

# Part 1

# Toward a Common Purpose

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# Chapter 1

# Education for the Information Age

**MOST OF US** have had some experience—perhaps fleeting, and perhaps outside school—with the kind of learning that characterizes good schools: the hum of collaboration, of building, of creating; the sense of purpose; the excitement of new discovery. We cherish the sense of growth and development over time, not just one fascinating moment, and the warm human connections—people to ask for knowledge or for a hand, people with whom to laugh or commiserate. Such an environment makes participants willing to take risks, to stretch intellectually, because they share a collective commitment to support and honor such attempts, not only the outcomes. With such a sense of collective discovery and growth, it's not completely clear who are the learners and who are the teachers. In these experiences of learning, some of our deepest human needs—for meaning, connection, contribution, and growth—are met.

Such are the small schools we envision. We are confident they can exist, because such schools exist today. Our task is to convert all schools into this ideal. But we have a long way to go. Research on our current system of high schools paints a picture of failure:

- More than 90 percent of students from the top two income quartiles graduate from high school—compared to 65 percent of those from the bottom quartile (Mortenson, 2001).
- Only 28 percent of low-income students are enrolled in college preparatory curricula, compared to 49 percent of middle-income students and 65 percent of higher-income students (Gates Education Policy Paper, 2003).
- For every hundred students who begin the ninth grade, sixty-seven finish high school in four years; thirty-eight go to college, and only eighteen

earn associate's degrees within three years or bachelor's degrees within six years (Mortenson, 2000).

- Only about 50 percent of African American and Latino ninth graders graduate from high school within four years, compared to 79 percent of Asian Americans and 72 percent of whites (Greene & Forster, 2003).
- U.S. workers with bachelor's degrees earn nearly a million dollars more over the course of a lifetime than those with only a high school diploma (U.S. Census Bureau, 2002).

## A Vision of Education for the Twenty-First Century

So what do we need to do? What do successful high schools look like? In general, they have less than a hundred students at each grade level and less than four hundred overall. And smaller is better: the Coalition of Essential Schools believes in a ratio that allows each child to be known well; KnowledgeWorks argues for no more than seventy-five students in each grade, and for three hundred total students in a school. Successful schools are *autonomous*, that is, they control their own resources—budget, staffing, curriculum and assessment, governance and policies, and scheduling, consistent with state and district standards. Autonomy includes hiring and evaluation of teachers and staff consistent with labor contracts, and it also includes the freedom to set different school days and calendar years for both students and faculty in accordance with the school's own principles, as well as to create governance structures that give school staff increased decision-making powers over budget approval, principal selection and firing, and programs and policies. If a school shares a site with other programs, it does not have to seek permission of the site's cohabitants when it wants to change its programs—though it may have to negotiate site usage issues. (See Chapter Two for a description of specific autonomies.)

Nonetheless, successful schools differ greatly from one another. Their academic visions and missions are diverse. Some, like the Met School in Providence, Rhode Island, tailor their programs as closely as possible to the interests and passions of individual students, asking all students to spend extensive time in community internships, working as apprentices to a wide variety of professionals. Some, like the Boston Arts Academy in Massachusetts, organize coursework around a particular discipline or set of disciplines—in this case, the performance arts—and use these disciplines as a lens for academic learning. Some, like LaGuardia Middle College High

in New York City, teach a traditional curriculum but provide such a high level of personalized attention that *every* student will be ready for college-level work by graduation.

This diversity of academic vision is rivaled by the diversity of physical settings. For the schools we need now, no single model defines what constitutes a viable physical plant. In some cases, where organizers have had the opportunity to design a facility with a particular educational philosophy in mind, schools look quite different from our standard image. The School of Environmental Studies (affectionately known as the “Zoo School”) in suburban St. Paul, Minnesota, for example, looks more like the offices of a busy architectural firm. Each student’s home base is an individual work station, and there are lots of comfortable niches of different sizes for collaboration. Other schools find their homes in converted storefronts, churches, grocery stores, and neighboring houses on a city street. Some tuck themselves into spare (or intentionally created) space in other civic buildings—the municipal art museum, city hall, the opera house, a recreation center in a large park . . .

