

RE-VISIONING HIGH SCHOOL

How three districts created new visions of what high school should be in the 21st century.

Perhaps it is the power of our collective memories of high school that makes it so difficult to think of high school in any other way: the smell of fresh paint and old lockers, the Homecoming game and dance, the teacher who opened your heart to literature. Yet today's students live in the Information Age, a time when change itself is the most constant presence. How ironic that high school remains one of the institutions most resistant to change!

It is time to walk away from stale mindsets of the past. Too many students drop out, physically and intellectually. Too many leave unprepared for the workforce or higher education. Too many exit with skills appropriate for the 20th century, not the realities of the 21st century. High school reform is on everyone's lips, but one cannot reform high school without first "re-imagining" high school. By re-imagining, I mean creating and carrying out a new vision for what high school can and should be:

- its essential purposes and goals;
- the ways that teachers and students interact and spend their time;

- the knowledge, values, and skills students derive from the experience; and
- the ways the building itself reflects the dreams and values of the community.

Re-imagining is a process, one that involves the entire community. Re-imagining means appreciating that new kinds of schools will require new kinds of teachers. And re-imagining means finding ways to assure that the knowledge and skills students need for success are woven through the teaching and learning process. Re-imagining is about knowing that one size does *not* fit all—that there can and should be many ways of assuring that all students graduate with a knowledge base that opens the doors of employment and further education, the skills and ability to compete in the global economy, and a lust for learning that makes their minds places in which they will enjoy spending the rest of their lives.

STARTING FRESH:

PHILADELPHIA'S SCHOOL OF THE FUTURE

What if you had a chance to design a high school from scratch? Using the same resources, rules, and regulations that apply to existing schools within a district, is it possible to build a school that will meet the needs of kids who will graduate in 2010, 2020, and beyond? This is the opportunity that greeted Philadelphia, a city that had not built a new high school in the last 50 years, when Microsoft selected them as a partner for their School of the Future project. But Microsoft isn't paying for this high school—the district is. Microsoft is providing inspirational and intellectual capital. And, although the goal is to "create a technology-based educational model that can be replicated in communities around the globe," the school isn't about technology. It's about a "vision of an empowered community where learning is continuous, relevant, and adaptive."

PHILADELPHIA RESOURCES

Building the School of the Future. Microsoft Corporation. www.microsoft.com/education/schooloffuture.msp

"Building the School of the Future: Discovery Brief 01: Methodologies for Strategic Planning." Microsoft Corporation, 2004. www.microsoft.com/education/schooloffuturedownloads.msp

The School District of Philadelphia.
www.phila.k12.pa.us

Snyder, Susan. "For School of the Future's Leader, 'an Educator's Dream.'" *The Philadelphia Inquirer*, October 28, 2005.



Media Bakery

Nice words. But how does this happen? Mary Cullinane, Microsoft's academic program manager and team leader for the School of the Future, describes it this way: "We are building a public school that has to work under all the existing agreements—state and district regulations, union contracts, per-student space and cost requirements; all the real-world constraints of a public school. But throughout the process, we are looking for elasticities that can be applied—flexibilities that aren't always pursued by school reformers, but things that can make a real difference."

The process began in September 2003, when the development team, made up of district and community leadership, Microsoft, and education experts from around the world, started imagining, dreaming, and planning. They undertook what they now call the 6i Development Process:

- • • **Stage 1: Introspection.** They began by asking, "What is our organizational structure, framework for instruction, and culture? What project benchmarks should be applied; what are the metrics of success?" The team applied a tool known as SWOT analysis—strengths, weaknesses, opportunities, and threats—to guide their understanding of possibilities, goals, and realities.
- • • **Stage 2: Investigation.** The team did their



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- • • **Stage 3: Inclusion.** Five separate organizations, involving 50 people from the community, were brought into the process at this stage. The choice was consciously made to involve the larger community after introspection and investigation provided a strong grounding, rather than at the beginning. The community accepted that, and they have been a part of the work ever since.
- • • **Stage 4: Innovation.** Even though innovation is an underlying theme for the school, the nuts and bolts of innovation came later in the process, after the first four stages had been set. Technology design came after instructional planning; classroom design came after agreement on methodology. But imagination and creativity were keywords driving the development process.
- • • **Stage 5: Implementation.** Ground was broken in November 2004 for the September 2006 opening—a tight timetable they expect to meet. Together, the

homework. They reviewed the research on small schools and on effective schools. They analyzed other models. They created an international advisory council, and visited numerous schools around the world to investigate methodologies, technologies, and educational approaches that have been successful. With the Internet, anyone re-visioning schools can and should get beyond the boundaries of their own local experience.

principal, community team, and district officials are interviewing teachers. Professional development for the entire staff began this winter, bringing the team together as a community before they set foot in the classroom. Students will be selected by lottery this spring.

