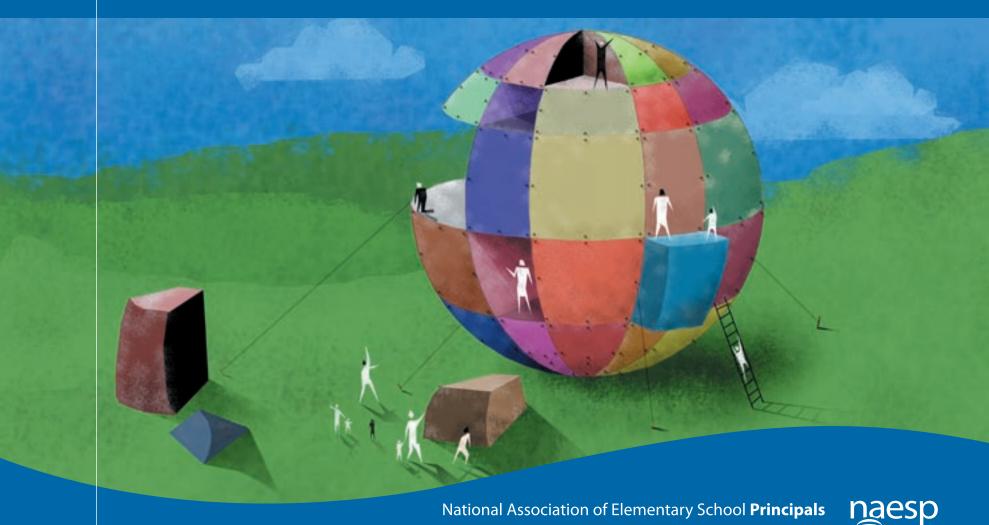
Vision2021

Transformations in Leading, Learning and Community



Vision 2021: Transformations in Leading, Learning and Community was created by the National Association of Elementary School Principals in partnership with Collaborative Communications Group.



National Association of Elementary School Principals

1615 Duke Street Alexandria, VA 22314 Phone: 800-38-NAESP Fax: 800-39-NAESP E-mail: naesp@naesp.org Web site: www.naesp.org The mission of the National Association of Elementary School Principals (NAESP) is to lead in the advocacy and support for elementary and middle level principals and other education leaders in their commitment to all children. Over 30,000 members of NAESP provide administrative and instructional leadership for public and private elementary and middle schools throughout the United States, Canada and overseas. Founded in 1921, NAESP is an independent professional association with its own headquarters building in Alexandria, Virginia. Through national and regional meetings, award-winning publications and joint efforts with its 50 state affiliates, NAESP is a strong advocate for both its members and for the 33 million American children enrolled in preschool, kindergarten and grades 1 through 8.

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E-mail: info@collaborativecommunications.com Web site: www.collaborativecommunications.com Collaborative Communications Group is a strategic consulting firm that builds the capacity of individuals, organizations and networks to work collaboratively to create solutions that are better than any single entity could produce on its own. Through strategic consulting, dialogue and convening, creation of publications and tools, and community conversations, Collaborative helps organizations and networks to identify, share and apply what they know in ways that increase productivity and effectiveness. The ultimate objective of Collaborative's work is the improvement of the quality of public education and community life.



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E-mail: futurist@altfutures.com Web site: www.altfutures.com The Institute for Alternative Futures (IAF) is a nonprofit research and educational organization founded in 1977. IAF and its for-profit subsidiary, Alternative Futures Associates (AFA), specialize in aiding organizations and individuals to more wisely choose and create their preferred futures. IAF works with clients to create forecasts, scenarios, goals and strategies that are the essential tools for transforming organizations to succeed in times of rapid change.



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Contents

Foreword	7
Introduction	9
Nine Provocative Forecasts for Learning	11
A New Path for Leadership	17
A Transformation in Learning	23
A Stronger Community	41
What These Changes Mean for Principals	49
Challenges	52
Acknowledgments	55
Bibliography	57

Foreword

by Gail Connelly, Executive Director

The world is moving at a pace that stretches the mind and staggers the imagination. And so is NAESP.

Over the past two years, NAESP staff have worked closely with the Association's Board of Directors, state affiliates and key strategic partners—Collaborative Communications Group and the Institute for Alternative Futures—along with scores of principals throughout the country, to look deeply into the trends that will affect learning, leadership, schools and communities in the coming years.

This process, called Vision 2021 to align with the year of NAESP's 100th birthday, included extensive research and a series of conversations to help principals anticipate the future of learning and school leadership. In addition, key trends and powerful forces outside of education were identified that will have an impact on leadership, learning and schools. Based on this rich data, scenarios were developed for what the future for principals might look like, and to help principals set priorities that can help them create their preferred future, not just react to what comes.

Throughout this period of intense inquiry and future forecasting, it has been continually inspiring and energizing to see an emerging focus that includes but goes way beyond test scores to ensure that children's social, emotional and physical needs are met so that every child can reach the full potential of his or her human development. It is encouraging to talk with principals every day who are showing their continued commitment to innovative, imaginative and creative approaches that not only meet but also embrace the changes ahead.

Many organizations do not make the investment that NAESP has made to look into the future. We have done so because we believe that trends in leadership, society and education are truly going to transform our future.

But we also know that simply helping to forecast what's ahead is only the first step. That is why NAESP has also identified a set of ambitious goals that can help transform our association. More than ever, we are focused on the core work of principals who are leading the learning of students and adults in collaborative learning communities.

The next few years promise to be the most exciting for principals and for the Association, and we stand committed to continue to provide the leadership our members, state affiliates and partners in the education field require: providing the research, tools, learning experiences and networking that enable principals to understand and prepare students to be highly adaptive learners in a rapidly changing world.

Introduction

In the press of daily life it is easy to lose sight of the profound changes transforming the world. Consider what has happened since this year's high school graduating class was born: In 1990, the World Wide Web did not exist, but the Soviet Union did. Charter schools did not yet exist, and accountability was only just emerging as an education policy.

The changes since then, in those areas and in many others, have had profound effects on schools and in particular on how principals do their jobs. Schools are often accused of resisting change, and in a superficial sense, schools in 2008 look a lot like schools from the previous century. Yet today, principals are routinely doing things that might have seemed futuristic not that long ago: they are using spreadsheets to analyze a wide range of data on student performance, tapping professional development resources from India, creating virtual courses that students can take at any time of the day or week and much more.

What will the profession of school principals look like a decade from now? What trends in society and education will affect how principals work?

Since 2006, the National Association of Elementary School Principals (NAESP) has been attempting to answer those questions. Looking ahead to 2021, the year the Association will celebrate its 100th birthday, NAESP spent 18 months examining trends in leadership, education and society to make reasonable predictions about the world elementary and middle school principals will face.

As part of that organizational visioning process, NAESP worked with the Institute for Alternative Futures (IAF) to identify strategic issues that will affect schools, and conducted a series of focus groups with principal-leaders to discuss provocative forecasts, create scenarios for the future and continually relate them to everyday experiences principals face today. NAESP also asked Collaborative Communications Group to conduct an extensive survey of the literature on education and societal trends and to interview thought leaders in the fields of leadership and education to determine significant issues and their repercussions for schools and principals. In each research process, NAESP met with active principals from all regions of the country to discuss these findings and their implications for the profession.

NAESP's overall goal is to help practitioners navigate the transition from current reality to desired practice. In addition to creating a forecast of what principals can expect to encounter, NAESP is defining guideposts and benchmarks along the way that can help principals understand what they need to know and be able to do to prepare for what's ahead. Particularly now, when a generation of leaders is about to retire and a new generation is about to take on leadership roles, principals need the tools and skills to thrive as educational leaders.

One outcome of NAESP's effort is a set of strategic goals for the organization, its membership and its partners. The strategic framework provides four overarching goals for the Association, through its centennial in 2021. Those goals, unanimously agreed to by the Board of Directors in its January 2008 meeting, are as follows:

- **Leading.** NAESP nurtures and supports all principals to demonstrate the vision, courage and expertise to lead and advocate for effective learning communities in which all children reach their highest potential.
- **Learning.** NAESP develops and supports all principals by providing on-demand learning opportunities that ensure access to the knowledge, skills, networks and tools to equip all students for the 21st century.
- **Community.** NAESP develops and sustains local, state, national and global networks that create powerful relationships for effective leadership and learning.
- **Organizational Transformation.** NAESP develops dynamic leaders, efficient systems and creative resources that build capacity for long-term sustainability and adaptability in a rapidly changing world.

This report, *Vision 2021: Transformations in Leading, Learning and Community*, examines trends in leadership, society and education to create reasonable scenarios of what schools might look like in the next 10 years. We present a vision of the future and how that vision will transform schools, as well as teaching and learning. We then present implications for how these changes will affect the role of the principal, and suggest some challenges that principals might face in managing those transitions.

A companion guide to this report, a revised and updated version of *Leading Learning Communities: Standards for What Principals Should Know and Be Able To Do*, provides specific tools and resources to help principals meet standards of effective leadership. NAESP's intent is to help school leaders imagine a preferred future for public education and their learning communities, assess the gaps between that preferred future and current reality and use the tools and leadership continuums in the guide as a way to improve principal performance that bridges that gap and leads students—and adults—to new levels of performance.

Nine Provocative Forecasts for Learning

What will schools look like in the next decade? In many ways, the seeds of the future already have been planted. For example, by examining birth rates and immigration patterns, we can project with reasonable certainty the demographics of the student population a decade from now. We can look at the most innovative uses of technology to project what is likely to be common practice in the coming years. We can see the growth of new education practices and infer the policies and approaches that are almost certain to color the landscape of the future.