Still other schools may look very much like what we currently think of as a high school, with wide, locker-lined halls leading to traditional-sized classrooms, a big lunch room, and a library. These schools result from a process called *conversion*; it’s unsurprising that they still look like comprehensive high schools at first glance, because they’re in a building that used to host one large high school that offered a wide variety of classes and electives. Now it hosts multiple new small autonomous schools with more specialized curricula, but the walls are the same as always. Schools that share a building may mingle with one another, but often they are *interconnected* instead, meaning they share a site but each has control over a contiguous space it can call its own. What makes them distinctive is that young people and adults know each other well. That’s because the actual school population is small, and multiple independent schools share the same building. Their offerings are genuinely *new*, not a repackaged version of an existing program, not subsidiary to the larger school in any way, and not a model of the larger school’s practices in a smaller format. They are qualitatively different organizations. At the Julia Richman Complex in New York City, for example, six schools, including a pre-K–8 special education school, a high school for new learners of English, and three other high schools, share space with a day-care center and a community medical center.

Despite their diversity of physical sites and curricular programs, the schools we need are small in size and share key convictions, goals, and methods. These are the essential elements common to all of the new schools:

- *Intellectual vibrancy:* A commitment to help all students tap into their love of learning and to prepare all students for postsecondary work. TheodoreSizer, founder of the Coalition of Essential Schools, writes, “The school should focus on helping young people learn to use their minds well.” Our current system, with its college prep and regular tracks, assumes that not all students need the same level of intellectually challenging work or need to be ready for postsecondary education. In an Information Age economy, this is simply no longer viable. The new schools we envision will organize themselves to prepare all students to use their minds well and to attend college, if they so choose.

- *Personalization:* A commitment to nurture each student as an individual. In our current system, it is largely assumed that all students will be on the same page with all their peers every day, in every class. Everyone reads the same material; everyone does the same homework; everyone takes the same tests on the same day. This sameness does not match what we know about human cognition. The truth is that each of us learns differently. We each have our own set of passions, interests, and talents, and our own learning style. To nurture all students as individuals, no matter what their curricular focus, each new school will build in flexibility and responsiveness as part of the way it works. The structure allows staff to know students well. Students in all schools will be able to make choices about what they want to delve into in depth. Personalization enables schools to be responsive to a specific student’s experiences and social and community context.

- *Equity:* A commitment to reverse embedded inequities. In our current system, poor students and students of color are far more likely to attend overcrowded schools with less skilled teachers and deteriorating facilities. Within any given school, they are more likely to be taught by the least skilled teachers in the most crowded classrooms (Center for the Future of Teaching and Learning, 2000). Our new schools, individually and collectively, will provide all students with the resources they need to receive an excellent education and will actively monitor student outcomes to ensure that all students are succeeding. Attending to personalization and intellectual vibrancy is pivotal to achieving equity.

## Remaking an Icon

Most of us remember high school as a place of adolescent socialization, negotiating cliques and peer groups, waiting for the bell to ring so we could meet friends in the hallways. As the bricks and mortar of the large high school dominates the American landscape, the cultural image of the large

comprehensive high school dominates America's collective identity. Either personally experienced or stamped on the collective consciousness through Hollywood's endless films, the image of a pack of young people moving, anonymous to teachers, from one class to another, sitting in rows of desks, listening to lectures, tracked according to perceived college aspirations (which generally means by socioeconomic and racial background) and struggling through adolescent challenges with their peers is something we all share.

The large comprehensive high school was conceived at the beginning of the twentieth century to fit an industrial society. These schools were originally expected to be a sorting mechanism for an economy that had a place for students who did not graduate. They were not intended to educate all students to the level of college readiness, and the system has always done a grave disservice to some children and communities. Comprehensive high schools have often unwittingly contributed to what Jonathon Kozol has called "savage inequalities" by tracking low-income students and children of color and being unresponsive to the needs and calls for accountability from their families and communities. Middle- and upper-class white students received an academically challenging college preparatory program, while predominantly lower-income students and students of color received business or vocational programs (from which a good number dropped out). These schools were founded on conceptions of teaching-as-information-delivery, conceptions that have been thoroughly debunked in the last generation of scholarship about human cognition.

