

HIGH SCHOOLS OF THE MILLENNIUM

REPORT OF THE WORKGROUP

American Youth Policy Forum

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CONTENTS

Acknowledgments	ii
Executive Summary	iii
Introduction	1
I. High Schools of the Millennium Workgroup	3
II. Why High Schools Need to Change	5
III. Obstacles to Change	15
IV. Vision of a High School of the Millennium	19
V. Strategies to Redesign High Schools	31
Federal and National Strategies	31
State Strategies	33
Local Strategies	35
VI. Conclusion	39
Appendix: Principles and Characteristics of High School Reform Efforts	41
References	47
High Schools of the Millennium Workgroup Members	49

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Each participant in this process contributed meaningful and insightful ideas about high school redesign. Sometimes the discussions were uncomfortable for us, as we explored our own perceptions of and experiences with secondary schools. But the group never wavered in its commitment to improving the life chances of our youth—all of our youth.

A hearty thanks to the Workgroup for their intellect, skillful debating, challenging ideas, and for continuing to push for policies and practices that will defeat the status quo.

Betsy Brand and Glenda Partee
American Youth Policy Forum

EXECUTIVE SUMMARY

While the world around us continues to change at unprecedented rates, most high schools have been slow or resistant to change. The high school experience no longer can be limited to learning that occurs only inside a traditional school building. Rather, the learning experience for teens must use all of the resources that a community has to offer.

High schools need to be redesigned to meet the needs of today's youth. School administrators and teachers must engage others in the community in the enhancement of the education and development of teens. This new concept of a learning experience for youth must recognize that there are multiple teachers and caring adults and resources available throughout the community that can be drawn on to strengthen the learning experience in ways that neither schools nor community agencies alone can accomplish. Small, individualized, and caring learning communities must be created to help students manage the transitions in their lives and become active learners for life.

The high schools of the millennium group

With this underlying belief, a group of people concerned about the high school experience for youth came together in Washington, DC in 1999 and 2000 for a series of meetings organized by the American Youth Policy Forum (AYPF). The group consisted of individuals who work in the fields of education, including standards-based reform and career-technical education; service-learning; youth development; and community education.

The High Schools of the Millennium Workgroup spent time discussing a number of issues that are forcing communities to change. The number one issue is that the world as we know it has changed and our schools and other social institutions must respond and

adapt to that change. Education is inextricably linked to economic and social issues and trends, which have contributed to the difficulties that schools, particularly urban schools, face today. The Workgroup believes that the response to this change cannot fall on the shoulders of the public education system alone; we are all responsible.

Why high schools need to change

There are many pressures in today's society that are forcing change on how high schools are structured, how teaching and learning occurs, and how youth are supported in their development. The Workgroup identified the following issues that are forcing communities to reassess their public education systems:

- **Student Performance**—National and international tests indicate that while American students have shown improvement in the last ten to fifteen years, that improvement is not enough to keep pace with the demands of today's society and economy, and poor students generally do worse on standardized tests.
 - **Standards-based Reform**—The focus on standards and high-stakes testing means that educators must find ways to help students, particularly disadvantaged students and those not achieving at grade level, to master rigorous coursework, which generally means changing the way students are taught and taking advantage of the ways they learn best.
 - **Assessments**—Most assessments are limited in the types of knowledge they measure and are most often used as high-stakes tests to determine grade promotion or graduation, rather than being used to gauge a student's strengths and weaknesses on an ongoing basis.
 - **Limited Learning Options**—High schools are still dominated by lecture-style classes, where the content is divorced from the real world, and students have limited opportunities for learning in the community.
 - **Needs of Urban Schools**—The dropout rate in urban schools remains unacceptably high—60 percent in some urban school districts—and resources and community supports are often scarce where needs are great.
 - **Student Disengagement from the Learning Process**—Today's students feel as though high school is irrelevant, that classes are boring, and that they are just passing time until something important, like college or a career, comes to pass.
 - **The Global Economy**—Employers indicate that skill shortages are the number one barrier to growth, and most jobs will require some postsecondary education.
 - **Expansion of Information Through Technology**—The amount of information available to students, at any time, in any place, will change the traditional notion of where and how learning happens and how teachers teach.
 - **Teacher Workforce**—Teachers have a significant impact on student learning, yet the shortage of math and science teachers and the number of teachers teaching outside of their content area, mostly in urban school districts, means lower student achievement for many students.
 - **Public Interest**—Education, including school safety and student achievement, is the number one concern of the public in 2000.
 - **Legislative Issues**—A number of legislative initiatives that affect elementary, secondary and postsecondary education and workforce development are now being considered at the federal, state, and local levels.
- All of these issues are placing pressure on schools and communities to rethink how youth are educated and to consider a major redesign of high school.
- ### Obstacles to change
- The Workgroup also discussed a number of reasons why it is so difficult to bring about change in the education system. The issues identified by the High Schools of the Millennium Workgroup are some of the most critical issues to be dealt with.
- **Parental Expectations and Community Values**—Differing expectations of the education system often prevent the development of a shared vision and community-wide change strategy.
 - **Resource Allocation**—There are significant inequalities in funding for public schools, with vast differences between suburban and urban school districts, as well as funding inequalities within schools for certain groups

of students, and these funding decisions are usually made without the full input of the community, parents, and students.

- **The Culture of School**—Schools often have a culture that is risk-averse, hierarchical and that discourages communication, sharing of information, empowerment of workers and students, and innovation.
- **Diversity**—Communities consist of diverse groups—ethnically, racially, economically, and politically — with a wide range of interests that need to be involved in any change process, but often they are not included.
- **Governance**—The turnover and politicization of leadership, particularly at the district and school level, create major road-blocks to systemic and long-term change.

While these are stiff challenges, the High Schools of the Millennium Workgroup believes they can be overcome, by starting, first of all, with a clear vision of what the learning experience for high school-aged youth should be.

Vision of a high school of the millennium

The vision of a new learning experience for teens presented here is based on numerous reform efforts and experiments engaged in by many people over the past decade and more. It is also based on the best thinking and practice of several fields: whole school and standards-based reform; career preparation programs; youth development; community education; and service-learning. The High Schools of the Millennium Workgroup has tried to build on the best ideas of all these fields and integrate the most promising strategies and principles in a manner both complementary and synergistic. (The diagram on pages vi-vii shows the key elements of a High School of the Millennium.)

While it is difficult to achieve this vision of a High School of the Millennium in its entirety, the Workgroup urges communities to begin

the process of a major redesign of their secondary school systems based on these expectations. The Workgroup encourages federal and state agencies and foundations to provide support for comprehensive redesign efforts and for those individuals committed to change. However, the Workgroup realizes that change along this scale is not always possible. Most communities will begin with a few small changes, a few small wins, and then tackle larger issues as momentum for change grows. Both strategies are acceptable, and both need support from funders.

The Workgroup finished its task by developing strategies needed to achieve the vision of a High School of the Millennium.

Strategies for Federal and National, State, and Local leaders

- **Strategies for Federal and National Leaders**—The Congress and the U.S. Department of Education play an extraordinarily important role in providing leadership through the priorities written into federal law and regulations. The Congress, as it appropriates dollars and considers education legislation, such as the reauthorization of the Elementary and Secondary Education Act, and the Department of Education, as it develops and implements current programs, need to send clear messages about expectations for a redesigned secondary school experience. At the same time, the federal government must enter into partnerships with a wide range of national organizations to create a national dialogue on the need for change in high school. Strategies include the following: Establish a Vision and Set a National Agenda for High School Redesign (establish a National Commission on the High School); Provide Resources to Support High School Redesign through Federal Laws; Improve Accountability; Conduct and Share Research and Development; Support Innovation and Collaboration; and Increase Youth Voices and Engagement.

KEY ELEMENTS *of a* HIGH SCHOOL *of the* MILLENNIUM

VISION, STANDARDS AND EXPECTATIONS —

Communities create High Schools of the Millennium when they have a clear vision of the standards, expectations and educational experience they want for ALL their youth. A High School of the Millennium sets high academic standards that are challenging and that reflect the community's expectation of the knowledge and skills needed for full and meaningful adult lives and participation in a civic society.

PRINCIPLES OF YOUTH DEVELOPMENT — A High School of the Millennium recognizes the needs, beyond the academic needs, of high school-aged youth and embraces a youth development approach to create engaging learning opportunities. It helps prepare youth for lifelong learning, civic involvement, leadership, and careers and engages young people in learning, work, and service throughout their community. High Schools of the Millennium surround youth with caring and competent adults to help them navigate not only the challenges of high school and preparation for college and further learning, but also the stages of adolescence.

NEW FORMS OF ASSESSMENT — Assessments are used on an ongoing-basis to determine how well students are learning the coursework and to provide information to teachers about how to alter or modify their practice to better meet their students' needs. High Schools of the Millennium use multiple assessments for demonstrating learning in recognition that no one test can truly measure a student's knowledge, understanding, and skills.

IMMERSION IN THE ADULT WORLD — High Schools of the Millennium recognize the importance of an advocate in a child's life and ensure that each student has a relationship with at least one caring adult and, hopefully, many of them in various settings. Students have opportunities to experience authentic learning situations with adults — at work, in the community, through volunteer activities, sports, clubs, band, or other youth groups.

USING THE COMMUNITY FOR LEARNING — Underlying a High School of the Millennium is its connection and relationship to the community and its resources that support learning. The community and the educational system partner to ensure that all students have access to the supportive networks to allow them to pass through adolescence safely and with high levels of achievement. The High School of the Millennium is a critical piece of the system of lifelong learning that exists in the community.

STRUCTURE AND ORGANIZATION — A High School of the Millennium is designed to provide small, personalized, and caring learning communities for students, with a clear focus on a career, academic, or thematic topic.

ACCOUNTABILITY — High Schools of the Millennium are accountable to the community (both the learning community and the broader community) and provide information on their performance on a regular basis. The wider community measures its performance in the development of healthy and successful youth by looking at a variety of youth indicators.

TEACHING AND LEARNING — Learning occurs in a wide variety of settings and contexts, in teams and independently. Learning occurs anytime, anywhere: at home, in the community and work settings. Students have many opportunities to engage in authentic learning, which involves them in the creation of knowledge, disciplined inquiry, and engagement in real-world issues. The general and vocational tracks do not exist; all students are expected to pursue a course of studies that leads to high academic achievement with the goal of postsecondary education leading to careers. Teaching and learning is competency-based, not time-based or credit based. All students have the opportunity to experience learning in the community. Teachers are highly competent, have access to on-going professional development, externships in the community, and are given authority for determining the curriculum. Principals provide instructional leadership for the high school.