To help prepare principals to examine their futures, IAF developed nine "provocative forecasts." These forecasts are intended to help leaders explore the uncertainties and opportunities ahead of them. As Marsha Rhea, a futurist for IAF, noted: "We live in a time of split-second opportunities and threats. We could just as easily fall into a feared future as stay on track for an expected future. For a preferred future, we need to do much better than simply stay in step with rapid technological and evolutionary advances. Anticipatory learning gives us the learning and skills to shape our future in complex and interdependent times."

Forecasts

Based on IAF's research, the following are forecasts of how elementary schools might look in the next decade:



Schools are the learning portals to a global workplace

Schools shift from learning environments producing workers for an industrial era, to integrated settings producing lifelong learners for the global workplace. State-of-art school design integrates students into a work world that relies on project-based learning, team building and technologies that remove the barriers between schools and companies, organizations and communities around the globe.

The work world of the next decade differs markedly from the industrial-age of the 20th century, and the skills needed to thrive differ as well. Workers in the United States compete with workers from around the globe, not just around the block, and change jobs many times through their careers. Learning throughout one's lifetime, not just through the school years, is essential.

At the same time, globalization means that manufacturing jobs will be done in places with low wages, but knowledge-sharing jobs—those that require creativity and innovation—can be done anywhere. Thus, schools succeed by producing knowledge workers who can create ideas and idea-based goods and services that can be sold globally.



Free market forces create tensions between school choice and education equity

Members of the Baby Boom generation trust free market approaches to deliver results, and as consumers they like "having it their way" in the marketplace. People with means have generally found a way to secure educational opportunities for their children, while less affluent families often have to work harder to do so. As the nation's immigrant and minority populations continue to grow, this two-tiered system will become increasingly diverse. Ensuring equitable resource allocation across diverse constituencies will require a new vision of public education and deft leaders working to unite schools and communities around that vision.

Principals have the job of attracting students and teachers to their learning portals by creating a strong, marketable brand. Even elite private schools fail without good leaders. In public school districts where parents can exercise their preferences for school assignment, principals find they are the leaders in marketing their schools' learning environments.

At the same time, principals are key allies in organizing for equity at the community, state and federal levels. The relationships that principals have with parents and the community help in these organizing efforts.



Hyperlinked learning explores meaning through multimedia

Teachers and students in the next decade make sense of an increasingly complex world using multimedia and learning technologies that honor multiple forms of intelligence and different ways of knowing. Learners find that these varied, "hyperlinked" experiences provide the context that connects facts and skills to understanding. These learning technologies enable more collaborative and accelerated learning; they redefine the boundaries of place, curriculum and grade.

Thousands of students participate in learning environments beyond traditional schools. Students use social networking to form communities around their interests and talents. Video-, photo- and music-editing software enables students to develop technical, artistic and musical skills, while modeling and simulation software enables students to conduct virtual science experiments to develop and test hypotheses. Many of these programs are developed as games in which student learning and fun are combined. These programs expand the range of electives offered to students and enable new options for education that appeal to the estimated 30 percent of learners who acquire knowledge best through reading, visual instruction and manipulating visual media.

If used correctly, these new technology options provide greater flexibility in the educational process and create new ways to deliver content. Greater use of games, models and simulations reduces the need for dedicated classrooms for subjects such as art, music and science classes. These lessons also are integrated with the outside environment and community through the combination of textual learning and wireless education.



Scientific knowledge and technology bring new understanding to child brain development

Knowledge from neuroscience, psychology and biology confirm how brain functions, biological factors and life conditions contribute to intellectual capabilities. Students use assistive technologies to gain access to a wider range of personal capabilities. Educators use new knowledge and technologies to customize developmental pathways for students that redefine and re-sequence teaching and learning pedagogy.

Advances in imaging science and genomics deepen and extend our understanding of how brains function and develop. Previously, most brain imaging was considered either too invasive for children or required children to be stationary. Optical imaging enables cognitive neuroscientists to see neural activity and brain function in a much less constrained environment than did previous technologies. This ability dramatically expands knowledge of brain development and enables researchers to explore the types of environments and experiences that encourage brain development.

To educators, the debate about allowing calculators in classrooms seems quaint. The next generation of cognitive assistive technologies will be memorizers, analyzers and synthesizers.

Memorizers have evolved from today's personal digital assistants and mobile phones that keep track of important personal information. These portable devices link personal information with school databases. This provides students with automated alerts for homework, extracurricular activities and other school events. Parents also have their memorizers linked to school databases to schedule student absences as well as monitor student grades, attendance and other important information.

Students who can quickly access resources like Wikipedia and other knowledge resources have little need to memorize data. Analyzers, perhaps incorporated into the same portable devices, use intelligent agents that rely on algorithms and probability to draw meaning from data. This allows teachers and parents to monitor trends in school performance and intervene early to prevent academic problems. Synthesizers evolve out of simulations that present knowledge as experience and social networking that draws knowledge from the experiences of an individual's network. This ability is an important part of arranging mentorships, internships and other outside learning opportunities for students.



Holistic standards expand expectations for achieving student potential

Educators and public officials hold schools accountable for educating the whole child. Standards require individualized learning and hold schools accountable for meeting holistic indicators of student potential.

The No Child Left Behind (NCLB) Act has given way to individualized measures. More data is collected through continuous testing, feedback from simulations and games, and analysis of classroom video. This data helps shift from the population-based view of students on a bell-shaped curve to subpopulation-based views that create a variety of profiles of learning curves based on different dimensions that can be measured. Students are compared with appropriate subpopulations using data on matched cohorts for any given measure. For example, language proficiency has a different cohort for native-born speakers than for immigrants, and students with disabilities are measured with students with similar disabilities.

Schools also are expected to meet other key indicators to show that they are meeting the needs of the whole child. Pre-kindergarten students are evaluated against readiness indicators. Out-of-school programs are evaluated for their quality and effectiveness in enriching student learning and well-being. Students are evaluated against health measures. Those who are struggling are referred to an array of health and social services in a process of continuous support.



Networks of learning innovation experiment with new learning strategies for children

Networks link schools to centers of innovation in research, collaborating and knowledge sharing. Many new types of schools identify strategies that work for failing students, and they attract sufficient public and private support to continue innovating. Better networks for distributing these innovations create a cycle that shares innovations throughout a network of schools. Many knowledge technologies help to create these networks by making it easier for educators to communicate, collaborate and share ideas.

Principals identify and incorporate innovation through a much higher level of educational research that incorporates more "scientific" methods from other disciplines. At the same time, they maintain the learning they have developed to apply that learning to complex and dynamic classrooms. Nonprofit organizations will emerge to certify research and products that meet global evidence standards and to help principals pick the products that are the best fit for their schools.

New technologies improve the ability of principals and teachers to identify successful innovation in other schools. Software tools known as intelligent agents retrieve and filter information so that it is easier to find and create relevant knowledge. Digital communication technologies also make it cheaper and easier for schools to participate in these innovation networks as nodes for research, teaching practices and learning.

Platforms and practices for open source research make it possible for organizations in different locations to share data and findings. In an open source model, schools can test innovations in other schools against the data for their own unique situations. Open source licenses also expand access to curriculum resources and other knowledge products for teachers and principals. More educators can be active participants in research and development; knowledge about important innovations spreads more rapidly.



The surveillance society links schools to electronic safety networks

Schools will be linked to electronic safety networks that have sophisticated threat detection and rapid response. Biometrics (identifying people by their fingerprints or irises) clear students and personnel for entry, while profiling systems warn when a "person of interest" tries to enter school grounds. Biosensors are used to detect sudden changes in patterns of behavior or activities. Schools are more open to parents and the community through secured entries and virtual visitation.

Digital security technology provides not only increased security but new tools to improve staff performance and improve the learning experience. Parents use remote viewing capability to check on their children and observe teachers. Classrooms are videotaped to share best practices among the teaching staff, to allow students and parents to review presentations and to help principals evaluate their faculties and staff members. Students access video recordings of their classes through the school network to study for tests.

Parents can use a wide range of Web-based and hand-held technologies to track their children and their education. These include GPS monitoring systems that can be placed inside cell phones, cars and even clothing. Software programs are also available for parents to monitor online activity and communication.



Society's mounting debts compromise future investments in education

Although Americans in the next decade have bought into nationalistic appeals to invest in science and technology to keep the economy globally competitive, mounting debts have made it difficult to invest in education. The public treasury is stressed by rising costs for health care and pensions, national security and long-neglected improvements to public infrastructure. High levels of personal debt make increased taxes politically untenable.

The Bill & Melinda Gates Foundation and all its counterpart philanthropies and corporate foundations cannot spread sufficient funding equitably across a nation of more than 300 million people to meet every public need.

However, educators have appealed to the public's sense of the importance of education to a well-functioning democracy—as well as to their economic self-interest in a highly educated work force—to shift values toward support for education. In this effort, the many community volunteers who have supported schools over the years prove important allies.



Principals set the standards as lead advocates for learning

Effective principals have become the model that chief learning officers in corporations and organizations want to emulate. Principals are masters in leading the adults in their schools to learn and adapt in an uncompromising pursuit of what is best for their students. Operating in an era of increasingly intense accountability that few corporations will ever experience, principals are creating learning organizations that are transforming individual lives and communities.

Principals place student and adult learning at the center of the school. They help students achieve high standards of academic performance by creating safe and secure learning environments for students and fostering collaborative learning communities for adults. In the coming decade, as it was when NAESP released the original *Leading Learning Communities*, the "model of a school leader is one who is continually learning."