••• **Stage 6: Introspection.** Debriefing and reflection about both process and outcomes are critical components. The benchmarks and success metrics defined in the first stage of introspection are kept in the forefront. Admitting failure and mistakes is not just permissible; it's a necessity. Introspection is the spark for what will be the continuing renewal of the 6i Development Process.

Many of the tools and resources that other schools can leverage as they build their own schools of the future are available on Microsoft's School of the Future website. Discovery Briefs share best practices and key learnings; other resources include technical blueprints and a staff-hiring process built on a "competency wheel," in which key competencies are identified and form the basis for "behavioral interviewing." A Learning Space Matrix lists six critical elements in their vision of a successful school: it must be motivating, flexible, collaborative, reflective, performance-focused, and community-centered. In the Learning Space Matrix, these goals are lined up against each of the school's design elements to ensure there is complete alignment. These design elements then form the core building blocks around which the school is being shaped—physically, intellectually, and socially.

NEW TEACHING FOR NEW SCHOOLS: CHICAGO ACADEMY HIGH SCHOOL

Re-visioning schools cannot work without re-visioning teaching, the roles of teachers, their incentives, and their preparation. Today's teachers—especially high-school teachers—were prepared to teach alone, with little interaction or collaboration among peers. This may have worked in industrial-era high schools, but the model is clearly obsolete in today's world, where success is built on cooperation and collaboration, shared expertise, and distributed knowledge.

Often, those who create new schools find that the

teachers who were prepared in traditional ways and who have taught in traditional schools really aren't comfortable teaching in new models of schooling. "Small schools often find it difficult to find teachers who 'get' what it means to teach in a small school—expectations that you'll lead a professional-development activity, what it takes to personalize instruction, using staff meetings as a time to build consensus, or knowing how to become an effective member of an interview team for new teachers," explains Brian Sims, the principal of Chicago Academy High School (CAHS).

CAHS, operated in partnership between Chicago Public Schools and the Academy for Urban School Leadership (AUSL), finds itself at the confluence of reform efforts: it is a newly designed high school, a small school, and a new model for teacher preparation. Working closely with National-Louis University, which has prepared teachers for the Chicago Public Schools for the past 100 years, AUSL describes itself as a "dual mission" model—preparing students for academic success *and* preparing teachers for teaching success.

Personalization is one of the central redesign features. At CAHS, every element must contribute to the intentional personalization and learning-community focus. All students are in advisory groups, called small learning communities, where they spend 45 minutes a week reflecting on their personal goals, celebrating each other's successes, and building awareness and respect for the multiple cultures they represent. Ninth-graders spend another 45 minutes a week with counselors and in a life-skills class. All 10th-graders participate in a leadership seminar led by the principal and assistant principal.

But it is the commitment to teacher development that is perhaps most unique. National-Louis University completely redesigned their Masters of Arts in Teaching program to certify teachers through a one-year program that takes place entirely in AUSL's training schools. The student teachers, called residents, work in the classroom alongside their mentor teachers all day throughout the school year. Residents also take courses after class, right there at CAHS, which doubles as a professional-development site for both the residents and experienced teachers. The mentor teachers, who are paid an extra stipend by AUSL, work a longer day—until 4:30—in order to continue to guide and work with their residents. AUSL residents and experienced teachers are constantly in an action-research mode, using what occurs in the classroom as a laboratory to jointly reflect on what is effective in teaching—and what is not.

It's extremely important, Sims maintains, that new teachers train in a small-schools environment so they

CHICAGO ACADEMY RESOURCES

Academy for Urban School Leadership.
www.ausl-chicago.org

Chicago Academy High School.
www.chicagoacademy.org/highschool

have a realistic understanding of the roles they will be expected to play if they are to be effective in these schools.

EMBEDDING 21ST CENTURY SKILLS: LAWRENCE TOWNSHIP, INDIANA

Any effort at re-visioning schools requires attention to curriculum and instruction—the core of the learning experience. In 2001, the Lawrence Township district conducted a technology audit to consider what skills their students need upon graduation from high school. Their state

curriculum standards clearly laid out the knowledge base students need, but they recognized that the skills were not well defined.

Drawing on the enGauge Digital Age Skills co-developed by the North Central Regional Education Laboratory and the Metiri Group, they worked with the Partnership for 21st Century Skills to identify seven competencies: basic literacy, technology literacy, information literacy, visual literacy, self-direction, higher-order thinking, and cultural competence. With a five-year grant from the Lilly Endowment, an Indianapolis-based foundation, Lawrence Township developed a strategic plan to embed these skills in all curricula and instruction. Their approach is elegant in its clarity.