- **Strategies for State Leaders**—State government can provide significant leadership to local school districts and communities by starting and encouraging a dialogue on a new vision for secondary schools, best practices, and strategies for change. Consistent messages from the governor, the chief state school officer, and all cabinet agencies affecting youth will help focus energies and align efforts. Efforts to design and develop new approaches to the traditional high school must include a wide range of perspectives and involve youth, parents, and those involved in standards-based reform, career preparation such as school-to-work and Tech Prep, service-learning, community-based organization schools, youth development, and workforce development. Recommendations are that state leaders Create a Vision and Align Systems; Redesign the High School; Ensure Qualified Leaders and Teachers; Promote Continuous Improvement; and Increase Youth Voices and Engagement.

- **Strategies for Local Leaders**—At the local level, it is particularly important that a core of leaders across agencies in the community come together to develop a shared vision of the learning experience for high school-aged youth. School personnel, employers, local elected officials, school board members, parents, youth, representatives of community-based organizations and postsecondary education, youth-serving agencies, and faith-based organizations need to be involved in this community visioning team. The visioning team must be able to answer the question affirmatively, “Can we ensure that every youth, whether currently in the educational system or not, gets the high-quality education to which s/he has a basic right?” in ways that are both clear and realistic, for the youth and

his or her parents. At the community level, strategies focus on Creating a Community Vision of the Learning Experience for High School-aged Youth; Redesigning the High School to Enhance Student Learning and Achievement; Ensuring Qualified Leaders and Teachers; Promoting Continuous Improvement; and Increasing Youth Voices and Engagement.

Conclusion

The High Schools of the Millennium Workgroup recognizes the enormous difficulty of redesigning high schools, as well the time it takes to affect such significant change. No one expects a High School of the Millennium to appear overnight or to be perfectly executed in all dimensions in the short term.

Creating a vision of a **High School of a Millennium** is only a first step—but it is an important step. From here, we must continue the conversation with policymakers and practitioners to get their “buy-in” to the concept of supporting the redesign of high schools. We must continue to widen the circle to include others not already represented, but who should be, and to identify those who are already engaged in significant change so they can serve as beacons. We must continue to take on some of the tough policy issues, such as high-stakes tests and alternative assessments, helping disadvantaged students to catch up and meet standards, attracting and keeping high quality and skilled teachers, accountability to the community, and allocation of resources. By providing opportunities for debate and discussion, we can come to common policy solutions designed to help all youth learn and achieve.

INTRODUCTION

In considering the reform of high schools, one is confronted with an American institution of almost mythic proportions. While each of us has our own perspective of what high school was like, Americans share a collective concept of high school that is strongly rooted in our society. Our culture popularizes a monolithic picture of high schools: large, imposing buildings; bustling hallways with lockers slamming and bells ringing; happy, energetic, and frenetic teens; athletic teams, homecoming and proms; youth able to manage the four years of classes and emerge prepared for college, work, and life. For generations, we have assumed that this model of education is a good one. It worked for us, so why change it?

The reality is that many young people today are not being prepared for college, work, or life during their high school years. Statistics bear this out. While it is true that the numbers of students entering postsecondary education have increased in the past ten years, only about 28 percent of high school graduates ages 25–29 completed a bachelor’s degree, and only eight percent completed an associate’s degree.¹ Of the high school graduates who go to college, approximately 30 percent need to take a remedial course in basic subjects like English and algebra. This level of preparation is not sufficient for the constantly evolving workplace, which now demands higher skill levels.

Economically, the standing of young men and women with limited education is very weak. In 1997, the unemployment rate for minority youth (age 16–24) with a high school diploma was 25.7 percent, vastly higher than the current national average of 4 percent. In 1996, young families (under age 30) headed by a high school dropout earned about \$15,000

annually, compared with \$26,000 for those headed by a high school graduate and \$53,000 for a family headed by a college graduate.²

Socially, many young people are disaffected and unconnected to the adult world. The recent spate of violence in American high schools is a tragic indicator that the high school experience is unhealthy for many adolescents. This is particularly true for young men and youth of color.

Many teens are falling through the cracks academically and emotionally. They are not receiving the support and preparation they need to reach their full potential as learners or to be educationally and socially productive members of our communities. The personalization of the teaching and learning process is simply not a part of the culture in most high schools. Changes in family structure and work patterns, vast technological change, the saturation of information over the Internet

¹ U.S. Department of Commerce, Bureau of Census, Current Population Survey, March 1999.

² The Forgotten Half Revisited, Ed. Samuel Halperin, American Youth Policy Forum, 1998.

HIGH SCHOOLS OF THE MILLENNIUM WORKGROUP VISION FOR A NEW LEARNING EXPERIENCE FOR YOUTH

It is possible to think radically—on a totally clean slate—about what constitutes the best futuristic scenario for young people, ages 14–18. This would mean not tinkering with the existing high school structure as we know it, but rather starting fresh with a blank canvas. The Workgroup did consider some quite sharp departures from current policy and practice. Yet, for the most part, our focus was on dealing with the system we have inherited and improving it in terms of what the Workgroup considered to be both educationally desirable and politically feasible. While some might find our recommendations too tepid for their tastes, we believe the weight of our report will result in high schools substantially more effective than those available to most young people today. However, we believe that we should not be content to just fiddle with our current high school structure. We urge “break the mold” experimentation with rigorous evaluation, supported through federal, state, and foundation dollars, to determine what really works in the redesign of high schools. We support those courageous community and educational leaders who take on the task of completely redesigning their high schools. We know how hard it is.

and through other media, and the dangers of drugs, crime, and violence have radically altered the way children grow up and learn. Students themselves have changed from previous generations.

A non-traditional educator, Leon Botstein, President of Bard College, argues that the “primary reason high school doesn’t work anymore . . . is that young people mature substantially earlier in the late 20th Century than they did when the high school was invented.”³ In reality, teens today mature physically and sexually at earlier ages (13–15), but they are not expected to assume adult roles and responsibilities until they are much older (18–19), creating a tension in society’s expectations of and attitudes toward young

people. These trends raise questions about whether our high schools are appropriate in today’s dramatically altered society and whether they provide the best learning environment for today’s students.

We believe it’s time to rethink what the high school experience for teenagers should be in order to meet these new challenges. It’s time to rethink how we, as a society, help teenagers prepare for a global, high skilled economy, an increasingly diverse society, vast reliance on technology, and few boundaries in terms of commerce, information, work, and learning. It’s time to rethink how we help our youth become caring, connected, productive members of our society, especially at a time when they have fewer supportive adults in their lives.

³ Botstein, Leon. *Jefferson’s Children: Education and the Promise of American Culture*, Doubleday, NY, 1997.

I: HIGH SCHOOLS OF THE MILLENNIUM WORKGROUP

A group of people⁴ concerned about the high school experience for youth came together in Washington, DC in 1999 and 2000 for a series of meetings organized by the American Youth Policy Forum (AYPF). The group consists of individuals who work in the fields of education, including standards-based reform and career-technical education; service-learning; youth development; and community education. This paper summarizes the collective thinking of the group and lays out a vision of a very different learning experience for teens than the one we now know.

The goals of the group were to:

- Raise awareness of the need to dramatically alter high schools to meet the needs of students, and to increase their achievement, aspirations, and preparation for careers.
- Seek agreement on what an ideal learning experience for teens should look like and identify what experiences and conditions are necessary to help students achieve to high standards.
- Inform others about the present conditions of secondary-level education and suggest policies that may be useful in improving schooling for youth in the teenage years.
- Provide policymakers involved in high school reform, including those working on the reauthorization of the Elementary and Secondary Education Act (ESEA), a blueprint for high schools of the future.

- Inform governors, state legislators, and other policymakers as they deal with issues of state academic standards, high-stakes testing, and high school exit exams.

The High Schools of the Millennium Workgroup used and built upon the work of other reform-minded efforts, such as the “Breaking Ranks: Changing an American Institution” report (1996) of the National Association of Secondary School Principals and the “Future of School-To-Work” group organized jointly by the Institute for Educational Leadership (IEL) and AYPF (2000). However, this group differs from those efforts in that:

- There is an emerging interest in linking education reform with a wide range of community resources and programs that provide experiential opportunities for student learning, building on the lessons from school-to-career initiatives, service-learning, and community schooling models and

⁴ A list of Millennium Workgroup members appears at the end of the document.

- The group is challenging the model of the self-contained high school as we know it, embracing a more expansive notion of student learning that includes using multiple sites, players, and providers.

This report contains a discussion of Why High Schools Need to Change (Section II); Obstacles to Change (Section III); the Workgroup's Vision of a High School of the Millennium (Section IV); and Strategies for Federal and National, State, and Local Leaders (Section V).

II: WHY HIGH SCHOOLS NEED TO CHANGE

The burdens and expectations placed on public schools are enormous. Education is inextricably linked to economic and social issues and trends, which have contributed to the difficult situation many schools, particularly urban schools, face today. During the Workgroup discussions, a number of issues forcing change in our communities were considered. Fueling the need for change is that the world as we know it has changed and our responses must reflect this.

The Workgroup came together as a thoughtful and action-oriented group, interested in affecting positive change in our nation's high schools. They did not join together to blame or to point fingers. Their interest is in helping youth succeed—educationally, economically, and socially. The Workgroup also believes that the response to this change cannot fall solely on the shoulders of the public education system; we all have a responsibility to help.

The Workgroup identified the following issues forcing communities to reassess their educational system: Student Performance, Standards-based Reform, Assessments, Limited Learning Options, Needs of Urban Schools, Student Disengagement from the Learning Process, The Global Economy, Expansion of Information Through Technology, Teacher Workforce, Public Interest, and Legislative Issues.

Student Performance

Since 1983, when “A Nation at Risk” was published, little has changed in many schools. While the U.S. is making some progress in

increasing student achievement,⁵ most schools are not making the necessary progress fast enough to keep pace with the global economy and the information society. Serious problems of student achievement exist in high-poverty, urban high schools, where dropout rates can and frequently do exceed 50 percent. Most other high schools, those in suburban and rural areas, are not adding enough value to the learning experience for adolescents.

The most recent National Assessment of Educational Progress (NAEP) Reading Achievement State by State (1999) assessment provides a picture of U.S. student performance in reading over the past six years:

- Only 31 percent of U.S. fourth graders scored at the proficient or higher level;
- Between 1992 and 1998, there was no significant change in the percent of fourth graders who met the National Education Goals Panel performance standard in reading;
- In the highest performing states, only 42 percent of eighth graders reached the proficient level or higher;

⁵ *Do You Know The Good News About American Education?*, Washington, DC: Center for Education Policy and American Youth Policy Forum, 2000.

- The percentage of eighth graders who met the Goals Panel performance standard increased from 29 percent in 1992 to 33 percent in 1998.