A New Path for Leadership



Principal Jennifer Jones has called a meeting of the Jackson Elementary School **leadership team**, and, as usual, the agenda is packed. The literacy team has collected data that shows worrisome signs about student reading performance that confirms Jones's observations from **classroom walkthroughs**. The city librarian, the director of the neighborhood after-school program and a university professor are joining the meeting to discuss ways they can help with reading achievement.

The school's chief operating officer also wants the team to discuss plans for adding classrooms. Some of the teachers on the team are concerned that the plan might not fit with the **school vision** of ensuring close relationships between students and adults.

Jones also wants the **team to share** their ideas for state legislative proposals. She will be at the monthly meeting of the chamber of commerce to discuss the town's agenda for the upcoming legislative session, and Jones wants to present a **focused agenda** on school issues.

Another item on the leadership team agenda is a brochure the media department prepared. Jackson Elementary has been receiving an increasing number of applications, and team members are eager to weigh in on how they should present the school to prospective parents. Jones has been making the rounds at **community meetings** to talk about the school, and she will share perceptions she has heard to help the team agree on a message that will help parents determine whether Jackson is the **right fit** for their children.

School Leadership

A conventional view of leadership in the 20th century, in which the charismatic leader stands atop the organization and almost single-handedly directs its operations, is giving way to a view in which leaders inspire excellence in the organization and build a coalition of individuals committed to collectively attaining greatness.

Rather than asking leaders to use management skills to control every aspect of an organization, increasingly complex organizations like schools—which require knowledge of instruction, budgeting, law and human relations, among other things—require leaders with a sufficiently broad set of knowledge and skills.

This emerging type of leadership requires a more specialized set of skills. In an influential study of leadership in the social sector, including schools, business expert Jim Collins argues that effective leadership, which he calls "legislative" leadership, "relies more upon persuasion, political currency and shared interests to create the conditions for the right decisions to happen."

This type of leader keeps his or her eye on the vision of the organization and makes sure that everyone within the organization does what needs to be done to attain it. In that respect, the leader is not so much a driver of change within an organization but rather a catalyst.

Such a view demands a different set of skills than those typically attributed to leaders. In his 2008 book *The Six Secrets of Change: What the Best Leaders Do To Help Their Organizations Survive and Thrive*, Michael Fullan identifies **five hallmarks of effective school leadership:**

- Moral purpose, or a commitment to making a difference not only in students' lives, but in the social environment as a whole
- Understanding of the change process
- Relationship improvement
- Knowledge creation and sharing
- Coherence-making

New leadership requires relational skills to ensure that others within the organization are motivated and able to work well together to carry out the school's vision.



These characteristics are a far cry from the Lone Ranger-type leader the industrial model required. New leadership requires relational skills to ensure that others within the organization are motivated and able to work well together to carry out the school's vision. Significantly, leaders from within an organization are much more likely than charismatic outsiders to produce long-term, sustained gains in performance.

In addition, leaders increasingly draw on the skills and expertise of others in the school community to take on leadership tasks. As external pressures for improvement become more intense and internal challenges to success increase, principals are likely to find that the need for sharing leadership becomes greater. The complex task of enabling every student to learn to high levels will require more diverse expertise, both within and outside schools, and principals will need to apply substantial skills to marshal the leadership necessary to succeed with every student.

"I think we'll have to do some more systemic thinking about the resources we have for leading and managing a school," says James Spillane, professor at the School of Education and Social Policy at Northwestern University. "Most schools have a principal and other formally designated leaders. How these resources are deployed is critical. We also have to think about the informal leaders of the organization and how to mobilize them in order to help the principal lead effectively. Basically you have to think about leadership and management from a different perspective. The expertise for leading and managing should be distributed, and not just focused on what the principal knows."

Community Leadership

In addition to leading schools, principals will increasingly play a visible role in the community. The growing recognition of the importance of schools in community development and well-being will mean that principals will be at the table for community decisions about housing, work-force development and other vital issues. At the same time, principals will increasingly engage the community to build support for education policy changes.

"We're hearing from our principals that the community expects them to be part of [that community], rather than a chief building manager," says Steven T. Heck, the executive director of the Indiana Association of School Principals. "Building community support for innovations for changes to be made in schools requires communications and marketing skills. At one time that was delegated to our central office leadership. Community partners, business leaders and principals must all be involved in school improvement committees. I think that's a little different than what the expectations once were."

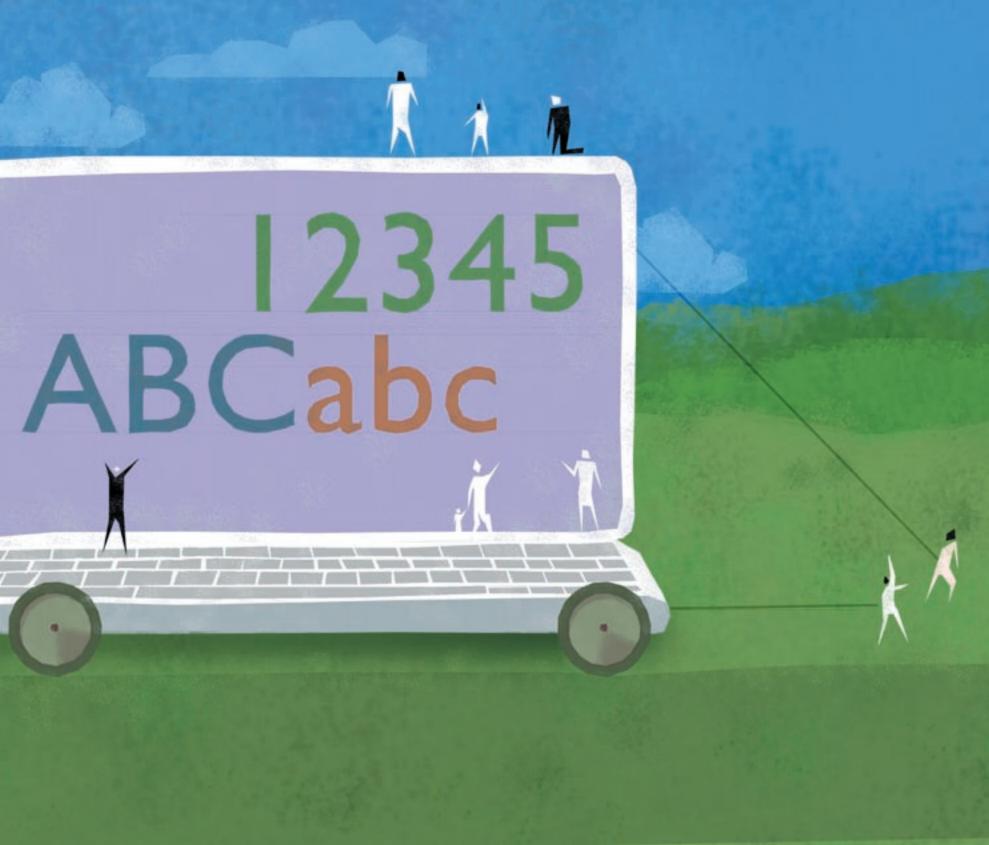
One important leadership role is representing the school to parents and the public. This public role will be particularly vital in places where parents can choose among schools. In such communities, there is likely to be a much wider array of school options than ever before. Schools will emphasize a curricular focus or a pedagogical approach, such as project-based learning tied to student results. Principals, then, must lead efforts to market schools to prospective parents.

School choice is likely to become more prevalent over the next decade. The expansion of choices in other areas—such as cable television channels or types of coffees—suggests that many Americans like to choose among various options and view choosing schools as an appropriate way to find the best fit for their children.

Public school choice has expanded rapidly since 1992, when the first charter school opened in Minnesota. In all, the proportion of students who enrolled in a public school of their choice rose from 11 percent to 15 percent between 1993 and 2003. And 51 percent of parents in 2003 reported they had the option to choose a school for their children. Parents of high school students were more likely to have the option of school choice than parents of children in grades 1 through 5.

The growing prevalence of choice will require principals to pay more attention to their "customers." "For 150 years, there has been a public monopoly on education and people looked to government to provide services. That has since broken," says Joseph Murphy, professor of education at the Peabody School of Education at Vanderbilt University. "We're moving from a producer system to a customer/client system. That system causes you to lead schools very differently—it's very different than the old bureaucratic ways. One principal in New York would take parents on tours of the school; the next year she had 100 one-hour tours lined up. If she didn't market her school, she wouldn't have one. There are some serious implications on how principals do their business. We haven't been a customer-sensitive kind of business. I think those days are over. If parents want a Montessori school, you'd better create one."

A Transformation in Learning



It's 3 o'clock, and Principal Alan Alston is headed to a meeting with the **third- and fourth-grade teams**. The teams are going over the individual learning plans for their students, and they have a lot of data to sift through.

Teachers have findings from an **action research group project** that show the results of the application of leadership and teamwork skills. Parents have sent, via **handheld devices**, results from science simulations students completed at home. Students have provided links to **videos of oral histories** they prepared at the Asian senior center.

Alston has data to share as well. A European colleague on a Listserv had sent him a paper from a Dutch journal on mathematics that showed promising results from a teaching technique, and he wants to alert the teachers that the researcher is offering an **online tutorial** about the approach.

Alston also wants to ask the teachers to submit student work for the Adams Elementary School portfolio. State department of education officials will be reviewing the portfolio soon to help Alston and the leadership team prepare a **professional development plan**. One area that's sure to be on the agenda is the learning environment. Data from **biosensors** had shown increases in behavioral problems, and Alston will be seeking additional support for improving the environment.

Perhaps the most significant changes likely over the next decade involve learning, both for students *and* adults. What students and adults learn, how they learn, where they learn—all of these are changing rapidly. And these changes have dramatic implications for how principals lead schools.

