael Cohen, "Transforming the American High School: New Directions for State and Local Policy", The Aspen Institute, December 2001 (available as a free download at http://www.aspeninstitute.org/bookstore.asp?i=92).

[17] Gene Bottoms, "Raising the Achievement of Low-Performing Students: What High Schools Should Do". Paper prepared for the Office of Vocational and Adult Education, U.S. Department of Education, April 2002, p. 24.

[18] *High Schools That Work* information may be found at http://www.sreb.org/programs/hstw/hstwindex.asp. Descriptions of state efforts may be found in the Aspen Institute report, "Rethinking High School: The Next Frontier for State Policymakers" (on the web at http://www.aspeninstitute.org/bookdetails.asp?i=92&d=196).