A longer-term look at average scores on NAEP mathematics achievement for 17-year olds indicates a minor increase. In 1982, 17-year-olds scored an average of 298 on a scale of 0–500 and in 1996 that score increased to 307.⁶

The Third International Math and Science Study (TIMSS) provides additional evidence that performance by American students is not progressing quickly enough to meet the demands of the changing workforce and society. “At the fourth grade, U.S. students were above the international average in both science and mathematics. In the eighth grade, U.S. students scored above the international average in science and below the international average in mathematics. At the end of secondary school, U.S. performance was among the lowest in both science and mathematics.”⁷

Even when comparing 12th grade students who take Advanced Placement calculus with all advanced mathematics students in other nations, the performance of U.S. students was just at the international average.

While these statistics show some minimal progress, the stark reality is that a very large percentage of our students are performing at basic levels and are *not* performing at proficient levels or levels required by the global economy.

Standards-based Reform

One issue that is driving the need to change the way our children are educated is the development and implementation of standards-based accountability systems. This focus on standards is behind the reform efforts in all states, but one, and has been the strongest

force in the school reform movement of the past decade. Since 1994, federal policy has encouraged states to adopt standards for what all students should know and be able to do and to hold districts and schools accountable for reaching those standards. Schools are now looking at new strategies to enable all students to reach standards, which include changes in curriculum, instruction, assessments, staffing, and structure, as well as providing individual help for students having difficulty achieving the standards.

States and communities are rejecting “watered-down” curriculum in favor of more rigorous coursework. But that means educators must find more effective ways of increasing student learning, especially for students who have not been successful with “traditional” programs or who are behind in grade level. Whereas project-based, contextual, and applied teaching methods have been shown to engage students, these approaches appear to be crowded out by the rush to get all students to meet the standards and pass the tests. The premature shift towards “teaching to the test” with the outcome of narrowing the curriculum and limiting the learning experiences to test items may be a less effective means of helping some students. This trend of teaching to the test, where practiced, is effectively limiting access to conceptual and contextual learning as well as opportunities for learning in the community.

Schools and communities beginning to implement the new standards and assessments are quickly realizing that many of their students will fail to meet the standards or to pass the high-stakes tests required for high school graduation, unless they provide extra assistance to help needy students. This is true for students in districts with very high per-capita income and family educational levels, as well as

⁶ Ibid.

⁷ Third International Mathematics and Science Study, U.S. Department of Education, 1998.

students in low-income communities, but the numbers of failing students in low-income communities are feared to be much higher.

While there is a recognition that getting academically at-risk students to meet standards will be difficult, there is at least strong political support for helping low-achieving or disadvantaged students meet the same standards as all other students. But the trade-offs—getting students to pass, what are in some states, narrowly-skilled tests, versus using a broader curriculum that exposes students to higher-order learning through more relevant learning experiences—is unknown.

Assessments

While some schools have been creative in using portfolios to demonstrate student proficiency, the focus on standardized tests is pushing aside alternative forms of assessment. The focus on standards-based reform has also drawn attention to the types of tests being used. Assessments viewed as being narrowly constructed tend to encourage the rote memorization of discrete pieces of information, rather than measuring higher-order and conceptual thinking. States are struggling to find ways to measure not only academic skills, but also employability and higher order thinking skills in ways that are accountable and consistent.

How assessments are being used is also receiving a lot of attention in the current environment. Most assessments measure what knowledge has already been acquired, but do not measure how that knowledge is applied, and many assessment tools do not predict particularly well how young people will do after high school. Another problem is that many assessments are not necessarily aligned with the curriculum, so there is a mismatch for students who take the tests. Using single, high-stakes assessments late in the high school years to determine graduation could easily be considered a harsh punishment for many

students who might fail. Assessments should be used diagnostically to determine levels of understanding and mastery of material to support a teaching and learning strategy, but not as a hurdle to graduation. Much more work is needed in developing appropriate assessments to measure both content and conceptual understanding and to use assessments developmentally and diagnostically.

Limited Learning Options

Many high school students spend the bulk of their time in conventional classrooms, with limited contact with adults, being taught through traditional lecture methods. Many teachers and administrators rely on pedagogies that rarely involve project-based or contextual learning, and even less on learning in authentic situations, such as work-based or service-learning activities. Research into learning and cognition shows that students learn best when the material is presented in context, is constructivist and situated, and when different learning styles are taken into account in the learning process (Caine and Caine, 1991).

The question of how and where youth are engaged in learning activities in order for them to meet personal and societal goals perhaps provides the broadest context for redefining the high school experience.

Needs of Urban Schools

Urban schools continue to be in crisis. Dropout rates in inner-city high schools remain around 50 percent and unacceptably large numbers of students do not experience high levels of achievement. Urban high schools generally are in need of a great deal of physical repair, are overcrowded, and lack enough books or supplies for students. Schools are often plagued by student violence, drugs, vandalism, and truancy, and many students feel unsafe walking to and from school.

The teaching force is weak in many urban schools. Due to teacher shortages, personnel

are often hired without certification, and many teachers are forced to teach in subjects outside their content area. Even when teachers are certified in the subjects they are teaching, they often do not have the training and skills to enable students to meet the challenging academic standards called for by school reforms. This exacerbates an already challenging teaching and learning environment.

Some urban school's expectations for students are very low, as are their expectations for parental involvement. Students are often not advised about the courses they need to take in order to attend college, many advanced courses are not available,⁸ and guidance counselors, with large student caseloads (often ratios of 1 to 400 students) have limited or no impact on helping students plan their future. Community involvement is often minimal and students frequently lack options for work-based learning experiences and service-learning experiences in the community.

Student Disengagement from the Learning Process

Many students say that high schools are not working. They feel their classes are irrelevant and boring, that they are just passing time until they can graduate to do something meaningful, such as go to work or college. Student participation in co-curricular activities has declined and only 30 percent of students are involved in such activities.⁹

Many students also are not able to connect what they are being taught with what they feel they need for success in their later life. This disengagement from the learning process is manifested in many ways, one of which is the lack of student responsibility for learning. In many ways the traditional educational struc-

ture, one in which teachers "pour knowledge into the vessel" (the student), has placed all responsibility for learning on the teacher, none on the student. Schools present lessons neatly packaged, without acknowledging or accepting the "messiness" of learning-by-doing and through experience and activity. Schools often do not provide students a chance to accept responsibility for learning, as that might actually empower students. Students in many schools have become accustomed to being

"I was always taught

that you went to elementary school to prepare for junior high to prepare for high school which prepared you for college which prepared you for life. But life was happening when I was fourteen, and I was stuck in school. I wasn't being prepared, I was being held back, constrained. . . . I had energy, passions, physical life to lead and that was set back."

—High school dropout

quoted in *Real Learning, Real Work: School-to-Work as High School Reform*, Adria Steinberg, 1998.

spoon-fed the material required to master tests, and they have lost their enthusiasm for exploration, dialogue, and reflection—all critical steps in the learning process. In addition, many students see school as a place only focused on academics, not on their development as a whole (social) person.

⁸ Eight African American and Latino students are suing the University of California—Berkeley on the basis that their admissions policies are discriminatory because they give greater weight to grades from Advanced Placement courses, and these students claim they do not have the opportunities in inner-city and minority community high schools to take Advanced Placement courses. Long Beach Press Telegram, Rodriguez, February 10, 1999.

⁹ Hersch, Patricia, *A Tribe Apart: A Journey Into the Heart of American Adolescence*, 1998, Ballantine, New York.

Many students have also learned how to play the “high school grade game.” Frequently, students look for “easy” classes to take which will allow them to get good grades, instead of taking harder classes that would give them a deeper understanding of the material, but might also result in a lower grade.

Students also learn early on about tracking and what it means to be placed in a certain group: the “smart kids” (bound for a prestigious four-year college) will get the support, attention, and encouragement they need; the average kids or neglected majority¹⁰ (headed for a lower-ranked four-year college or a community college) will be provided the minimum help needed to graduate; and the “dumb” kids (no college expectations and headed directly to work) will generally be ignored and left to fend for themselves. Tracking clearly affects student motivation to learn, especially when adults make decisions about student placement at an early age. Some students give up out of frustration, boredom, or because they feel under-appreciated or misunderstood. Some students may actually want to be in a lower track, which is less demanding and allows them more social time with their peers or opportunities for earning money in after-school employment.

The Global Economy

Healthy communities need not only thriving workplaces where individuals can access good jobs at a living wage, but a strategy of economic development to maintain those jobs and to attract new ones. The K–16 educational system is a critical element of successful economic development but often operates

completely independently of economic development programs and strategies.

Even local employers that may not operate in the global marketplace themselves, understand the need for employees with broad, high level basic skills (math, science, and communication) as well as the SCANS¹¹ skills. In 1997, 64 percent of corporate leaders pointed to the skill shortage as the number one barrier to growth, compared to 32 percent who responded similarly in 1993.¹² Research indicates that the skills workers need to be successful on the job are learned in work experiences,¹³ yet most students do not have the opportunity for “real-world” experiences, often because of the difficulties of creating these high quality experiences or due to the educational bias that discourages or undervalues work as part of the developmental learning process for youth. The increasing emphasis on meeting standards and high-stakes tests may also curtail opportunities for students to participate in work experiences or internships, as the skills learned from these experiences are not measured by the high-stakes tests.

The economy demands not only higher skill levels from high school graduates but more postsecondary education. Well-articulated pathways from high school to further education generally do not exist, yet more and more students will need to take these pathways to college. In addition, many educators (along with many non-educators) are unfamiliar with new, emerging careers, new types of technologies, or work processes commonly used by employers today and are unable to counsel students on potential careers. Since the majority of teens work at jobs outside the

¹⁰ Dale Parnell, *The Neglected Majority*, The Community College Press, 1985, Washington, DC. A term to describe those students served neither by college preparation courses or classes for the disadvantaged, yet representing the majority of students in school.

¹¹ Secretary’s Commission on Achieving Necessary Skills, Department of Labor, 1991, Washington, DC.

¹² *Winning the Skills Race*, Council on Competitiveness, 1998, Washington, DC.

¹³ Center for Workforce Development, Education Development Center, *The Teaching Firm: Where Productive Work and Learning Converge*, 1998, Newton, MA.

school, it would behoove both the education system and the private sector to find ways to maximize this time spent working.

Expansion of Information Through Technology

Technology allows instant access to any kind of information, but the impact of technology on teaching and learning is still not fully understood. Educators, administrators, parents, and students are not quite sure how to use this vast new resource to its maximum potential. Educators need to learn how to integrate large amounts of new information into their curriculum and how to help students discriminate among so many vast sources of information. Schools need to help ensure equal access to information through technology for all students and to provide time and resources to faculty to help them stay current with the latest technology.

Distance learning will have a profound impact on independent learners and will also provide access to high quality educational offerings from colleges, universities, the private sector, and knowledge centers around the world.