"This is probably the most profound shift that anyone could think of," says Tom Welch, a former Kentucky Teacher of the Year who is now a consultant with the International Center for Leadership in Education. "Principals have to come to see that teaching is only part of the solution to helping students achieve at high levels. The learning that occurs in the building is only one part of the learning that happens with students. The idea that learning to read and increasing levels of literacy only occurs at school is absolutely one of the most outdated ideas I can imagine. If a principal knows that there are these other ways that are available to help children learn, that would profoundly change the way he/she would approach his/her job. We have to put a priority on children learning at the highest possible levels. The idea of 'running a good school' is totally outdated. It's more like organizing high, high levels of learning to occur for each student he/she is responsible for in that school."

Transformations in learning are occurring for a variety of reasons, including:

- The rapidly growing diversity of the student population, in socio-economic status, in ethnicity and in learning needs means that students come to school with a broad array of knowledge and skills. Expecting all students to march in lockstep through a pre-selected curriculum will no longer be feasible—if it ever was. Instead, schools will need to develop plans to enable each student to succeed based on his or her own background and needs.
- Technology is transforming what students need to know and be able to do while at the same time making the idea that learning takes place only within school walls and during the school day a relic of the past.
- Globalization is changing the learning goals for young people by requiring a broad set of abilities.
- Technology and globalization are expanding access to new resources to support adult learning. At the same time, communications tools enhance the ability of teachers and principals to form learning communities and networks to share and develop knowledge.

In response to these changes, accountability systems are likely to shift to incorporate a broader range of measures of student, adult and school performance, while also paying greater attention to the supports needed to improve learning. Demonstrating student and adult performance to the public becomes the core business of schools.

As instructional leaders, principals have the primary responsibility to lead a community of adults who can learn continually and ensure that all students succeed. Preparing principals to fulfill that responsibility will be a major challenge in the coming decade. Principals will be required to develop a larger understanding of learning and instruction, and school systems must create structures to enable principals to play this role effectively.

The United Nations in the Schoolhouse

The August 2007 report from the U.S. Census Bureau confirmed what many educators and public officials had long known: The United States is becoming more and more diverse. More than 300 counties—one-tenth of all counties in the country—are "majority minority," the Bureau reported, meaning that members of what had been considered minority groups made up more than 50 percent of the local population.

A growing nonwhite population reflects immigration from Mexico and other Latin American nations, and indeed, many of the counties with majority-minority populations are the traditional arrival points for recent Latin American immigrants. Nearly three-fourths of Los Angeles County residents, for example, are members of minority groups; one in 14 of the nation's minority residents—7 million people—live in Los Angeles County. Similarly, Maricopa County, Arizona (Phoenix), Denver County, Colorado, and numerous counties in Texas have substantial Hispanic populations.

But many areas outside the traditional ports of entry for Hispanic immigrants, like Blaine County, Montana, and Manassas Park, Virginia, were also among the majority-minority counties in 2007. The entire nation is diverse.

A comparison of pictures of the class of 2005 with that of a class from approximately three decades before would provide a vivid illustration of some of the demographic changes that have swept through American schools over the past few decades. In 2005, 42 percent of public school students were members of racial and ethnic minority groups, compared with only 22 percent in 1972. Much of this increase reflects Hispanic immigration. The proportion of Hispanic students rose from 6 percent to 20 percent over that period. But other ethnic groups also became more prominent in schools as well. Asian, Pacific Islander, American Indian/Alaskan Native students and students of more than one race now make up 7 percent of the school population, compared with 1 percent in 1972.

Of course, the United States has seen waves of immigration in the past, and schools have accommodated large groups of children from other countries. Nearly 22 million immigrants arrived in the United States between 1890 and 1930, and many of them came here with children or soon had children after arriving. In New York City, for example, roughly two-thirds of students in the first decade of the 20th century had fathers who were born outside the United States.

Unlike in those earlier periods, students now come to school in the United States from many more countries. Whereas the immigrants in the late 19th and early 20th century arrived primarily from Europe, immigrants now are more likely to come from Latin America, Africa or Southeast Asia. In 2000, the top 10 countries of origin for immigrants were Mexico, China, the Philippines, India, Cuba, Vietnam, El Salvador, Korea, the Dominican Republic and Canada.

Because of this diversity, students come to schools speaking a wide array of languages. According to the Census Bureau, nearly 10 million children ages 5 to 17—roughly 20 percent of the school-aged population—speak a language other than English at home. The vast majority of these children, about 6 million, speak Spanish, but more than 1.4 million children speak Indo-European languages and 1.15 million children speak Asian and Pacific Island languages. Not all of these children require services for English language learners in schools, but many do; the number of children receiving such services rose from 2 million in 1994 to 3.8 million in 2004.

These trends are expected to continue. The Census Bureau projects that the Hispanic population will increase from 12.6 percent of the population in 2000 to 17.8 percent of the population in 2020, and that the Asian population will increase from 3.8 percent to 5.4 percent of the U.S. population over that period. The effect on schools will likely be even more pronounced because immigrants tend to have more children than native-born families.

The increasing diversity of the student population will have far-reaching implications for how students learn and how adults teach. The diversity will also affect the education and social dynamics within schools, as the student population looks less and less like the teacher and principal work force. The proportion of teachers who are minorities rose only slightly between 1994 and 2004, from 13 percent to 17 percent. Only 7 percent of public school teachers in 2004 were Hispanic, and 1.3 percent were Asian. That same year, 5 percent of principals were Hispanic, and 0.5 percent were Asian.

The racial and ethnic makeup of the student population is just one of the demographic factors that will affect schools over the next few years. There is a good chance that the number of students with disabilities, and particularly students with significant learning challenges, will increase as well. Disability is often associated with poverty, because many factors associated with poverty—such as poor nutrition and environmental hazards—are causes of disabilities. An increase in the number of low-income students suggests an increasing number of children with disabilities. Advances in medical technology have enabled more children to survive with disabilities, and these advances are likely to continue.

In the first half of this decade, the proportion of students receiving special education services increased slightly, from 13 percent in 2001 to 14 percent in 2006. But within that total, there were substantial increases in the number of students with certain disabilities. For example, the proportion of those with developmental delays grew from 0.4 percent to 0.7 percent during that period, and the proportion of students with autism rose from 0.2 percent to 0.5 percent. Autism is one of the most costly conditions; by one estimate, schools spent \$11,543 per pupil for special education services for children with autism in 2000, more than for students with any other condition.

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Many schools are seeing increases in the number of students from low-income homes. A 2007 report from the Southern Education Foundation, for example, found that more than one-half of students in that region of the country—54 percent—were poor, as measured by their eligibility for free and reduced-price meals. The report suggests that the influx of immigrants, particularly Hispanics, to the region, along with persistent underemployment and global changes in the economy that added to underemployment, have contributed to the increase of lowincome students in the South.

The report also notes that California and New Mexico also had a majority of poor students, and it predicts that more than one-half of students in the West would soon come from low-income homes.

The increase in the population of immigrant students, particularly English language learners, students with disabilities and students from low-income homes, poses particular challenges for schools, because these students are among those who have been least well served in the past. Only 7 percent of limited-English students scored "at or above proficient" in reading on the 2003 fourth-grade National Assessment of Educational Progress, compared to nearly 30 percent of students overall. Likewise, 30 of 39 states with complete data reported gaps of 30 percentage points or more between the number of special and general education students who scored at the "proficient" level or above on fourth-grade reading tests. On high school reading exams, 32 of 36 states reported such gaps, according to Education Week.

In order to succeed with an increasingly diverse student population, principals will have to lead schools that provide individualized learning, according to Michael Fullan, professor emeritus of education at the University if Ontario. "You have to look at who your students are," he says. "When we talk about assessment for learning, it's the ability to differentiate the learning [that matters]. The different cultural backgrounds have special needs. This means that schools have to relate to every child and where they come from."

The Technology Revolution

In the first half of 2007, Americans could not turn on the television or read the newspaper without hearing about the iPhone. Apple's device, which weighs less than five ounces and is less than a half-inch thick, enables users to listen to music, watch movies and browse the Web—not to mention talk on the phone—all at the touch of a finger. The iPhone is evidence that the technological revolution of the past two decades, which has enabled people to gain access to more information and communicate more broadly and more easily than ever before, has reached a new level.

The technology behind the iPhone, along with similar advances in communications, data analysis and simulations, will have profound effects on schools in a variety of ways.

Technology has particular implications for:

- Student knowledge and skills
- Instructional support
- Organization and management

Because these effects are likely to become even more significant, they deserve further exploration.

Student Knowledge and Skills. While the use of technology in the classroom remains limited, students use technologies extensively outside of school. At home, students send text messages to one another and talk with networks of friends via MySpace and Facebook. They conduct Google searches to learn about sports, games, movies and—sometimes—schoolwork. They create videos and song mash-ups and upload them to YouTube. Students are so well versed in technology that teachers often ask them for guidance, rather than asking the school's technical support specialists. The writer and video-game developer Marc Prensky refers to young people as "digital natives" who have lived only in a world of instant communication and access to information; by contrast, adults—"digital immigrants"—speak with an "accent" that reflects the pre-digital past and makes it difficult to communicate with young natives.

A survey of 167,000 students who participated in the 2004 Speak Up Day, a project of the nonprofit group NetDay, illustrates the prevalence of technology in students' lives. About 60 percent of the participating students had cell phones, 81 percent had at least one e-mail account, 75 percent had at least one instant messaging screen name, and 62 percent said they turned first to technology when writing a school report.

This phenomenon is not unique to the United States. Walter Bender, the president for software of One Laptop per Child, an organization that has developed a low-cost computer available throughout the world, says that the first English word children in rural Cambodia know is "Google," and when they get the opportunity, they Google their favorite Brazilian football stars.