The Bill & Melinda Gates Foundation, a driving force behind the creation of new small autonomous schools, offers five reasons why large comprehensive high schools fail to meet the needs of students:

- *Incoherence*: High schools offer a dizzying array of disconnected courses with little guidance.
- *Isolation*: Many teachers see more than 150 students daily. Both teachers and students have little adult contact.
- *Anonymity*: High schools have doubled in size in the last generation, resulting in overcrowding and reduced student and teacher interaction.
- *Low expectations*: Only one of the four to six tracks in most high schools prepares students for college.
- *Inertia*: High schools are slow to change due to large and isolated staffs, restrictive state and district policies and employment agreements, over-precise higher education entrance requirements, and an array of interest groups dictating much of school policy.

Students today must be prepared for a changing Information Age economy. According to Michelle Kennedy, a teacher who became teacher-leader of the Math, Science, and Technology Academy (MAST), a new autonomous school in the West Clermont Local School District in Cincinnati, Ohio:

*People need to realize we're moving from the Industrial to the Information Era. Now people have to take the information that we have at our fingertips and evaluate and learn from it. It's a very different mindset. Few students can have a high-paying, successful job without going beyond a high school diploma, whether it is a skill, trade, two- or four-year degree, or beyond. And the hardest thing right now is to convince the community of that because our community's experience is "Well, all I have is a high school diploma and I have a decent paying job." But what was good enough for them is not going to be good enough for their children.*

Being prepared for the Information Age requires students to be analytical thinkers, effective communicators and problem solvers, and lifelong learners. Students should be prepared for being engaged members of an active democracy, which requires them to be knowledgeable, reflective, and able to embrace their civic responsibilities. They need an informed point of view, a meaningful knowledge of the world, a capacity to grapple with complex problems, and a willing ability to engage with people different from themselves.

The new expectation of high schools reflects a shift in the purpose of schooling and is in tension with the structures, cultures, and instructional strategies of today's schools. Compelled to consider options other than the status quo, many parents, teachers, superintendents, and business leaders have asked, What do our students need for the future to prepare them to have the opportunity to attend four-year colleges? What skills do they need to get an economically secure job or to become active citizens? What will enable disengaged youth to be leaders and revive their communities? Shared among the answers to these questions has been the conclusion that something dramatic must change in the whole system of providing education.

New York City has undertaken a large-scale questioning of the school system, concentrating first on district-wide reforms in the Bronx. According to Peter Steinberg, director of the Bronx New Century High Schools, "Everyone who has gone through this system (and most educational systems) believes that those systems don't effectively serve young people or their communities well." Steinberg observes, "One of the benefits for us working in the Bronx was that everyone believed that the educational system was not working." This community consensus led the district to make fundamental changes rather than just tinker around the edges.

Failing students or school districts are not the only concerns driving conversions. Bill Hart, principal of Leominster High School in Leominster, Massachusetts, echoes the idea that change is needed not only to serve students who currently drop out but to serve all students better. Few if any comprehensive high schools serve all their students well; fewer push even the highest-achieving students to really use their minds. Hart argues, “High schools traditionally have been very scholar-academic, and very teacher centered. I don’t care how well your kids are doing, we are not preparing them for the world they need to be in if we aren’t focusing—not only on how much information they can acquire and manipulate—but on how well they use their minds, focusing on critical thinking skills.” When Hart speaks with parents of high-achieving students, he tells them, “Yes, your kid is doing well, but I’m in classrooms every single day and too often kids are passive recipients of information. Even though kids might be straight A students, if we haven’t pushed them to use their minds in the most effective way, then we haven’t given them the education they deserve. And you have a false comfort, thinking, because they are getting high grades, that they are getting the education they need and they deserve.”

Many educators, parents, and others have concluded that today’s large comprehensive high schools have unfixable flaws. While there have always been examples of small schools that served children well, the current form of secondary education has been remarkably stable and has lasted for over a century—in the face of repeated waves of reform. As Phillip Schlechty writes, “Public schools have no history of producing an entire population of academically well grounded citizens, despite the persistent myth of a golden age of education, [therefore] *if schools of America are to survive and thrive, American educators must be prepared to do things that have never been done, under conditions that have no precedents in our history*” (2001, p. 9, emphasis in original). This system must now give way to a new form of schooling.