Teacher Workforce

The shortage of teachers in critical areas such as math and science, the number of teachers who lack content knowledge in the fields they are teaching, and the aging of the teacher and principal workforce present major challenges for education. Data indicate that teachers teaching out of their field occur more frequently in low-income schools,¹⁴ and, as a result, poor students suffer disproportionately from a shortage of qualified teachers. Even those individuals teaching in their field often do not have the subject matter background

necessary to meet new, more challenging academic standards, nor the skills to teach contextually, or to work with the full range of students and differing learning styles. Teachers also lack the knowledge and skills to effectively use technology as an instructional and learning tool. These labor market imbalances provide opportunities for redefining teaching practices and may force schools to look for new teaching resources in the community and the private sector.

Public Interest

Over the past several years, the public's interest in school reform and student performance has grown. The commitment of Presidents Bush and Clinton, the 50 Governors, and a number of influential business leaders to develop standards to measure academic performance has helped create a strong public awareness of the need to improve failing schools. Also, the recent highly visible violent events in schools continue to propel the question of what kinds of schools we need and want to the forefront of the public's concern.

In addition, more and more of the public understands that educational attainment is directly correlated to economic success and quality of life. A recent poll¹⁵ indicated that a majority of voters would support increased taxes for improved education. At the same time, there is unprecedented interest in charter schools and voucher programs, which introduce competition into the public education system. For many reasons, the quality of education ranks as the number one concern to many people, and will remain high on the public agenda during the baby boom echo years.

¹⁴ What Matters Most: Teaching for America's Future, National Commission on Teaching & America's Future, 1996, New York.

¹⁵ NPR/Kaiser Family Foundation/Kennedy School of Government poll, released 9/7/99.

Legislative Issues

In addition to the issues described above which are forcing change on high schools, there are various legislative items being considered at the national, state, and local levels that will have an impact on the structure, funding, and policies for secondary schools.

At the national level, the U.S. Congress is considering the reauthorization of the Elementary and Secondary School Act (ESEA), the largest federal education program, that provides over \$10 billion to support programs for disadvantaged students and to improve education.

Many educators and policymakers have decided over the years to use the bulk of Title I resources at the early grade levels, to ensure that children have the foundational reading and math skills needed. While early intervention is critically important, there are several compelling reasons why more Title I dollars (or similarly targeted funds) should be provided to secondary students: (1) there are significant numbers of students from low income families at the secondary school level; (2) educators cannot assume that they have successfully remediated all learning deficits in the early years and especially with the advent of standards, additional support must be available to students in the upper grades; (3) as needy students progress, they will need to learn new, higher order skills, such as the application of knowledge, comprehension, and problem-solving, and may need continued support and assistance; and (4) these types of academic supports may help to lower the high school dropout rate.

Currently, 28 percent of students are in secondary education, but only eight percent of Title I dollars are spent at the secondary school level. Providing more Title I funds to the secondary school level would provide schools with the assistance they need to help needy students meet state standards and to increase achievement. Guidance to policymakers on effective learning environments for teens would be helpful in this discussion.

Second, the School-to-Work Opportunities Act (STWOA), which provided five years of funding to states and communities to develop programs supporting career preparation for youth, is set to expire in 2001. This law is helping to promote different models of secondary level education by using more applied, contextual, and work-based learning. School-to-career programs are successful in engaging students by making classes more relevant and meaningful and by demonstrating connections between academic concepts and real-life applications. With the expiration of the Act, however, many of the ideas, concepts, leadership, and practices for supporting career preparation and academic improvement programs may be lost. Information in this paper about lessons learned from career preparation programs and their importance for youth could also be pertinent to Congressional discussions on ESEA.¹⁶

Third, the Carl D. Perkins Vocational and Applied Technology Education Act (Perkins) while a few years away from reauthorization, is undergoing questioning and scrutiny as to the role and purpose it plays. Recent proposals to increase funding for Tech Prep¹⁷ have caused

¹⁶ Another recent report by the American Youth Policy Forum and the Center for Workforce Development, Institute for Educational Leadership, "Looking Forward: School-to-Work Principles and Strategies for Sustainability" (2000), contains a discussion of how school-to-work activities can support high school reform.

¹⁷ Tech Prep is a program authorized by the Carl D. Perkins Vocational and Applied Technology Education Act that provides funds to communities to develop articulated programs in technology careers for students in grades 9 through 14, using contextual teaching methodologies.

policymakers in the career-technical education field to begin debating the merits of the Tech Prep approach versus the programs supported by the basic state grant.¹⁸ In addition, because there are so few federal programs that provide dollars to high schools, and Perkins is one of the few that do, Perkins is viewed as a potential source for helping high school-aged students to meet challenging standards by supporting contextual learning and increasing student engagement in career-oriented programs.

Fourth, states and communities are currently engaged in the implementation of the new Workforce Investment Act (WIA) that supports workforce development. The WIA focus on youth and youth councils and on developing community strategies to support dropouts and disadvantaged youth provides an opportunity for policymakers to look at programs that link in and out-of-school learning in a more systemic way. The emerging interest in community education and community schools shown in the 21st Century Community Learning Centers funding, is a natural connecting point for youth trainers and educators. Sharing a vision of a dynamic, effective learning experience for teens, utilizing resources within the school system and throughout the community, with WIA policymakers and practitioners may help as they design their programs.

Fifth, Congress will most likely endorse the National Education Goals for another decade, as a way to continue to focus education reform efforts. As the U.S. is still a long way from meeting the goals on student achievement,¹⁹ federal funds will most likely continue to be allocated to comprehensive reform programs that have been successful in increasing student achievement. This Workgroup report may help

to provide policymakers with a better understanding of what types of secondary school learning will promote high achievement.

While not an issue before Congress this year or next, programs under the Higher Education Act, which was recently reauthorized, increase the focus on helping students prepare for and succeed in college. A number of these programs look specifically at academic preparation and the types of courses students take during their high school years in order to gain entrance to and succeed in postsecondary education. As the borders between secondary and postsecondary education continue to blur through increased numbers of articulated programs and courses for college credit, the high school experience will be of greater interest to higher education policymakers.

Apart from national level discussions, states are leading the work on standards-based reform. They are deeply engaged in the creation and implementation of academic standards and systems to assess performance. From a policy perspective, governors and other state officials and legislators are faced with extremely difficult questions regarding the impact of standards on students, especially under-prepared students, teachers, curriculum, and school and district performance. States are struggling through the first few years of standards-based accountability, and are just beginning to face the implications of high-stakes tests used to determine grade promotion and high school graduation. As the states move through this process and reexamine their secondary schools, this paper can provide useful guidance.

At the community level, funds are being provided for after-school programs under the

¹⁸ The basic state grant has less of a focus on articulation, career pathways, and promotion of students to postsecondary education.

¹⁹ Goals 2000: Educate America Act includes the following goals: "All students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign language, civics and government, economics, arts, history and geography;" and "By the year 2000, U.S. students will be first in the world in mathematics and science achievement."

21st Century Community Learning Centers program. These programs are designed to provide children and youth with activities before and after school, on weekends, and during the summer in a safe environment that provides positive developmental activities, recreation, and academic enhancement. The importance of the community in providing these types of learning and developmental activities is crucial. The connections between the public education system and community resources are a major focus of this paper.

Lastly, a number of communities are receiving grants under the WIA's Youth Opportunity Grant program (from the Employment and Training Administration, U.S. Department of Labor) to saturate high-poverty urban and

rural communities with sizeable resources to cause a significant drop in youth unemployment and idleness. Services can include academic remediation and work-based learning. This paper may help youth employment programs as they develop these new learning opportunities and neighborhood-wide systems.

Conclusion

In summary, there are many reasons why the high school experience needs to be redesigned to fit the demands of today's world and the lives of our youth. Taken together, these reasons merge to become a powerful force for change. However, the group realized there are also formidable obstacles to change.

III: OBSTACLES TO CHANGE

As the Workgroup discussed the reasons that high schools must change, a number of obstacles to change were raised. While this is not a comprehensive list, the Workgroup believes that these are issues that need to be considered if high school redesign is to be successful. The group realizes this section could be much longer and could address many other issues (teacher unions, state laws on length of school year, state textbook adoptions) but chose to focus on only a few key items.

Parental Expectations and Community Values

While parents expect schools to prepare their children for life and further learning, many parents also place other expectations on schools that complicate their mission. A recent poll²⁰ showed that approximately half of the respondents think schools have gotten too far away from teaching basic skills (i.e., traditional academic subjects), but 41 percent say that schools need to teach students a broader range of subjects as well as critical thinking and problem-solving skills in order to prepare them better for work, careers, and responsible citizenry.

Many parents consider schools to be places of custody for their children and count on the teachers, administrators, and staff to “watch” their children during the workday. The spread of before and after-school care at most schools bears this out. Providing care for elementary age children is usually manageable for most schools, but providing before and after-school care for teenagers is entirely different. Teenagers do not want to be in custody care, and so schools and communities must be creative and

innovative to find ways to create environments after school that support positive academic, physical, and personal growth that attract and engage teens and that provide the custody care many parents want.

For schools to be successful, the community must decide what the goal and purpose of the school are, what standards and expectations are created for all students, and how to hold the school accountable. However, most communities never have this type of sustained and inclusive conversation, or the discussion is held with a limited number of representatives from the community and parents who do not speak for the whole. In addition, public opinion surveys almost always show parental support for their own children’s school and indicate parents are generally satisfied with the status quo, providing little incentive to the principals and teachers to change.

Resource Allocation

High schools face tight budgetary situations, with competing demands for a wide range of services with limited dollars. At the federal level, funds are often allocated to narrow,

²⁰ NPR/Kaiser Family Foundation/Kennedy School of Government poll, released 9/7/99.

categorical programs, limiting the flexibility of schools to fund reform or innovation strategies. Even when federal funds can be used to support broader reform strategies, the amount of funding is usually quite small and may not necessarily impact the way state and local dollars are spent. State and local funds for education may allow more flexibility, but often school districts continue to spend dollars on the same unequal or ineffective programs that have been in place for years. At the community, regional, or state level, resources and funds are also often distributed unequally. Most commonly, because of property taxes, schools in low-income urban and rural neighborhoods have far fewer resources than schools in suburban areas with higher property values.

Through history or design, some groups of students have been better served than other groups. The very brightest students and those with special needs often receive extra or supplementary services (though for students with disabilities these can be inadequate, poorly designed, or accompanied by low expectations), while large numbers of “average” students are left to fend for themselves. Another way to consider resource allocation is that most high schools have traditionally focused on the college preparation programs and have left the “non-college bound” student with low-level options: the general track, an outdated vocational curriculum, or a smorgasbord of weak electives.

The departmental structure of high schools based on academic disciplines also impacts the way dollars are used. These academic silos, which result in the professional isolation of teachers, frequently prevent funds from being used for whole school reform or even for interdisciplinary, project-based learning, which helps students connect learning to application and retention of material. Teachers have little incentive to work with colleagues from other disciplines because their budgets and programs are often in competition with each other.