The ubiquity of technology in students' lives presents enormous opportunities for schools. Students come into school knowing much more than they ever did—not just about how to use technology but also about parts of the world that would have seemed impossibly exotic a generation ago. They are capable of producing sophisticated products. And they are skillful at communicating with a wide range of peers from all over the world.

Yet these possibilities also pose a number of challenges. First, the knowledge students possess coming into schools is not always related to the standards they are expected to meet. Being able to find information about football stars does not mean that a student can find credible information about the democracy in India.

Second, students are not always critical consumers of information. Conducting a Google search produces a lot of good information but it can also yield myth, rumor and misinformation. Separating the wheat from the chaff requires analysis and knowledge.

Third, students' access to technology outside of school is widely inequitable. Although 84 percent of white teenagers used computers at home, only one-half of black teenagers, and 55 percent of Hispanic teenagers, did so. And only 31 percent of students from families earning less than \$10,000 a year reported using the Internet, either in school or out of school.

In the past, advances in technology have lowered the cost of computers and other digital equipment—making possible the One Laptop per Child project, for example—and this trend is likely to continue. At the same time, more and more cities are likely to help make technology more accessible, as Philadelphia has done by creating a wireless zone throughout the city.

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Instructional Support. Through technology, learning does not have to happen only with a teacher and a student in the same classroom. Students can gain access to tutoring and other instructional resources online. America's Choice, a national comprehensive school-reform program, for example, has contracted with a mathematics education firm in India to provide tutoring services for students enrolled in one of its mathematics programs. These types of programs are only going to increase in number and prominence as teachers become more fluent with technology and as firms inside and outside the United States see the market for online learning.

Indeed, half of the states have already established virtual schools in which students take online courses, or even an entire curriculum, that might not be available in their physical schools. These options offer students the possibility of taking a broader range of courses and provide schools the opportunity to offer coursework for which they lack qualified teachers. About 700,000 students, most of whom are in high school, were served by virtual schools in the 2006 school year, twice as many as three years earlier. And the number of states with such schools increased nearly sixfold—from five to 28—over the past decade. In most cases, these schools supplemented the coursework students took in their regular schools, suggesting that principals have additional options to expand learning beyond their walls.

However, online tutoring and coursework options have also raised questions about quality control. In some states, these questions have led to tighter regulation, particularly over so-called "cyber charter schools," those without a physical location at all.

Online instruction will also provide a wealth of additional resources for teachers. Currently, many Web sites offer online professional development and learning opportunities for teachers. These sites provide everything from lesson plans and curriculum materials to instructional modules that help teachers learn to use new techniques. Many of these sites also enable teachers to stay in touch with the provider or with other teachers over time, so they can share ideas about how to implement their learning. For example, TeacherTube provides an online community for sharing instructional videos.

Teachers increasingly will be able to work with colleagues in other schools—and in other countries—to develop new lessons. The online site Moodle, for example, provides open source professional development for online learning, free of charge. The site currently has 200,000 registered users in 175 countries. Wiki technology, which made possible the popular online encyclopedia known as Wikipedia, allows users from anywhere in the world to construct virtually anything, including lesson plans and courses. Dubbed the "Wikipedia of curriculum," another site Curriki allows teachers to share curriculum, pedagogy and instructional strategies.

As with student coursework, quality control will remain an issue with teacher professional development and coursedevelopment as well. But the option of remaining in contact with the professional development provider and with an online community enables teachers to try out their new knowledge and report on the results. About 700,000 students, most of whom are in high school, were served by virtual schools in the 2006 school year, twice as many as three years earlier.



Organization and Management. The rapid advances in technology have enabled states and districts to collect and organize vast amounts of data and make it available so that schools can make fine-grained analyses of student achievement. Although not all states and districts possess this capability, those that do have used technology to their advantage to pinpoint strengths and weaknesses in school programs and direct professional development resources where needed.

In Philadelphia, for example, teachers can tap into a "dashboard" on their laptops and see the academic history of every one of their pupils. The system also provides school- and district-level information, so that principals can look at achievement across classrooms, and district officials can look at how various schools are performing.

Districts and schools are also creating digital portfolios that allow teachers and principals to see samples of student work online. These portfolios provide additional information on student achievement to supplement test scores and provide a window into classroom instruction.

Technology can also enable principals to save time on onerous management chores, such as constructing a master course schedule or lining up bus routes. Not all schools are currently capable of taking advantage of the efficiencies that technology makes possible—only nine states, for example, have the capacity to link teacher data with student data—but the imperative to improve school operations and student learning and the rapid development of technological tools make it likely that more and more principals will be using electronic tools to lead and manage their schools in the coming decade.

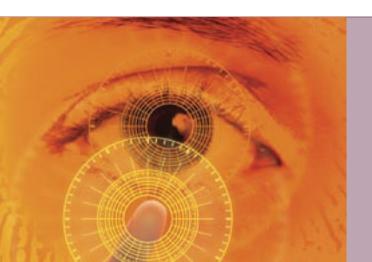
A Safe Learning Environment

While technology offers numerous benefits for schools and learning, the ease of communication and global reach also create dangers to which children are particularly vulnerable. Children can be victimized by or gain access to inappropriate materials far more easily than in the past.

A national survey of young people ages 10 to 17, released in 2000, found that large numbers of young people were being approached sexually, encountering sexual material and encountering harassment over the Internet. A follow-up study, conducted in 2005, found that these dangers remained prevalent.

Specifically, the survey found:

- Approximately one in seven young people received sexual solicitations online, a decline from five years earlier; however, aggressive solicitations did not decline. Four percent of Internet users reported receiving aggressive solicitations in 2005, about the same proportion as in 2000.
- About 9 percent of youths reported online harassment, including threats sent via e-mail or posted on the Internet for others to see. This represents an increase since 2000, when 6 percent reported such harassment.



Biometrics make it possible to limit entry to schools to people who can identify themselves by their fingerprints or irises, and global positioning satellites can make it possible to keep a watch on school buses—or individual children.

These increases in new forms of crime come at a time when physical violence against students in schools is declining, although still prevalent. In 2004, according to a report prepared for the National Center for Education Statistics and the Bureau of Justice Statistics, students ages 12 to 18 were victims of 1.4 million nonfatal crimes at school, including approximately 863,000 thefts and 583 violent crimes. Overall, 55 students per 1,000 students were victims of a crime at school, a decline from the year before when 73 students per 1,000 students were victims.

The homicide rate at schools has declined as well, despite national concern over school shootings. There were 21 homicides of students ages 5 through 18 at school in 2005, down sharply from the levels of the 1990s.

Other threats to safety remain prevalent. One-fourth of all schools reported daily or weekly student bullying, 11 percent of principals reported verbal abuse of teachers and 17 percent reported gang activities.

In response to these threats to safety, schools and school systems have increasingly adopted new policies and practices. About 50 percent of all public schools in 2004 took a serious disciplinary action against a student, in most cases an extended out-of-school suspension. In addition, 28 percent of elementary schools and 42 percent of middle schools used one or more security cameras to monitor schools. Other schools have sought to instill cultures of respect and closer connections among students and adults to improve behavior.

Technology is also making available new forms of security, which have raised questions about privacy. For example, biometrics make it possible to limit entry to schools to people who can identify themselves by their fingerprints or irises, and global positioning satellites can make it possible to keep a watch on school buses—or individual children.

In part because of concerns over terrorism, the development of these new technologies is likely to become more rapid. A growing number of schools, for example, are likely to link their biometric capabilities with their information technology systems, enabling principals to track who is using school facilities and providing instant information for emergency personnel.

A 'Flat' World

In his influential and best-selling 2005 book, *The World Is Flat*, the journalist Thomas A. Friedman showed how the spread of fiber-optic cable throughout the world transformed the global economy and society. Once telecommunications became ubiquitous, countries such as China and India could compete in the world marketplace in a way not before possible.

The global changes of the past decade have enormous implications, many of them for schools. First, the spread of information technology means that information is instantly available in any part of the globe. Americans, who a generation ago might have been hard-pressed to locate Indonesia on a map, saw immediately the 2005 tsunami in that country and its devastating effects. At the same time, Americans were able to contact Indonesians in the wake of the disaster and provide aid and support.

Thus, Americans have a much greater awareness of world events and world cultures than ever before. Knowledge and understanding of the world—for example, fluency in foreign languages—is at a premium. And students are responding: Enrollments in courses in languages other than English in colleges and universities grew by 13 percent in 2006, and the fastest-growing languages are Arabic, where enrollments increased by 126.5 percent between 2002 and 2006, and Chinese, where enrollments grew by 51 percent during that period.

Milton Chen, the executive director of the George Lucas Education Foundation, predicts that world language instruction will increase: "As Americans, we need to understand what it means to be educated in the 21st century. It's a wholesale change from what we thought even five years ago. I find it really exciting. But it almost goes without saying that the things we all taught years ago when we were in school, very little of it applies to how we need to think about our place in the world now."

A second consequence of the "flattening" of the world is the exponential growth in the supply of firms that provide services and resources. With instant telecommunications, it is no longer necessary for a company to be located near its clients. Accountants can prepare taxes in Bangalore just as easily as they can in Boston. And many U.S. firms find that it is easy—and less expensive—to locate services, such as call centers, in countries like India.

As a result, hundreds, if not thousands, of organizations now provide services from myriad points on the globe, and organizations, such as schools, in this country have many more suppliers to choose from. "If the person who is best able to help somebody might be a tutor in China, I have trouble understanding why, as an administrator, I wouldn't make sure that help for my individual students wasn't the best possible for them," says Welch.