## Small Schools for a New Society

“Small schools can be the antidote to an educational system that has lost its soul as it has become more bureaucratic and impersonal. If teaching and learning above all are about the relationships constructed by teachers and learners—and I believe they are—then small schools hold out the promise of equality in education because they can promote the demanding but affirming personal relationships essential for high levels of student learning” (Nieto, 2000, p. 13).

The transformation of existing high schools into the small schools we need requires much more than changing school size. It requires a paradigm shift in the way that everyone—students, teachers, and a surprisingly wide range of community members—view what schools do, what they look like, what students need to know and experience as adolescents, how they really learn and how they should be taught. It requires giving up one vision and building another. The transformation of the physical large schools that stand behind the icon requires deep shifts in culturally embedded beliefs and in the actual institutionally embedded instruction, school design, and school culture.

Cotton (2001) notes five elements that are critical to the success of small schools:

- *Self-determination*, or the autonomy to make key decisions regarding space, time, budget, curriculum, instruction, and personnel
- *Identity*, which includes a clear mission and vision, thematic focus, and a focus on student achievement
- *Personalization*, or knowing students well, having heterogeneous classes in which each student's needs are met, and parent and community involvement and participation in the life of the school
- *Support for teaching*, including leadership and decision making, professional development, collaboration, and a large repertoire of instructional strategies
- *Functional accountability*—for students, using multiple forms of assessment, and for schools, providing two-way accountability with districts, school boards, and legislatures

Small autonomous schools can bring all five elements to bear, and they work. Indeed, research over the past fifteen years supports what educators have experienced: Students do better in autonomous small schools than in large comprehensive high schools. Small schools are safer, have greater teacher and parent satisfaction, higher achievement and graduation rates and lower dropout rates, higher student attendance, greater participation in extracurricular activities, reduced racial achievement gaps, and a deeper sense of student affiliation (Ancess, 2003; Ancess & Wichterle, 1999; Darling-Hammond, 1997; Darling-Hammond, Ancess, & Ort, 2002; Cotton, 1996, 2001; Wasley & Lear, 2001; Lee & Loeb, 2000; Wasley et al., 2000; Howley, Strange, & Bickel, 2000; Raywid, 1996, 1999; Cushman, 1999; Klonsky & Klonsky, 1999; Lashway, 1998–1999; Fine, 1998; Gladden, 1998; Lee, Smith, & Croninger, 1995; Bryk & Thum, 1989; Center for Collaborative Education, 2004).

Small autonomous schools have also been found to be more effective than *small learning communities*, that is, individualized units that allow teachers and students to spend some time together within a larger high school, but without the autonomy of independent school status (U.S. Department of Education, 2001; Cotton, 2001; Gregory, 2001). Although small learning communities have been found to be effective to the extent that they have the conditions that are critical to small autonomous school success, as Gregory notes, it is common for small learning communities to revert to big-school strategies and lose much of the autonomy that makes them successful.

## Creating Small Schools from Large Buildings

The infrastructure of secondary education in this country overwhelmingly consists of large school buildings. To take advantage of these facilities and spare the expense of building new ones, schools and districts are electing in ever-increasing numbers to undergo conversion of their large comprehensive high school buildings into several smaller autonomous schools—rather than start new schools from scratch. Even small-school proponents who believe that start-up schools face fewer obstacles than conversions acknowledge that the transformation of existing schools is essential if we are going to create enough small schools to serve all students. There is a broad sense that conversion, though difficult, is necessary. In the words of Larry Myatt, co-founder of Fenway High School in Boston and current provider of professional development to school leaders in the Boston Public School District Office of High School Renewal, “It’s got to get done, there’s no question about it. The prevalent reality around the nation is these are the schools that we have and we’ve got to start doing this [conversion] work.”