Parents have a significant impact on resource allocation. While communities in general may support change in high schools, some groups of parents may not want things to change or may fight reallocation of resources if they feel it means a reduction in services for their children. There are cases where parents of top performing students express their concerns about resources being taken away from their children to pay for other students with extra needs. Also, many parents do not have the information on academic programs at schools throughout their community and the options available for their children or even the disparities in offerings among schools, which can affect their participation as advocates for funding and resources.

Public school finance is confusing, complicated, and mystifying, and even though it is overseen by lay boards, little can be done to use these funds to support anything but the status quo. There are no hard and fast rules about how funds from state and local education agencies are allocated to individual high schools, nor how those funds, once they reach the high school, are used, making it difficult for outsiders, and some insiders, to understand funding decisions. High schools offer high-cost classes, such as occupational education or advanced placement, sometimes for limited numbers of students. Other high-cost activities, such as band and athletics, may be provided to the detriment of funding other courses, yet it is unclear how those decisions are made. In general, funding policies do not hold high schools accountable for student achievement. Policies allow schools to keep the per pupil expenditure even for students who drop out of school, and they do not always allocate equivalent funds to other parts of the education system when out-of-school youth resume their schooling.

The Culture of School

The current culture and management structure of school generally does not encourage teamwork and communication and can make implementation of reform efforts difficult. Teachers frequently teach behind closed doors and have little interaction with other professionals. Communication with parents is usually limited to parents' night and a small number of conferences. There is little ongoing communication between high schools and families. This lack of communication can set up a situation in which parents feel unwelcome or intrusive, and often parents who propose change or reform are viewed as troublemakers. Even teachers that introduce innovative practices are sometimes shunned by their peers or fired for "rocking the boat." Too often, administrators maintain the hierarchical structure of school, keeping decision-making under their control, to avoid any controversy or challenge to authority. This environment creates difficulty for teachers, parents, or other community leaders interested in innovation and risk-taking.

Not only is communication within the school limited in many instances, communication between the school and the broader community can be quite limited. While there have been significant increases in business-education partnerships in the past several years, there is still a lack of understanding in many communities about the skills employers need and value in the workforce and the implications for the education system. Similarly, in many communities, there is little communication between the higher education community and the K-12 system about expectations, goals, and college entrance requirements.

Students themselves have cultures that encourage or discourage achievement. In some high schools, non-achievers are the role models and students look down on those who work hard and get good grades. This type of culture certainly can destroy student motivation,

despite the best efforts of teachers. In cases like this, the entire community needs to send a clear message about its expectations for student performance so students see themselves as part of a larger culture with high expectations and standards. Sadly, in many, many schools, there exists a culture of "low expectations," that assumes that some students just can't learn, and this belief is perpetuated by, among other things, popular culture, parents, the media, community disfunction, and drug and crime problems.

Diversity

Dealing with a wide range of cultures, languages, and family expectations can make change more difficult. Schools must be prepared to deal with increased racial, ethnic, cultural, and linguistic diversity in their community in a positive way. Yet often decisions are made about students and their schools without input from these diverse groups. Satisfying the challenges of diversity, such as addressing the needs of limited English proficient teenagers, adds to the financial, staff development, staffing, and instructional needs of schools and communities and raises issues of using finite resources to meet new, emerging needs which can create tensions between the "established" families and new families to the community.

Governance

The school governance structure can make change exceedingly difficult if not outright impossible. While schooling is supposed to be free from politics, it almost always intrudes and turns attention from serious educational issues to matters popular with certain groups of the community. Often the selection of superintendents, and sometimes even that of principals, can become a very divisive matter, pitting various constituencies and educational philosophies against each other. School boards, whether elected or appointed, frequently become political creatures over time

and deal with the school crisis of the moment, rather than setting the long-term direction and expectations of the school system. And, the turnover in school boards, superintendents, and principals often means that reform efforts get stalled as a new crew comes in, learns the ropes, and decides on a new course for reform.

Conclusion

There are, of course, many more barriers to change. Perhaps the most difficult to deal with are individual behaviors, beliefs, and perceptions. We can only deal with these

barriers one person at a time, but they must be viewed as part of the path to change.

It would have been easy for the Workgroup to quit its work after the discussion of the barriers and the reasons why high schools need to change. But these large-scale and complex barriers did not deter the Workgroup. The charge to create a vision of a new learning experience for teens to meet their needs and the needs of their families and communities energized the group and kept them coming back to the table.

IV: VISION OF A HIGH SCHOOL OF THE MILLENNIUM

We believe that most high schools need to be completely redesigned to meet the needs of today's youth. The high school experience can no longer be limited to learning that only occurs inside a traditional school building, but rather the learning experience for teens must use all of the resources that a community has to offer. School administrators and teachers must engage others in the community in the enhancement of the education and development of teens. This new concept of a learning experience for youth must recognize that there are multiple teachers and caring adults and resources available throughout the community that can be drawn on to strengthen the learning experience in ways that neither schools nor community agencies alone could accomplish. Small, individualized, and caring learning communities must be created to help students manage the transitions in their lives and become active learners for life. Most importantly, youth must be seen as the primary actor in their development and that of others. The prevailing picture of youth as passive recipients of services must be replaced with an active vision of youth as resources and assets to be nurtured and engaged.

While we use a number of words, such as building, school, and classes, that describe a conventional high school in our description of a High School of the Millennium, we do not mean to limit our vision to the traditional high school as we know it. Some members of the group believe we should not even use the word "school" to describe this new learning experience for teens, because many teens consider "school" to be completely irrelevant to their lives. While we may use traditional words in our description, we hope to convey a picture of a radically different learning environment than what we now know as high school.

The Workgroup urges communities to undertake a major redesign of their secondary school

systems. We would encourage federal and state agencies and foundations to provide support for comprehensive redesign efforts and to support those individuals committed to change. However, we realize that change along this scale is not always possible. Most communities will begin with a few small changes, a few small wins, and then tackle larger issues as momentum for change grows. Both strategies are acceptable, and both need support from funders.

The vision of a new learning experience for teens presented here is based on numerous reform efforts and experiments engaged in by many people over the past decade and more. It is also based on the best thinking and practice of several fields: whole school and standards

THE FOUNDATION FOR A LEARNING EXPERIENCE FOR HIGH SCHOOL-AGED YOUTH

- 1** Youth must have and help to build, above all else, a learning community committed to academic achievement for every student in accord with standards that can stand up to national scrutiny. All youth are expected to meet high standards and are entitled to the support necessary to reach those standards.
- 2** Youth must have opportunities for transitional experiences, so that they are ready for the next stage of life, whatever it may be for that individual, with the understanding that, ultimately, each person needs to find or create meaningful and rewarding work.
- 3** Youth must have multiple pathways leading to postsecondary education and career opportunities.
- 4** Youth must be prepared for lifelong learning and have the skills that enable them to pursue learning on their own.
- 5** Youth must be provided an underpinning for good citizenship and for full participation in life in a democracy.
- 6** Youth must have opportunities for personal development, as social beings who have needs beyond those that are strictly academic.
- 7** Youth must have the skills to be able to participate comfortably in an increasingly technological society.
- 8** Youth must be equipped for life in a world in which interdependency will link their lives and careers to those of others, however different those others may be from them.
- 9** Youth must have caring adults in their lives to provide help as needed and to serve as role models and mentors. Adults and institutions within the community must advocate unabashedly on behalf of young people.

based reform; career preparation programs; youth development; community education; and service-learning. The High Schools of the Millennium Workgroup has tried to build on the best ideas of all these fields and integrate the most promising strategies and principles in a manner both complementary and synergistic.

In reviewing common principles and characteristics across a wide range of secondary education reform efforts (see Appendix), we found that the vision of high schools described in the "Breaking Ranks: Changing an American Institution" report of the National Association of Secondary School Principals (1996) provided an excellent basis on which to begin. We thank the individuals who developed this vision and acknowledge them for their important work.

The following pages provide a more detailed vision of a High School of the Millennium. While the description is divided into separate topics, a High School of the Millennium will only exist if all parts are integrated into a whole system. Communities can begin the process of moving towards High Schools of the Millennium by focusing on one or more of the following topics, but all are critical components of the new learning system for high school-aged youth.

The Workgroup also wishes the reader to understand that the vision of a High School of the Millennium presented here represents an ideal learning experience that we believe should be available for every child. We realize that achieving this vision is very difficult; however, we believe it is well worth the effort.

Vision, Standards, and Expectations

Communities create High Schools of the Millennium when they have a clear vision of the standards, expectations, and educational experience they want for ALL their youth. The vision is developed with input from the entire community, including parents, educators,

employers, civic, religious, youth development, and human service organizations, and especially the students themselves. The vision is clearly and consistently expressed to all parts of the community and the community supports the vision in word and deed.

Strong, stable, leaders from the educational system and in the broader community promote the vision and push the system to change. They consciously make high school redesign a high priority for the community. Each school has a strong principal, with a supportive superintendent, whose main focus is on revising the teaching and learning to meet high standards, constantly building connections with and garnering support from the community, and engaging youth in creating the vision of their school. The community develops a communication outreach strategy to involve parents, business leaders, school district personnel, and other influential individuals in the campaign for change and continuous improvement.

A High School of the Millennium sets high academic standards that are challenging and that reflect the community's expectation of the knowledge and skills needed for full and meaningful adult lives. The standards are clear, unequivocal, easy to understand, and they are sufficient to allow students to meet the entrance requirements for colleges and universities. The standards are applicable to all students, and there is a strong culture of support for students, so that their families, teachers, and staff can work to ensure high performance for everyone. The adults involved with youth throughout the community make a commitment to help each student reach the standards by providing whatever assistance is necessary. The community takes responsibility for all students, whether they stay in the traditional school system or leave to participate in a community school, alternative school or other option. Positive youth development activities and supports are integrated into learning activities for all students.

Principles of Youth Development

A High School of the Millennium recognizes the needs, beyond the academic needs, of high school-aged youth and embraces a youth development approach²¹ to create engaging learning opportunities and prepare youth for lifelong learning, civic involvement, and careers.

High Schools of the Millennium surround youth with caring and competent adults to help them navigate not only the challenges of high school and preparation for college, but also the stages of adolescence. Youth are viewed as resources and are involved in the design of and decisions affecting school's and

“If you had a problem in the Black community, and you brought together a group of white people to discuss how to solve it, almost nobody would take that panel seriously. In fact, there'd probably be a public outcry. It would be the same thing for women's issues or gay issues. Can you imagine a bunch of men sitting on the Mayor's Advisory Committee on Women? But every day, in local arenas all the way to the White House, adults sit around and decide what problems youth have and what youth need, without ever consulting us.”