The rise in technical jobs overseas has entailed some costs in the United States as domestic firms have shifted operations to other countries. The employment rate in software industries peaked in 2001 in the United States, in part because of the movement of jobs outside the country. These changes in the U.S. economy affect the tax rate of communities that have lost jobs, and in turn they affect the financing available for schools in those communities.

Competition from overseas also has increased pressure on American students and schools. If workers in many countries can perform the same jobs Americans can (and at lower wages), then Americans are now competing with students from around the world, not just those across the nation. Yet students in many of these countries outperform those from the United States in studies of international performance. In science, for example, eighth graders from Taiwan, South Korea, Japan and Singapore significantly outperformed their U.S. counterparts; those same countries also outperformed U.S. students in mathematics. Without significantly higher levels of achievement, particularly in mathematics and science, U.S. students are not likely to do well in the global economic competition.



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Many education and business leaders suggest that the changing work force demands additional skills, many of which have received little attention in schools. For example, the Partnership for 21st Century Skills, which includes about two dozen corporations and education associations, has outlined a framework that calls for students to develop core academic skills; "emerging content," including global awareness, financial literacy, and health and wellness awareness; learning and thinking skills; information-technology skills; and "life skills," such as leadership, adaptability, personal responsibility and social responsibility.

This broader conception of student learning is consistent with the emerging trend of emphasizing the "whole child." In that view, schools and communities must form partnerships to ensure the development of the health and well-being of children and youth, in addition to their academic knowledge and skills. As a report from the Commission on the Whole Child, a panel of educators convened by the Association for Supervision and Curriculum Development, concludes:

We do not argue for a diminished focus on academics. We do call for increased attention to the conditions that evidence makes clear are essential for learning. We know that students are more successful when they experience a broad, challenging and engaging curriculum; when they feel connected to their school and broader community; when they are healthy physically and emotionally; and when schools are safe and trusting places.

The transformations in learning that will take place over the coming decade open a wide range of new possibilities for educators. They can unleash the innovative spirit and introduce any number of new approaches—students can collaborate with their peers in southern Africa; teachers can lead instructional networks that span continents.

Bender says that young people will lead the revolution in learning. "I think schools will change because the children who come into school will come with such different expectations," he says. "I think it will be much more of a bottom-up driven process. I think kids will come in with different communication skills, different collaboration skills and different media skills. I think that will change how they approach learning and this will change how they are taught. It's going to change the whole organization of schools."

A Broader View of Accountability

The rapid growth in information provided by schools about student performance and the consequences attached to the results—along with the heightened demand for more information—have transformed education. Schools, and specifically principals, are seen as responsible for improving student achievement, and taxpayers and parents are watching and increasingly willing to take action if the schools do not improve.

Educators and researchers see no sign that this interest in accountability for results will abate over the coming decades. If anything, the interest is likely to increase. And parents and community members across the country are likely to demand more informative reports about school performance that will be useful in making decisions about schools.

Although accountability has been a hot topic since the passage of the NCLB Act, states and districts have long held schools accountable for student achievement. The NCLB Act accelerated the process; however, the jury is still out as to whether the law produced improvement in student performance. Some studies suggest that performance on state tests improved since the enactment of the law, while others suggest that performance has remained stagnant or declined.

Despite the disagreement about overall effects, there is some evidence that the accountability systems created in the wake of the NCLB Act caused schools to focus attention on historically underserved groups, such as racial and ethnic minorities and children with disabilities. But there is also evidence that the legislation led schools to focus on quick fixes to raise student test scores in the short term rather than improve learning. And studies suggest that schools have placed greater emphasis on tested subjects—reading and mathematics—and less attention on arts, social studies and science.

At the same time, accountability systems have increased the demand for accurate and useful data that will inform and help improve instruction. Some districts, such as Boston, Massachusetts; Montgomery County, Maryland; Broward County, Florida; Naperville, Illinois; and Hamilton County, Tennessee have developed sophisticated data systems that enable teachers and principals to analyze student-achievement data and use such analyses to plan instructional programs for individual children.



Many educators foresee accountability systems that adopt more sophisticated measures that provide a broader picture of school performance than standardized tests can give.

As a result, accountability is likely to remain a critical feature of American education. Accountability remains popular among policy makers and the public. Some 57 percent of the public, according to a poll conducted in 2007, believe that states should be required to have accountability standards. And witnesses who testified in public hearings sponsored by the Public Education Network strongly endorsed the idea of holding schools accountable for student achievement, even while they criticized some of the ways that the accountability provisions of the NCLB Act have been implemented. As one parent from Lancaster, Pennsylvania, noted: "Passing the buck cannot continue when it comes to our children. There should be no reason why our children are graduating without the necessary skills to be productive members of society, and far too many are."

Yet while accountability is likely to continue and to exert stronger pressure on schools to improve performance, the form accountability takes is likely to change. Many educators foresee accountability systems that adopt more sophisticated measures that provide a broader picture of school performance than standardized tests can give. At the same time, researchers also predict that policy makers will pay greater attention to the support side of the equation: helping schools that are identified as "low performing" bring about improvements.

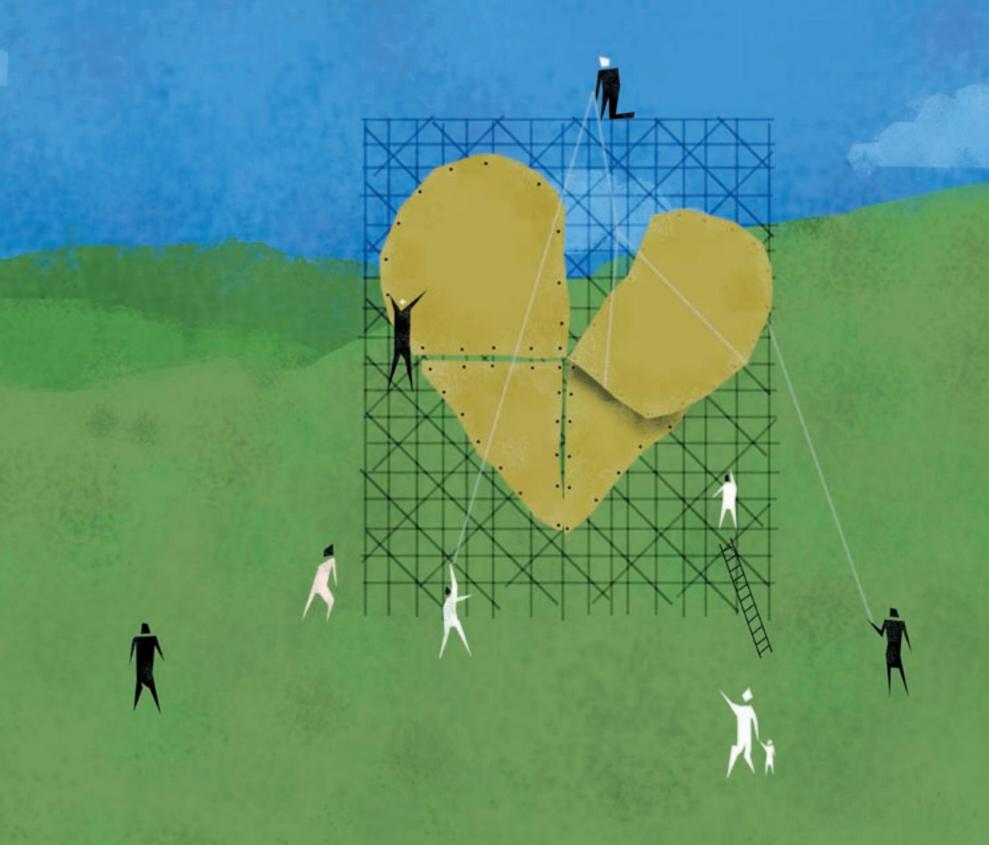
"NCLB showed us the downside of accountability," says Fullan of the Ontario Institute for Studies in Education. "But the improvements have been neglected. There's a correction factor here. You can add capacity building and collaboration as an equal partner in [the measures] to get the results. It means that school principals are expected to focus on collaborative cultures. They have to get involved in distributed leadership. They will be expected to participate in networks and clusters. All of these are new, and they are putting accountability in perspective."

The way schools and school systems hold adults accountable for their performance is likely to change as well over the coming decade. Traditionally, principals have tended to use checklists and other simple tools to evaluate teachers, and district officials have generally done the same in evaluating principals. But the growing interest in determining teacher and principal effectiveness has led to the development of more sophisticated measures that provide much better indicators of the quality of teachers' and principals' work and their contribution to improving student performance. These measures generally examine teaching and school leadership against standards for effective practice and use a broad range of evidence to determine whether teachers and principals have met these standards.

In addition, schools and school systems are likely to move away from traditional top-down evaluation methods as teachers and other members of the school community take greater responsibility for leadership of assessment functions. They are likely to incorporate multiple human resource measures, including self-assessments, 360-degree feedback, walkthroughs and audits that help leaders and learning communities to assess their performance.

As a result of these changes in accountability, principals increasingly will develop new skills to enable schools to implement sophisticated assessments of student and teaching performance and to report complex ratings to the public. And these new methods will transform the way principals carry out their supervisory responsibilities, according to Richard DuFour, a former superintendent who has written extensively on instructional leadership. "Principals will have to rethink the very structure of the school, so that they think of the school as a series of collaborative teams," he says. "And so, therefore, the principals will build the capacity to work within teams and spend less time evaluating individual teachers. They will put more effort in building capacity to work collaboratively."