Recognizing that most teachers were never taught 21st century skills, much less taught to teach them, Lawrence Township focused the entire grant on professional development. “We didn’t want this to be an add-on to the curriculum, a separate course or courses,” says Marcia Capuano, assistant superintendent of curriculum and instruction. “We knew it would never take hold that way. We were determined to make digital literacy a part of every teacher’s responsibility, in every class.”

To help spread new approaches to instruction that ensure the centrality of digital literacy in today’s test-driven, standards-based environment, they trained some of their best teachers and made them digital-age literacy coaches. All use best instructional practices as the basic vehicles for digital-age skills, but their approaches vary:



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“One size does not fit all—there can and should be many ways of assuring that all students graduate with a knowledge base that opens the doors of employment and further education.”

some co-teach alongside the teachers in their building, some encourage action research, some lead mini-courses or book study, and all work closely with principals. Most often, it takes a lot of handholding.

“You can’t lay 21st century skills on top of 20th century instruction,” says Troy Knoderer, the township digital-age literacy coordinator. “There’s no way to weave it into a didactic or lecture mode. It isn’t about just making graphs; it’s how you use the graphs to

better understand concepts and content we needed to teach anyway. It’s a new way of thinking about how students can visualize, integrate, and communicate information of various types.”

Lawrence Township is now in the fourth year of the five-year grant. Teachers are becoming comfortable with teaching this way. Even more exciting is how working with the coaches around digital-age literacy stimulated a new kind of professional learning community in the schools. Teachers are comfortable with looking at student work as a team; collaboration and reflective practice are becoming the norm. This digital-age teaching is itself a dynamic process—one they hope will last long after the grant ends.

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LAWRENCE TOWNSHIP RESOURCES

Digital Age Literacy. Metropolitan School District of Lawrence Township.

district.ltschools.org/initiatives/literacy.php

enGauge: A Framework for Effective Technology Use.

North Central Regional Educational Library.

www.ncrel.org/engage

Metiri Group. www.metiri.com

Partnership for 21st Century Skills.

www.21stcenturyskills.org

WestEd. www.wested.org

IS HAVING THE RIGHT ANSWER ENOUGH?

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could be used to teach and assess 21st century skills. As the U.K. has done, our federal government will need to play a leadership role in establishing this infrastructure, which is necessary to stimulate real innovation and widespread distribution in assessment development.

“We cannot afford to use 19th century methods and expect to achieve our goals to effectively educate the leaders of tomorrow,” Egan says. “After all,” notes Trilling, “what is at stake is the future of our whole economy, our standard of living, and the welfare of generations to come. A very high-stakes project indeed!”

For high schools especially, the handwriting is on the wall. The two U.S. assessments profiled here may well represent the shift to a new yardstick that colleges and employers use to make decisions about incoming freshmen and new hires. The ICT Literacy Assessment, in particular, is planning a high-school and workplace component. In their reform efforts, high schools would be wise to take ICT literacy seriously and begin not only to teach these 21st century skills, but also develop and support classroom-based assessments that step beyond multiple-choice questions and assess these skills.

While A) 5 may be the correct answer, it no longer seems like the right one. ●●●

21ST CENTURY ASSESSMENT

“The Assessment of 21st Century Skills: The Current Landscape”

www.21stcenturyskills.org

This report is written for policy, education, and business leaders who are focused on moving forward an agenda for 21st century learning, showing the current landscape of educational assessments that support 21st century learning. It defines key terms and concepts in the field of measurements; describes current activities in content and skill areas; highlights promising assessments in development; and outlines key principles and strategic recommendations for current and future efforts to develop 21st century learning assessments.

Assess 21

www.21stcenturyskills.org/assess21

Assess 21 is a web-based repository for information on assessments of 21st century skills. Assess 21’s goal is to highlight what assessments are available and make visible where gaps in the assessment of 21st century content and skills exist. Initially stocked with current assessments uncovered in the Partnership’s research, this repository is designed to serve as a central hub for background information on 21st century skills assessments as they become available through submissions to the website.

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LESSONS LEARNED

These schools are not the “isolated teaching; isolated learning” models of the past. Rather, we see in them learning communities where collaboration and sharing—among students, teachers, and administrators—are the norm. They are places where every student knows he or she is part of a team, and the full resources of the team—parents, teachers, other students, the outside community—are there to help assure the success of every individual on that team, through whichever path is necessary for that learner’s success. And these examples are places where reflection and dialogue among all members of the team stimulate continuous renewal.

“These three examples,” says Tom Carroll, president of the National Commission on Teaching and America’s Future, “are demonstrating that when teachers and principals engage in a collaborative effort to design new learning environments, they can improve student achievement beyond what any of them could accomplish alone. It is time to end the era of stand-alone teaching in isolated classrooms.”

Re-visioning America’s high schools means opening doors to the learning dreams of all our children. As Shirley Grover, principal of Philadelphia’s School of the Future, says, “I stand on the threshold of the doors of endless possibilities with kids.” ●●●