—**Jason Warwin**, a 17-year-old who works with Youth Force in New York City, explains how the ultimate stakeholders, youth themselves, are almost always disempowered from the governance process.

communities' programs and activities. Opportunities for personal growth and leadership are provided to all students, using resources in the community to help meet the vast range of teenage needs. Safe and appropriate activities and environments are created with youth input for after-school hours to support learning and social and civic development. Adults at a High School of the Millennium understand and recognize that students' developmental needs vary widely and engage them in ways that relate the learning to their lives. The school culture supports a belief system that every student can achieve and has talents and abilities that can be developed with appropriate supports. The community around a High School of the Millennium creates a web of services enveloping all youth, whether they are taking coursework in the physical space of the High School of the Millennium or another community institution, or in a service-learning or work-based learning setting.

Teaching and Learning

The commitment to engage students in a rigorous teaching and learning process is at the heart of a High School of the Millennium. In a High School of the Millennium, learning occurs in a wide variety of settings and contexts, in teams and independently, with multiple means of assessment. Learning occurs anytime, anywhere, at home, in the community, at work settings.

Learning opportunities are student-centered and contextual, and students are actively engaged in the learning process. Project-based, problem-based, and real world experiences are integrated into the curriculum and learning process, allowing students to explore subjects in a multi-disciplinary and integrated manner. Students have many opportunities to

²¹ Youth development is a process which prepares young people to meet the challenges of adolescence and adulthood through a coordinated, progressive series of activities and experiences which help them to become socially, morally, emotionally, physically, and cognitively competent. Positive youth development addresses the broader developmental needs of youth, in contrast to deficit-based models, which focus solely on youth problems. Statement approved by the executives of the National Collaboration for Youth Members, March 1998, www.nydc.org.

engage in authentic learning, which involves them in the creation of knowledge, disciplined inquiry, and engagement in real world issues.

All students have the opportunity to experience learning in the community, through work-based learning opportunities, service-learning and/or volunteer activities. Experiences from these community learning opportunities are integrated into coursework and supplement and augment class work. A close relationship between faculty, community and employer representatives exists, and natural partnerships are formed to facilitate the learning projects based in the community. Efforts by faculty and employer groups are made to link students' outside jobs with course objectives, thus building on the natural learning opportunities inherent in every workplace. Staff at each high school is dedicated to supporting partnerships with employers and to linking students with appropriate jobs.

The tracks that were known as the general and vocational track no longer exist. High Schools of the Millennium do not track students into any particular course or program. Rather, all students are expected to pursue a course of studies that leads to high academic achievement, with the goal of postsecondary education leading to careers.

Teaching and learning is competency-based, not time-based or credit-based. High Schools of the Millennium recognize that students master subject matter at different speeds and allow them to advance once competency is attained. This allows some students to complete their secondary school requirements quickly and move into postsecondary education at an earlier age. This may also allow students who need assistance additional time to achieve higher standards.

Each student is provided the help needed to achieve to high standards and to reach his or her potential as a learner and contributor to the community. Personalized learning plans are developed for each student, with input from teachers, staff, counselors, parents, and the student, that indicate plans for academic learning, community learning and youth development over a multi-year period. Students with additional needs, such as language minority students, are provided intensive assistance, and a great deal of contact with English speakers, both in school and throughout the community, to improve their English language skills and master rigorous coursework.

The curriculum is not "dumbed" down based on low expectations of the students' prior performance. All adults in the learning environment, using a range of community resources, find ways to help students master rigorous academic work and provide opportunities for enrichment after school, on weekends, during the summer, and through extracurricular activities. Peer teaching (which can have a positive impact on learning and motivation) is used when appropriate.

The curriculum is based on clear, high level standards set by the state and community. The school has a clear, organizing framework for the curriculum, which is based on linking academic content to real world application and context. Basic academics are rigorous, but are taught in an applied, contextual manner that helps make complex concepts accessible and understandable for students. Academic concepts are provided to students through multiple presentations, allowing students to spend more time mastering the work. Curriculum frameworks promote in-depth learning. Teachers and administrators integrate the coursework both horizontally and vertically,²²

²² Horizontal curriculum integration refers to creating multi-disciplinary coursework and integration of subjects such as science and English, math and social studies in contextual settings. Vertical integration means that courses flow naturally and follow a planned sequence from 9th to 12th grades with coursework becoming more advanced and rigorous, but connected through the grades, so that students can study complex concepts and topics in more than one grade and add depth and rigor as they progress.

so that pathways of learning are created for students to move through logical sequences of courses. The curriculum is focused on career majors or pathways or organized around themes that connect academics and the real world.

High Schools of the Millennium link their coursework with other educational institutions in the community, including middle schools and postsecondary institutions. Coursework is articulated with local institutions of higher education and faculty work together to develop courses that are challenging and rigorous. High Schools of the Millennium offer Advanced Placement courses and work with students individually to ensure their preparation for such courses. Other options include programs that articulate with community colleges or dual enrollment that allow students to obtain college credit for courses taken during high school. All students, based on their unique abilities, are encouraged to pursue college-level studies to earn college credit whenever possible. Programs and policies are in place to allow students with the ability and interest to graduate early to pursue postsecondary education.

Technology is integrated into the teaching and learning process at a High School of the Millennium, allowing unlimited access to huge amounts of data and information. Students and teachers have access to computers, the Internet, and other current technology through employers, postsecondary education institutions or other community agencies. High Schools of the Millennium make innovative use of distance learning to bring in higher level or specialized courses from other schools, colleges, and from around the world. This technology allows access to the best professors, teachers, or experts, wherever they may be.

High Schools of the Millennium use the Internet to establish communication with students and parents, allowing parents access to their child's school records, homework, and

conversation and discussion with teachers. For those students who do not have access to this technology in their own home, community technology centers, co-located in recreational programs, schools, service organizations, libraries, community colleges, churches or youth programs, allow teens access to the Internet and other educational media for research and study. Independent learners at a High School of the Millennium find a freedom to explore and delve into topics in a depth previously unknown, and as students mature, they rely more on self-directed, asynchronous learning to master their course requirements. Technology is also used to create electronic mentoring opportunities for students and interested employers and community leaders to supplement the academic and work-based learning that occurs throughout the school year.

The principal of a High School of the Millennium is the instructional leader of the school. He or she sets the tone for excellence and high achievement and creates an environment that encourages teachers and staff to constantly review and improve their instructional strategies to help students achieve. The principal aggressively seeks out the best information and practices in instructional strategies, especially strategies for students who are not performing at grade level, and ensures that staff and teachers know about and have access to such information, technical assistance, master teachers and coaches, and professional development when needed. The principal of a High School of the Millennium is able to use resources in the community and through supportive networks to develop leadership skills to maintain a high level of performance and achievement. Principals ensure that barriers to achievement are removed and that the teachers are able to focus on high quality instruction and student achievement.

Teachers in High Schools of the Millennium serve as coaches and facilitators of learning, providing assistance and guidance when

needed, and providing more direct instruction to students who need more help. Teachers are paired or placed on teams with other teachers to promote interdisciplinary planning and professional support. Teachers have access to multiple resources in the community to supplement their coursework, and they have adequate time and space for planning and teamwork.

Teachers are proficient in their subject matter and stay current through continuing opportunities for professional development, exposure to the private sector and employment and externship opportunities in the community. Teachers are hired for full-time, year-round positions and are treated as professionals in High Schools of the Millennium. They are hired from a variety of backgrounds—education, business, and community organizations—based on their subject matter knowledge, expertise, diversity of perspective, and teaching ability. Teachers use effective teaching strategies for working with the full range of students, including students with disabilities or with limited English proficiency. They also are proficient in using diagnostic assessments to determine how students are performing, and they use this information to adjust their teaching. Whenever possible, parents and other content experts from the community (e.g. employers) are brought into class to share a specialized knowledge or skill and to relate the academic work to experience beyond the school.

Teachers have access to high quality professional development that is ongoing and widely available and linked to the school's learning goals, mission, and the content of their discipline. Teachers are provided support from master teachers and other staff to aid in teaching and are observed frequently by peers and supervisors in an effort to provide more continuous feedback on performance. Teachers have the primary responsibility for curriculum, and together with students, determine the curriculum, teaching methodologies, and

“The Met’s ‘learn by doing’ philosophy

applies to staff as well as students. Professional development at the Met is a ‘real time’ plan/do/reflect process that actively immerses all teachers in the school’s development. Together the staff identifies needs, develops practices, implements, analyzes, and adjusts—all in the regular course of the school year. This fosters a culture where change can occur at the very point that it’s needed, and where staff can make immediate use of learning opportunities as they arise. At the Met, professional development is synonymous with leadership development. Teachers rotate leadership roles at the grade, team and whole school levels.”

—1998–99 Portfolio of The Met School, Providence, RI.

rubrics needed in order to help students understand what they need to do to achieve.

New Forms of Assessment

Assessments are used on an ongoing basis to determine how well students are learning the coursework and to provide information to teachers about the strengths and weaknesses of each student. Teachers and staff in High Schools of the Millennium use assessments in a diagnostic fashion to better understand what students do or do not know. Based on these ongoing diagnostic assessments, the teaching methodologies and approaches are regularly adapted to focus on changing student needs. A variety of assessments are used to determine the skills and knowledge of the students, including portfolios and evaluations from

adults outside the school who have contact with the students (such as an employer or community leader). For graduation, each senior must plan and complete a senior project demonstrating the student's proficiency and integrating and demonstrating several fields of knowledge. Members of the community (employers, parents, representatives of youth and community organizations) help review and approve the senior projects. This not only allows community members to better understand the performance of the school and students, it also provides valuable feedback from employers or community members who have been involved in a senior project to the High School of the Millennium and the teachers.

Assessments that are used to determine whether a student will be promoted or will graduate are carefully designed and examined to ensure that the student is held accountable only for what has been taught, that the criteria for promotion or graduation are linked to the High School of the Millennium's academic standards, and that assessments are capable of validly determining whether or not the student has or has not actually met those criteria. Teachers take into account the need for multiple avenues for demonstrating learning in light of the range of error that can occur when any one assessment is used to draw conclusions about an individual student. Assessments are provided in a manner and form that will allow each student, including those with limited English-proficiency or a disability, full opportunity to demonstrate his or her skills and knowledge. In an effort to improve the adequacy, accuracy, and richness of these assessment processes and to eliminate the potential for bias or favoritism in subjective evaluations, the teaching staff of a High School of the Millennium school constantly discuss and analyze the assessments.

Structure and Organization

The structure and organization of a High School of the Millennium is very different than that of the conventional high school. First and foremost, a High School of the Millennium is designed to provide small, personalized, and caring learning communities for students, similar to career academies or schools within a school. These smaller groupings of students are based on academic or other interests (e.g., science and technology, performing arts) or broad career themes around an entire industry or cluster of industries. The smaller groups allow a number of adults (teachers, administrators, and counselors) to work together with the students over several years, as a way to develop more meaningful relationships and as a way for the teachers to better understand the individual learning needs of each student. Within these smaller learning communities, students are provided with more personalized and individualized teaching and learning opportunities, based on their needs, strengths, and weaknesses.