A Stronger Community



As usual, Principal Wanda Williams' calendar was jam-packed this week. On Monday, she met with the **school board** to discuss the coming year's budget; with the **Rotary Club** to speak on education and its role in **strengthening the community**; and with a group of parents who were considering applying to Washington Elementary School. The next day she met with the director of the art museum to discuss plans to team students with working artists; with the head of a local art studio where many Washington students will attend an **after-school program**; and to plan a future meeting where the three of them could analyze language arts standards. She also held a videoconference with a group of **university professors** about an online mathematics tutorial for teachers.

Back at school, she led a **study group** of teachers and paraprofessionals on group learning, and began planning an adult course in English as a second language to be held at the school.

In addition, she greeted a steady **stream of visitors** who had come through the school. Ever since the local newspaper carried an article about Washington's success in improving reading performance, educators from around the state have been contacting her about visiting, and she wanted to accommodate as many as possible. Yet she also found time to visit the town's **Hispanic center** to discuss **support services** for newcomers.

Amid all this activity, Williams needed to remind Washington's Web designer to post samples of student science simulations. But the designer had already known about them, and had sent them in a group e-mail to the **school's Listserv**.

The imperative of ensuring success for every student is increasingly leading principals to look both inside and outside their buildings and seek support and partnerships from faculty members, parents and community members. To be sure, effective principals have long enjoyed community support. But in the next decade, these efforts will be a central part of the principal's job. Indeed, principals will be community leaders.

The need for principals to take on this role stems from many of the trends discussed in this report. The complexity of schools means that learning communities within schools take on more leadership functions. The growing diversity of the student population means that principals and school staff members must understand the diverse backgrounds of their students. The availability of choice and the variety of school options mean that principals need to respond to public demands. The focus on high levels of learning—and the presence of learning options in and out of schools—means that principals need to seek partnerships to support student and adult learning throughout the community.

"Principals used to be concerned with only things like whether children came in on time and learned lessons," says H. Wells Singleton, education provost and university dean of the Fischler School of Education and Human Services at Nova Southeastern University. "Now, I see them responsible for social services, dealing with parents, dealing with courts maybe—the product is not just the care and welfare of children, it's the full process of learning."



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Learning Communities

"Professional learning communities" has become a vogue term in schools, and like many trends that sweep education, it has been applied in widely varying ways. The idea is based on substantial evidence that communities focused on learning within schools can improve practice and results for students. Such communities break down teachers' isolation and enable them to solve problems of teaching and learning together.

In practice, though, the communities have not always lived up to the ideal. As DuFour notes, in some cases teachers have confused community with "congeniality" and focus on building camaraderie or on school operations, rather than on student learning. In addition, some teachers remain averse to working together or to sharing and using data for improvement.

But the need for continual improvement in student and adult learning and the complexity of schools will require true professional learning communities, and principals will have to lead them. At the same time, the need for knowledge about effective practices will lead principals to look outside of schools and form networks with other schools, says Fullan. Moreover, networks are likely to extend to other countries as well, to enable principals in the U.S. to learn from practices in other settings and to share their knowledge with their global peers. "We think it's essential for schools to learn from each other," he says. "We call this lateral capacity building. A lot of the new schemes that are working on this have networks of schools working in clusters."

Engaging Parents

An ample body of research has demonstrated the importance of parent engagement in student learning, and effective principals have been skillful at ensuring that parents are true partners in schools. But the societal and educational transformations that will take place over the next decade will require all principals to rethink how they engage parents.

The growing diversity of the student population means diversity in parent backgrounds as well, and principals can no longer use tactics that worked when the student and parent populations were more homogeneous. Many parents speak languages other than English, for example, and many have had experiences that make them reluctant to approach schools. As a result, principals will have to be more aggressive in engaging teachers to reach out to parents, rather than waiting for parents to come to schools. "Principals should make home visits to their students' families in order to understand their history and their culture," says Chen of the George Lucas Foundation. "They should also model bilingualism. They should try to learn a few words of the native language spoken by immigrant populations."

Teachers play important roles here. Parents trust teachers, and teachers are often the primary contact parents have with schools. Principals need to develop teachers' ability to engage parents in supporting their children's learning.

In addition, in schools of choice the "community" no longer means the local neighborhood. Principals and teachers will need to engage parents who live throughout a school district. And they will have to take steps to attract parents to the school.

Engaging Community Resources

Learning has never stopped at the school bell, and effective principals have long formed partnerships with community organizations to support student learning after school. But the technological revolution and the need to develop a broader range of student abilities will increase the proportion of learning that takes place in out-of-school time. And principals will have to redouble their efforts to ensure that these extended learning opportunities complement and support the learning that takes place in schools.

Some pioneering efforts have shown how out-of-school-time learning can enhance student success. The Dallas Arts Learning Initiative, for example, is a partnership among the city, the school district and the local arts community that provides elementary schoolchildren with opportunities for arts learning in schools and community settings. The initiative's leaders are rigorously evaluating the program to ensure that the opportunities are meaningful and enhance student learning.

Similarly, Citizen Schools, a network of after-school programs that began in Boston, enlists volunteers from businesses and community organizations to engage middle school students in real-world learning, such as working alongside a lawyer or building a solar car. An evaluation of 10 Citizens Schools found that participating students had higher grades and test scores, less absenteeism and fewer behavior problems than their peers at other schools.

The Time, Learning and Afterschool Task Force, a panel convened by the C.S. Mott Foundation, concluded that developing such opportunities and integrating them with school-based learning will be essential for students to succeed:

The structure of the day for American children and youth is more than timeworn. It is obsolete. We know we must change the outcomes for all students, immediately. We can do this only by redesigning the whole day for children so that it is a seamless learning experience providing students with multiple ways of learning, anchored to high standards and aligned to educational resources throughout a community. In a new day for learning, there is no final bell.

Principals can make learning the center of the community. They can open doors to enable community members to take classes in English as a second language, for example, or to use school computers or hold meetings at night.



Engaging and Leading Communities

Helping all students succeed will require continued and expanded fiscal and community support. In order for that to happen, principals will have to become more than school leaders; they must draw and sustain support from the entire community.

Principals can make learning the center of the community. They can open doors to enable community members to take classes in English as a second language, for example, or to use school computers or hold meetings at night. Such efforts will help ensure that community members see schools as vital learning resources for all residents.

At the same time, principals will play increasingly important roles in policy-making decisions about education. Competing demands for public dollars and an aging population with large numbers of taxpayers without children in schools make continued support for schools urgent. As a result, principals need to look outward and engage communities to advocate for improvements, suggests Vanderbilt's Murphy. "I think the real shift is the advocacy for the kids," he says. "Principals need to be more aggressive about that role based on the decisions for learning for youngsters."

However, he adds, principals must maintain their focus on student learning and make sure community resources support the school's vision. "Principals get resources for their schools, but strong leaders get resources that align with missions and goals," Murphy says.

Implications

What These Changes Mean for Principals

Extraordinary transformations likely to occur in the next decade—in society, leadership, and education policy and practice—have enormous implications for learning communities and the ways principals lead them. In addition, the pace of change is expected to accelerate, meaning that principals will find it difficult to cling to traditional approaches.

As a professional association, NAESP sees our responsibility not just to help forecast these changes but also to support elementary and middle school principals who are continuously building their own knowledge and skills to effectively lead schools for the benefit of all children. We stand ready to help guide principals through the transitions coming in the next decades. As part of our effort, NAESP has prepared a second edition of *Leading Learning Communities* that expands and updates six standards for effective principal leadership and provides tools and resources that help principals lead effective learning communities.

For more than 20 years, NAESP has provided—and periodically updated—standards for principals. In 2001, the first edition of *Leading Learning Communities* was a response to what the Association recognized as a significant evolution in the role of principal as instructional leader. The 2008 edition of *Leading Learning Communities* does not replace the standards outlined in 2001; instead it updates and expands the standards to address the changing context and trends that principals have identified in the past seven years and that we have seen as part of our Vision 2021 planning process.

The updated standards include:

Lead Student and Adult Learning

Effective principals think about how they can best lead and manage multiple systems that together can bring effective practices to scale so that all students—and all adults—achieve better results.

Being learner-centered means that leaders create processes and structures that enable adults, as well as students, to participate and learn. They know that every member of their school community—including students, educators, families, community partners and citizens—must be continuously learning. The primary role of the principal is to keep all of these people on a shared journey that makes teaching and learning the core purpose of everyone's work. Whether focused on instruction or operations, effective leaders align every decision to support that shared purpose. This means that the learning community collectively does not allow the press of management or crises to override their attention to learning results.

These leaders are themselves models of continuous learning. They are committed to increasing their own knowledge, skills and capacities, through professional development, coaching, peer mentoring, and the establishment and support of schoolwide learning communities.

Lead Diverse Communities

An increase in the diversity of students—including English language learners, students with disabilities and students from low-income homes—poses particular challenges for schools, because these students are among those who have been least well served in the past.

To deliver on the promise of high levels of learning for all students, particularly with an increasingly diverse student population, principals must make greater efforts than in the past to understand their students and the communities from which they come—while maintaining their commitment to ensuring that all students learn at high levels. They must examine their own beliefs about ethnic and socio-economic groups and persuade teachers to do the same.

Effective leaders know that, beyond academics, the social, emotional and physical development of children is essential. Principals encourage the development of the whole child by supporting the physical and mental health of children, as well as their social and emotional well-being and their sense of safety and self-confidence. Leaders often do this by providing a connection between the school and the broader community.

Such efforts serve to overcome stereotypes and help school leaders understand how diverse backgrounds can enhance a school's learning environment and create a positive learning culture for the entire school community. Professional development experiences need to make the explicit connection between learning expectations, effective teaching and high student performance.