At some schools, the first steps in the conversion journey have been championed by groups of parents who were fed up with the persistent failure of their local school system. In other areas, the process started with thoughtful educators concerned that only a small group of their students were learning to use their minds to their fullest potential. Some districts have initiated major strategic overhauls because of unacceptable racial achievement gaps. Elsewhere, principals have realized that they were losing students to charter or private schools as choice policies increased the number of alternatives available to students. In New York City, for example, community engagement paved the way for the planned creation of two hundred small schools.

Further, forming multiple small schools in a district is changing the structure of education from a comprehensive high school to a comprehensive

system of small schools, which increases options for children. These schools all have the goal of preparing children for postsecondary education, but the specifics need to be determined within each district and school. For example, the Gates Foundation's Web site describes the objective for children and families to have choices from a "diverse portfolio of schools, each with different emphases, teaching approaches, and philosophies, all of which would prepare every student for college."

Few research studies have examined the experiences of students in converted high schools. A report on schools in their first year of conversion (American Institutes for Research & SRI International, 2004) found that students in converted schools appear to be doing well, but the schools face many complex and challenging problems before institutionalizing and sustaining success. This study reports that students in converted schools are known and cared about to a greater degree than in larger comprehensive schools and that parent-school communication is greater and more effective. Reports on student achievement were mixed: some students felt more academically challenged while others found schoolwork easier. Clearly, this is a work in progress as the evaluation examines schools in their first year of conversion. Still, the results are promising.

## Guiding Principles of Conversion

In Oakland, San Diego, Sacramento, and San Mateo, California, in Boston and Worcester, Massachusetts, in Portland, Oregon, in Seattle and SeaTac, Washington, in St. Paul, Minnesota, in Chicago, Illinois, in East Cleveland and Cincinnati, Ohio, in Denver and Adams County, Colorado, and in many more districts coast to coast, schools are at some stage of converting from large to small. Schools are grappling with issues from whether they should transform a large school into small schools to crafting a design for each school, staging the opening of each school, and having each school fully emerge into its own. This book itself is a snapshot, written while work is still very much in process. It is an up-to-the-minute account of what we see as the most promising practices for school conversion.

We discuss common and vexing challenges that arise in school conversion and redesign efforts, detail stories from the field, and discuss the opportunities for gain and loss that the conversion process provides, while identifying some pitfalls often encountered along the way. We draw lessons from the literature of effective school design, school reform, and organizational development. We've interviewed more than seventy district personnel, technical assistance intermediaries, professional development coaches, principals, teacher-leaders, and community partners about their strategies

for conversion, the challenges they have faced, and the central lessons they have learned. We have attempted to capture the best thinking on their experiences in their journey from large school to small.

We have heard a common thread in our conversations with school and community members across the country: *High schools must educate every student to the level of college readiness, for productive work in an information society and for active citizenship in a diverse society.* As we noted at the beginning of the chapter, society has fewer and fewer openings for people who emerge from school without that sort of education, and we are obligated to provide all students with the ability to support themselves and contribute to society. High schools need to educate all students to the same high level, and conversion efforts must develop a common understanding of why all students need to do well, what students need to be able to do, and how this change in thinking represents a paradigm shift for high school structure, culture, and instruction.

This overarching goal and the new call it places on high schools—to expect and educate all students to reach high outcomes—reflects a historical shift in the purpose of the institution of high school. It has two core implications for conversion.

*Implication #1: Conversion is about radical transformation.* A historical shift in the purpose of the institution of high school necessitates a parallel historical shift in the design of high schools and districts. Reforms that tweak, compromise, try to build on, and do not fundamentally remake dominant school culture, structure, instructional practice, and district relationships will fall short of meeting the needs we have of our high schools.

*Implication #2: The biggest challenges are human, not technical.* Any group of people will be somewhat resistant to or fearful of dramatic change. As the radical transformation of high schools involves change central to their social experience, core profession, and workplace, even more reluctance or resistance is natural. Though the technical tasks involved in converting a large school to several small ones are considerable, the human dimensions to this process loom even larger. Leading conversion requires an understanding of the connections and the differences between human and technical stages, tasks, and challenges—and how that human aspect is embedded in technical decisions.