While a High School of the Millennium is structured to be smaller and more individualized, with a specific academic and/or career focus, the arrangement is flexible enough to allow students to move from one cluster or academy to another. The core academic foundation of all the programs is similar and designed to meet the state academic standards, so that students learn the basics, but set within a specific context or application, such as health care or business and finance. Basics are mastered before students advance to higher level courses enabling students to transfer from one cluster or group to another without being penalized or having to repeat classes.

Time is used differently in a High School of the Millennium. Alternative schedules, such as a block schedule or modified block schedule, create longer class periods that allow students to become more actively engaged in their learning through more in-depth exploration of

a subject or longer laboratory periods. This contrasts with a more passive role in the traditional multiple period day where the same time is allocated for every content area. The longer instructional times also allow for multiple learning activities that better meet the different learning styles of students. High Schools of the Millennium have longer days and school years and may use a year-round schedule. Enrichment and remedial courses are available after-school, on weekends, and during the summer. The school is open for students to work on projects, or have access to the Internet in the afternoon, and in the evenings the facility is open to parents and siblings, as well, for other educational purposes.

High Schools of the Millennium are flexible in structure and create smaller learning communities that provide student mobility from cluster to cluster or school to school. They are also flexible in the way they use technology, distance education, and web-based curriculum. Teachers and students have access to high quality programming from around the country, and High Schools of the Millennium use distance learning technology to augment their courses. Advanced placement or higher level courses are available through distance education and students have options to take these courses, with supervision, at times of the day and evening that are convenient. While the presence of trained teachers is always critical, distance education and web-based programming provide students and teachers freedom from the traditional high school schedule and allow them to study subjects not always available. The High School of the Millennium is not a virtual institution by any means, because it recognizes the need for adult support and caring environments. But it does provide students and teachers with opportunities for learning beyond regular school hours by offering worlds of information and resources, especially through teaching simulations, not ordinarily available to high school students and teachers.

Employers and the community are an integral part of the learning experience for teens in High Schools of the Millennium. Work-based learning and service-learning opportunities that support, supplement, and enhance classroom learning are available for every student. Academic work is brought to life by experiences in the community, such as students using chemistry and scientific procedures to test the water quality in a river clean-up project, using math to assist in computer-aided manufacturing in a small manufacturing firm, or using language arts for writing copy at the local television news station. Learning is acknowledged to take place throughout the community, not just in the school facilities.

Postsecondary institutions become a more significant part of the learning process for high school-aged youth. High Schools of the Millennium work with community and technical colleges and four-year universities to develop programs that link secondary courses with postsecondary courses and allow dual enrollment when feasible. Youth take courses at nearby colleges, allowing them to see and experience college, which helps many students to overcome barriers and pursue postsecondary education. Secondary and postsecondary faculties develop planned sequences of courses spanning traditional grades 9 through 14. Schools and colleges make it easy for students to move from secondary to postsecondary school by having clear policies on acceptance of secondary classes for college credit. College placement assessments, given in the early years of secondary education, indicate where a student's strengths and weaknesses are and allow time to correct those weaknesses prior to graduation. These assessments are shared with the student's parents so they understand what work needs to be done or what skills need to be remediated in order for their son or daughter to attend postsecondary education.

Adults in the community focus on easing the transition from middle school to secondary school, as this is an especially emotional time for youth. More adult support, from teams of teachers, counselors, advisors, and youth programs, is made easily accessible to youth. High Schools of the Millennium provide information about their academic expectations and, especially, about critical gate-keeping courses to middle schools students and their parents on a regular basis. Guidance and career counselors work with students in middle school on learning plans that will help transition the student into and through the high school years and will detail the courses needed to meet personal and academic goals. Students, parents, teachers, and counselors all agree to a four-year course plan, and parents and students sign a contract indicating their support and commitment to it. Information, such as financial aid, is provided to students who may need help in getting to college. Counselors also provide information on careers and the skills required by today's workplaces, and they focus on long-term student success and the importance of lifelong learning. Counselors also conduct long-term follow-up activities to determine where their students are at least two years after graduation, whether it is in college, the military, or the workplace, and they use that information to validate the success of the school and improve programs.

Immersion in the Adult World

Adults figure heavily in students' lives in High Schools of the Millennium. Students have opportunities to work with and get to know a variety of adults, from teachers, staff and counselors with whom they are teamed as a supportive network, to employers and community leaders they work with, to volunteers

and mentors. High Schools of the Millennium recognize the importance of an advocate in a child's life and ensure that each student has a relationship with at least one caring adult and, hopefully, many of them in various settings. Adults help students understand their responsibility for learning, and involve them in the design and execution of the learning opportunities. Employers that have students working as interns reinforce the message that there are positive outcomes for studying hard and the importance of taking responsibility for learning and one's behavior.

Students have opportunities to experience authentic learning situations with adults—at work, in the community, through volunteer activities, sports, clubs, band, or organizations such as career-technical student organizations.²³ These opportunities allow students to work side-by-side with adults on common goals, to see a world beyond the classroom, and to know role models and adults in other aspects of the community. These opportunities also allow students a chance to develop meaningful relationships with adults who can provide guidance, advice, and nurturing experiences, and set guidelines and expectations for behavior beyond school, while reinforcing the importance of academic performance.

Parents are involved in many facets of the learning experience for youth, from helping to determine the overall vision, goals, and design of school to participation at school events. Parents are involved in the design of the learning plan for their child and communicate on a regular basis with the teachers and counselors about the learning plan. Parents are asked to share their expertise and skills from work or profession as appropriate. Parents become involved with the educational process through the use of technology and the

²³ Career-technical student organizations provide youth development, leadership, academic, service-learning, and work-based opportunities for students. Some of the better known clubs include the FFA (Future Farmers of America), DECA (Distributive Education Clubs of America), Skills USA-VICA (formerly Vocational Industrial Clubs of America) and HOSA (Health Occupations Students of America).

Internet and are able to communicate more easily with teachers and administrators. The High School of the Millennium makes learning opportunities available for parents as needed, and students can see their parents as role models in lifelong learning. Parents have always been volunteers at school; they are now welcomed as vital resources for the educational process.

High Schools of the Millennium work with community agencies, churches and synagogues, workforce development boards, and other community organizations to help involve parents who have not been involved in their child's education or at school. These organizations help to provide bridges between family members and the school and also serve as extensions of the school in the community to provide information and services and support for activities such as after-school care.

Using the Community for Learning

Underlying a High School of the Millennium is its connection and relationship to the community and its resources that support learning. Schools cannot provide all the opportunities youth need in order to develop their skills, abilities, and talents and to participate fully in society and work. The community and the educational system must partner to ensure that all students have access to supportive networks to allow them to pass through adolescence safely and with high levels of achievement.

The High School of the Millennium recognizes, as one of its core goals, that students need preparation for the world of work, and it strives to provide students with opportunities that expose them to careers and workplace expectations. A career-counseling program is in place that allows younger students a chance to learn about a wide variety of careers by

“This business world of ours is so foreign to the young adults who enter it that they need expert and caring guides. Many of our students come from families that cannot offer the support needed to help these students progress to higher levels of education. This is where the mentor and/or supervisor becomes so vital.”

—George H. Kaye, Partners HealthCare Systems, Inc.

visiting workplaces and meeting with employers. As the students age, they learn about careers through career awareness, job shadowing, mentoring or internship programs.

Opportunities for work-based learning exist through experiences with public and private employers (internships, apprenticeships), school-based enterprises, service-learning, volunteer work, job simulations and use of other technologies that allow students to experience the workplace and necessary skill requirements. In developing work-based learning experiences, teachers and workplace supervisors confer to ensure that the work experience supplements and supports the student's course of study and that clear guidelines and expectations for the student are set up in advance. Supervisors provide feedback to students and their teachers about the student's performance and the level of skills needed to perform certain tasks. This feedback helps the classroom teachers calibrate their work to the expectations of the workplace.

Students are also involved in service learning²⁴ projects as a way to connect their classroom work with and make it more relevant to the community. Service-learning projects also

²⁴ The Corporation for National Service defines service-learning as an educational process in which students apply academic lessons to solve real-world problems.

provide students a chance to interact with a range of individuals and organizations in the community and to develop positive relationships with other adults as mentors and teachers. Service-learning projects, often carried out in the students' own neighborhoods, help them to learn more about their community, the issues affecting their community, and ways to make positive change and help their neighbors. The neighborhood or community benefits from having a needed service performed and learns more about the local school and the neighborhood youth and their abilities and talents.

The High School of the Millennium promotes the close-knit working of educators and individuals in the community and, to do this, it relies on intermediary organizations that provide support in brokering partnerships and relationships. These intermediary organizations relieve individual teachers from having to scout and find potential community or employer partners. The intermediaries help build a framework for partnering and for working out logistical, legal, and administrative barriers so that the boundaries between school and the communities are seamless and invisible.

Beyond using the community for learning, the High School of the Millennium is a critical piece of the system of lifelong learning that exists in the community. Communities that create and support High Schools of the Millennium value high quality educational opportunities not only for their youth but for all members of the community. Schools, community colleges, universities, museums, adult education, family literacy, and workforce development programs are all linked through one-stop career centers that provide information on the labor market and on sources of

support for skills development. The community tracks outcomes from all the education and training providers in the system, and makes this information available to citizens.

Accountability

The community in which a High School of the Millennium is located is clear about its expectations for learning and student achievement and is also clear about the ramifications if expectations are not met. High Schools of the Millennium are accountable to the community (both the learning community of the school and the broader community in which the High School of the Millennium is located) and provide information on a regular basis on the performance and actions of the school. Staff and teachers who work at a High School of the Millennium agree to be held accountable for their role in student success, students understand that they are accountable for their part in the learning process, and parents, too, understand they are accountable for their involvement and support of their sons and daughters in the learning process.

The wider community measures its performance in the development of healthy and successful youth by looking at a variety of youth indicators. The community recognizes the prime importance of the high school in developing and educating youth, but also understands that the full burden of this task is not the high school's alone, and that only by working together can indicators of youth success improve. The community understands, too, that while schools must be accountable to the elected or appointed school board, in reality, accountability to the parents and families that make up the community is much more important and meaningful.

APPENDIX: PRINCIPLES AND CHARACTERISTICS OF HIGH SCHOOL REFORM EFFORTS

The following is a list of principles or characteristics that have been used to define, develop and support various high school reform efforts. This list is not meant to be exhaustive of all the reform efforts that are underway; it is only illustrative, and it is in no particular order. The point is to demonstrate the similarity of approaches in many of the current reform efforts. (Some small liberties have been taken with the language to shorten it.)