Lead 21st Century Learning

Educators and the public are shifting away from the "back to basics" mindset predominant in the 1990s to strongly supporting the idea that teaching 21st century skills is important to our country's economic success. Potential employers are clamoring for a better-prepared work force at a time when high school graduates are woefully unprepared for a world in which being college-ready and work-ready are really the same thing. Most young people enter the work force lacking the critical skills essential for success. And for those who do not graduate from high school, the chances of success are even lower.

Students in the United States need to know much more about the world than ever before. They need to know world cultures and languages, and they need high levels of knowledge and skills to thrive in an increasingly competitive and collaborative society. Skills such as global literacy, problem solving, ethics, social responsibility, teamwork, communications, innovation and creativity have joined the list of high academic skills that are critical for student success in the 21st century.

Leaders must adopt rigorous standards throughout the learning continuum, from pre-K through high school, to minimize the odds that students will need remediation later. These rigorous academic standards must be the default curriculum for all students, regardless of socioeconomic background.

Lead Continuous Improvement

Effective leaders know that they need to translate this pressure for performance into meaningful work for students and adults. Particularly for educators working in learning environments marked by extreme poverty and increased diversity, new levels of knowledge and skill are required. This means leaders must move away from the traditional structures and practices of schools, while at the same time supporting teachers who may never have been trained for the elevated expectations of this new work culture.

These larger expectations for teacher performance create an extraordinary demand on school leaders, who know that the learning of adults is a prerequisite to the learning of children. With the advent of performance-based accountability, many schools have embraced the link between student achievement and teaching quality, advocating for relevant and improved staff development.

Effective leaders create learning communities within the school that ensure that adults have multiple opportunities to work and learn together—whether sharing ideas and knowledge, developing and testing new approaches, or studying and analyzing student performance data.

The urgency now for school leaders is to plan and implement high-quality staff development—schoolwide as well as for individuals—and to create the kind of powerful professional learning that will transform teaching so that it increases learning for students.

Lead Using Knowledge and Data

Data can be a powerful tool for diagnosing and improving school programs and instruction. But, in many cases, the major challenge schools face is not finding the data but determining what is most relevant. In the past decade, the amount of data on student, school and teacher performance has multiplied. A wealth of data exists about school programs and performance. But not all of it is pertinent, or understandable. As they struggle to discern meaning from multiple data sources, effective school leaders continually ask this essential question: So what?

In addition to the summative data that the NCLB Act or the state assessment system requires once a year, teachers want more data at more frequent intervals to monitor the progress of skill development in individual students. A strong body of research shows that regular, formative assessments improve student learning by giving students feedback on their progress and teachers information they can use in real time to modify their instruction. In some cases, such assessments can involve something as simple as asking the right questions to determine if students understand the lesson.

Parents and the public are calling for accountability for student learning from both teachers and administrators. Beyond examining trends based on data of student learning, emphasis on teacher quality and its relationship to student achievement has reinforced the need to assess instructional skills and instructional leadership as well. The use of technology is making data more easily accessible than ever before.

Effective principals lead schools that are expected to show that they are meeting the developmental needs of the child. Pre-kindergarten students, for example, are evaluated against readiness indicators. Out-of-school programs are evaluated for their quality and effectiveness in enriching student learning and well-being. And students are evaluated against health standards and other measures.

Lead Parent, Family and Community Engagement

Schools simply cannot do it alone. Children need numerous opportunities to learn and develop—at home, in school and in the community. Because parents and families are such key advocates for children, and because of the time children spend outside of school, failure to equip parents and others in the community with the skills, knowledge and expertise to be partners in the education process severely hampers progress toward learning.

Effective leaders know that involving only parents isn't enough. They know that the conditions of students' lives *outside* the school have as much or more impact on students' school performance and social development than what goes on *inside* schools. Principals' experiences in many communities fortify the notion that ignoring the community limits the potential impact of school improvement efforts. Furthermore, continuing to push community members aside is likely to have a negative effect. They may become opponents of improvement strategies rather than active participants in supporting them.

Challenges

The transformations in the conception of leadership, in society and in education are inevitable, and principals face enormous challenges in transforming their roles to effectively meet those new realities. Meeting these challenges will require support from a broad range of stakeholders—from community members, districts, states, the federal government and the private sector. The success of students depends on all stakeholders' fulfilling their responsibility to ensure that all schools succeed, and holding one another collectively accountable for doing what it takes to bring about the needed changes.

Political and Social Challenges

Some of the most significant challenges are political and social. Changes in education take place in a political environment, and politics involves a clash of competing interests. Although polls suggest that Americans view education as one of the most important issues facing the country, the specifics about what to do to improve education spark heated divisions.

Funding. Nowhere is this truer than in funding. Despite the growing consensus on the need to raise achievement for all students, the likelihood of dramatic increases in funding for education remains slim for the foreseeable future. The strong opposition to large increases in taxes, combined with commitments to other social needs, such as health care, suggests that schools are not likely to see dramatic increases in financial resources in the coming decades. In addition, changes in other aspects of society, such as the aging of the Baby Boom generation, mean that the competition for funding might get even more intense.

Principals have two options in meeting this challenge. One is a long-term strategy to organize a campaign to support large increases in funding for schools over time. Education remains a top priority, and support is more likely if the community sees results that match its interest.

A short-term strategy is to be smart about the revenues that do exist and to make each dollar count. Using whatever expertise they can muster, principals need to scour district, school and community budgets to ensure that all available funds support improved learning and help to prepare all students for the 21st century. If a program does not match school and community learning goals, it should be eliminated. The research and development community, universities and the federal government can help by providing more information on program effectiveness.

At the same time, principals need to enlist community partners who can augment their educational programs and extend learning beyond the school walls and the school day. In that way, community members can act on the idea that improved education is their top priority.

Competing values. A second political challenge for principals involves competing priorities for schools. On the one hand, Americans increasingly like choice and want the opportunity to choose from among a diverse array of school options. On the other hand, Americans strongly believe that all children should learn at high levels.

These two values, choice and equity, can conflict. Unrestrained school choice could result in situations that are highly inequitable, if some schools attract only advantaged students while others continue to educate those with the greatest needs. These situations can set up conflicts over resources because children with the greatest needs require more resources.

If choice produces a wide range of school approaches, can all students learn what they need to succeed? Can there be standards without standardization?

Principals can lead communities through these dilemmas by helping define the proper balance between potentially competing, yet equally important, values. They can advocate for equitable funding to ensure that every child has the resources needed to achieve high levels of learning.

Resistance to change. A third political challenge is overcoming the resistance to change. Principals face this challenge inside and out of schools. Inside schools, many teachers, and many school leaders, are often reluctant to try new approaches and take on new roles. They were prepared for a different era and have been working their whole lives under a different paradigm. When the change is under way, some might leave, but others actively resist the change.

Leaders with vision can overcome such resistance by making clear the changes are vital to the mission of ensuring a better future for all students and to improve the quality of life for all communities. They also involve as many people as possible to enable all stakeholders to take ownership of the changes, and provide them with the space to take risks and pursue bold strategies.

Principals often face resistance from educators, parents and community members who question the need for a new approach. They reason that they were well educated under the old rules; and why should things be different for their children? Here again, principals need to show how the changes will ensure a brighter future for all children.

Technical Challenges

In addition to the political challenges, principals also face technical challenges that might inhibit their ability to take on the new roles that the transformations over the next decades demand. These challenges are manageable, but meeting them will require political will and support to produce the necessary financial resources.

One challenge is the limitations of most current assessments of student and adult performance. As noted above, leading for diversity and leading 21st century learners require fine-grained assessments that will enable schools to determine student strengths and weaknesses across a broad range of academic and nonacademic skills. With this data, teachers can provide the appropriate course of instruction in and out of school that will lead to high levels of learning and development. And principals need to be able to track learning over time to see if students remain on course.

Such assessments, for the most part, do not exist. Standardized tests tend to survey a subject area and do not provide detailed information on individual students' knowledge and skills. Smaller-scale formative assessments, which are growing in popularity, provide more details but tend to measure a relatively narrow slice of the curriculum. Few assessments measure the kind of emerging content and life skills called for by the Partnership for 21st Century Skills.

A related concern is the incomplete and in many cases antiquated data systems in most states and districts. Robust systems would enable principals to conduct necessary analyses to direct resources where they are most needed and help teachers make instructional adjustments. But few schools have the capability of conducting such analyses.

With investments in research and development, states, districts and schools can solve these technical challenges. They can build their data systems and make them workable for schools. They can create new assessments and prepare principals and teachers to use them effectively.

Principals should be lead advocates for investments in research and development, making the case to public officials and to the testing industry that the return on these investments can be well worth their cost.

Leadership Challenges

If districts, communities and states summon the political will to bring about the changes demanded over the next decade, will principals be ready to lead?

Who will be the principals of the next decade? Although fears of a principal shortage appear overstated, there is some evidence that, in many schools, particularly those serving low-income and minority students, the number of applicants for principal openings is declining. Some teachers seem to believe that being a principal offers additional workloads and enormous pressures but few rewards.

While some districts and private organizations have attempted to recruit individuals from a broad range of fields to the principalship by creating new, accelerated preparation programs, these efforts remain small. The vast majority of principals continue to come from the teaching ranks and through traditional preparation programs.

Perhaps a more serious concern is that principals might not be prepared for the new roles they are expected to take on. Principal preparation programs were designed for an earlier era, and tend to emphasize the managerial aspects of school leadership, rather than visionary and instructional-leadership components. Principal preparation programs must focus on the collaborative, shared leadership called for by changes in society.

Principals can play an important role in encouraging bold leaders to become principals and in fostering changes in preparation programs. By showing how 21st century leadership can improve schools and raise achievement and development for every child, these leaders can serve as beacons for transforming learning and public education.

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