A. Breaking Ranks: Changing an American Institution (National Association of Secondary School Principals—1996)

- ① High school is, above all else, a learning community and each school must commit itself to expecting demonstrated academic achievement for every student in accord with standards that can stand up to national scrutiny.
- ② High school must function as a transitional experience, getting each student ready for the next stage of life, whatever it may be for that individual, with the understanding that, ultimately, each person needs to earn a living.
- ③ High school must be a gateway to multiple options.
- ④ High school must prepare each student to be a lifelong learner.
- ⑤ High school must provide an underpinning for good citizenship and for full participation in the life of a democracy.
- ⑥ High school must play a role in the personal development of young people as social beings who have needs beyond those that are strictly academic.

⑦ High school must lay a foundation for students to be able to participate comfortably in an increasingly technological society.

⑧ High school must equip young people for life in a country and a world in which interdependency will link their destiny to that of others, however different those others may be from them.

⑨ High school must be an institution that unabashedly advocates on behalf of young people.

B. Coalition of Essential Schools

① The school should focus on helping adolescents learn to use their minds well. Schools should not attempt to be “comprehensive” if such a claim is made at the expense of the school’s central intellectual purpose.

② The school’s goals should be simple: that each student masters a limited number of essential skills and areas of knowledge. The aphorism “Less is More” should dominate: curricular decisions should be guided by the aim of thorough student mastery and achievement rather than by an effort merely to cover content.

- ③ The school's goals should apply to all students, while the means to these goals will vary as those student themselves vary. School practice should be tailor-made to meet the needs of every group or class of adolescents.
- ④ Teaching and learning should be personalized to the maximum feasible extent. Efforts should be directed toward a goal that no teacher have direct responsibility for more than 80 students.
- ⑤ The governing practical metaphor of the school should be student-as-worker, rather than the more familiar metaphor of teacher as deliverer-of-instructional services. Accordingly, a prominent pedagogy will be coaching, to provoke students to learn how to learn and thus to teach themselves.
- ⑥ Students entering secondary school studies are those who can show competence in language and elementary math. Students who need it will be provided intensive remedial work. The diploma should be awarded upon a successful final demonstration of mastery for graduation—an "Exhibition." As the diploma is awarded when earned, the school's program proceeds with no strict age grading and with no system of "credits earned" by "time spent" in class. The emphasis is on the students' demonstration that they can do important things.
- ⑦ The tone of the school should explicitly and self-consciously stress values of unanxious expectation, trust and decency. Parents should be treated as essential collaborators.
- ⑧ The principal and teachers should perceive themselves as generalists first and specialists second. Staff should expect multiple obligations and a sense of commitment to the entire school.
- ⑨ Ultimate administrative and budget targets should include, in addition to total student loads per teacher of 80 or fewer pupils, substantial time for collective planning by teachers and competitive salaries for teachers.

- ⑩ The school should demonstrate non-discriminatory and inclusive policies, practices and pedagogy. It should model democratic principles that involve all that are directly affected by the school.

C. High Schools That Work, Southern Regional Education Board

- ① Setting higher expectations and getting more students to meet them.
- ② Increasing access to intellectually challenging vocational and technical studies, with a major emphasis on using high-level math, science, language arts, and problem-solving skills.
- ③ Increasing access to academic studies that teach the essential concepts from the college prep curriculum by encouraging students to use academic content and skills to address real-world projects and problems.
- ④ Having students complete a challenging program of study with an upgraded academic core and a career major.
- ⑤ Giving students and parents the choice of a system that integrates school-based and work-based learning.
- ⑥ Having an organization, structure, and schedule giving academic and vocational teachers the time to plan and deliver integrated instruction aimed at teaching high-level academic and technical content.
- ⑦ Getting every student involved in rigorous and challenging learning.
- ⑧ Involving each student and his or her parents in a guidance and advising system that ensures the completion of an accelerated program of study with an in-depth academic or vocational-technical major.
- ⑨ Providing a structured system of extra help to enable students who may lack adequate preparation to complete an accelerated program of study that includes high-level academic and technical content.

⑩ Using student assessment and program evaluation data to improve continuously the school climate, organization, management, curricula and instruction to advance student learning.

D. Obey-Porter, Defining Characteristics of the Comprehensive School Reform Demonstration Program

① High standards for all children: school reform must upgrade the educational program for all students, rather than for particular groups such as “high achievers” or “at-risk” students.

② Comprehensive: School reform must address all core academic subjects, instruction, school organizations and all grade levels.

③ Research-based: Use best practice research.

④ Research-tested: School reform designs are the subject of rigorous and on-going evaluation by independent organizations.

⑤ Common focus on goals: Faculty and community have a shared vision for the school and a common focus on goals. A comprehensive design keeps schools focused through personnel and leadership turnovers, preventing the frequent derailment of reform efforts.

⑥ Professional development: On-going professional development for teachers and administrators that is tied directly to improving student achievement.

⑦ Alignment: Comprehensive designs align all resources—human, financial and technological across grades and subject areas.

⑧ Parent and community involvement: Reform efforts offer innovative and effective ways to substantially engage parents, and community and schools forge linkages with service providers that address the non-academic needs of students and their families.

E. Career Academies (National Career Academy Coalition—1999)

① Small Learning Community

- Several academy-only classes in grades 9–12, 10–12, or 11–12.
- Self-selected cross-disciplinary team of teacher-managers, with a lead teacher/coordinator.
- Voluntary enrollment, cross-section of students, size limited to maintain personalization.
- A family-like atmosphere with a motivating, supportive, disciplined instructional tone.
- When possible, academy classes blocked back-to-back in the daily schedule.
- Support from district and school administrators and counselors.
- Students given opportunities to engage in the full range of non-academy courses, electives, and other school activities.

② College-Prep Curriculum with a Career Theme

- Several academic courses per year that meet high school graduation and college entrance requirements.
 - One or more courses per year in a broadly defined career field that lets students explore a full range of career options.
 - Academic classes that illustrate applications in the career field.
 - Common planning time for teachers to allow curricular integration.
 - Projects that bring together skills across academic and career classes, possibly a school-based enterprise.
 - Counseling to ensure postsecondary plans which may include college, work or both.
 - Articulation with postsecondary curriculum.
- ③ Partnerships with Employers, Community, and Higher Education**

- Locally selected career field with a cadre of employer partners.
- Steering Committee that governs program operation.
- Parental involvement in students' decision to enroll and in various program activities.
- Business representatives, who serve as role models, show students career options and paths.
- Field trips/job shadowing to illustrate work environments.
- Mentors and employee volunteers that serve as career-related "big brothers and sisters."
- Workplace experiences (paid or unpaid internships, community service) in the last year or two.
- Postsecondary institution articulation, concurrent enrollment.

F. Secretary's (of Education) Awards for Outstanding Vocational-Technical Education Programs, Selection Criteria (1995)

- ① **Articulation.** The program maintains strong articulation among secondary, postsecondary, and adult vocational-technical education. Strong visible ties are established and maintained with business, industry, and the community.
- ② **Systemic Reform.** The program demonstrates well-defined systemic reform, including coordination with state policies and initiatives as they align with the national reform initiatives (Perkins Act, Goals 2000, Educate America Act, the Improving America's Schools Act and the School to Work Opportunities Act).
- ③ **Integration of Academic and Vocational-Technical Education.** The program demonstrates planned coordination and sequencing of courses, curricula and/or programs that foster academic and vocational-technical competencies and contextual learning.

④ **Performance System.** The program uses outcome-based performance indicators to evaluate quality.

⑤ **All Aspects of the Industry.** The program demonstrates that students have a strong experience in and understanding of the industry that they are preparing to enter.

⑥ **Sex Equity/Special Populations Served.** The program provides evidence of the participation of members of special populations and activities that promote the elimination of sex bias and stereotyping.

⑦ **Model and Replication.** The program is a model and could be replicated.

G. New American High Schools, U.S. Department of Education (1999)

- ① All the core activities of the school concentrate on student learning and achievement.
- ② All students are expected to master the same rigorous academic material. High expectations are established for student achievement.
- ③ Staff development and planning emphasize student learning and achievement.
- ④ The curricula are challenging, relevant and cover material in depth.
- ⑤ Schools are using new forms of assessment.
- ⑥ Students get extra support from adults.
- ⑦ Students learn about careers and college opportunities through real-life experiences.
- ⑧ Schools create small, highly personalized and safe learning environments.
- ⑨ Technology is integrated into the classroom to provide high-quality instruction, and students have opportunities to gain computer and other technical skills.
- ⑩ Periods of instruction are longer and more flexible.
- ⑪ Strong partnerships are forged with middle schools and with colleges.

12 Schools form active alliances with parents, employers, community members and policymakers to promote student learning and ensure accountability for results.

H. The New Urban High School Design Principles (Big Picture and USED)

- 1 Personalization: Create settings where teachers and students can know each other well.
- 2 Adult World Immersion: Situate students directly in the world beyond school.
- 3 Contexts for Reflection: Provide integrated, reflective contexts for students.
- 4 Intellectual Mission: Articulate a common intellectual mission for all students.
- 5 Community Partnership: Work closely with family and community.
- 6 Teacher as Designer: Conceive of the teacher as designer, inquirer, and clinician.

I. Tech Prep

- 1 Articulation between secondary and postsecondary education leading to an associate's degree.
- 2 Integration of academic and vocational curriculum with a common core of required proficiency in mathematics, science, communications, and technology.
- 3 Professional development in contextual learning and applied academics.
- 4 Career counseling for students that opens doors to further education or placement in suitable employment.

J. Principles for School-to-Work

Programs included in "Looking Forward: School-to-Work Principles and Strategies for Sustainability," American Youth Policy Forum and Center for Workforce Development, Institute for Educational Leadership, 2000.

- 1 STW promotes high standards of academic learning and performance for all young people.
- 2 STW incorporates industry-valued standards

that help inform curricula and lead to respected and portable credentials.

- 3 STW provides opportunities for contextual learning.
- 4 STW helps to create smaller, more effective learning communities.
- 5 STW expands opportunities for all young people and exposes them to a broad array of career opportunities.
- 6 STW provides program continuity between K-12 and postsecondary education and training.
- 7 STW provides work-based learning that is directly tied to classroom learning.
- 8 STW assists employers in providing high quality work-based learning opportunities.
- 9 STW connects young people with supportive adults, mentors and other role models.
- 10 STW promotes the role of brokering/intermediary organizations.

K. Service and Conservation Corp Programs

- 1 Programs accomplish work and service projects that are of value to the community and to the corpsmember.
- 2 Programs provide corpsmembers with structured opportunities to learn both academic and practical skills that meet the individual needs of each participant.
- 3 Programs provide life skills training that prepare corpsmembers for successful adulthood.
- 4 Programs provide corpsmembers with a disciplined, positive and supportive experience.
- 5 Programs are highly visible and publicly responsive organizations.
- 6 Programs employ sound management and administration practices.
- 7 Programs cultivate relationships throughout the broader corps movement.

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- Public Education Network, www.publiceducation.org
- Twenty-first Century Community Learning Centers, www.ed.gov/21stcccl

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