System Design To Support School Transformation

As shown throughout this publication, many studies have documented the practices of unusually effective schools and have uncovered similar features among schools that succeed with all students, including students who have historically been underserved. While much can be done to transform high schools by those faculty, students, and families who are their central members, redesigned schools require some essential conditions to be effective. In this chapter, we outline some of the lessons learned from earlier eras of school redesign and the policy conditions needed to create systems that can support and sustain schools that enable empowering learning.¹⁵⁵

Learning From Successful Innovation

Creating new schools and innovations is a great American pastime. Waves of reform producing productive new school designs occurred at the turn of the 20th century when John Dewey, Lucy Sprague Mitchell, Ella Flagg Young, and others were working in Chicago, New York, and other Northern cities, and Black educators like Mary McLeod Bethune, Anna Julia Cooper, and Lucy Laney were creating schools in the South. A wave of new school designs swept the country in the 1930s and 1940s when the Progressive Education Association helped to redesign and study 30 "experimental" high schools that were found, in the famous Eight-Year Study, to perform substantially better than traditional schools in developing high-achieving, intellectually adventurous, socially responsible young people able to succeed in college and in life. Urban school reform movements occurred in the 1960s and 1970s, and hundreds of redesigned schools were created in the 1990s when the Annenberg Challenge joined with the Gates Foundation to stimulate efforts to redesign schools in many urban districts across the country, including Chicago, Los Angeles, and New York City.

Successful efforts¹⁵⁷ have offered sufficient planning time and supports, including a learning process for all members of the community—faculty, students, and families—that included reading about, looking at, and experiencing the designs and change strategies used in other schools that seem to offer useful approaches, and talking to constituents in those schools. They also have recognized that a whole-school vision is needed, rather than piecemeal change, even if that vision needs to be implemented gradually over a period of years. For example, a large school may start phasing in a new model of smaller learning communities with entering 9th-graders, with clear goals and time frames for growing the model each year.

A growing number of new secondary school designs are offered by networks—such as Big Picture, EL Education, Internationals Network, Linked Learning, and New Tech Network, among others—that can assist those schools or districts interested in adopting or adapting specific models to their local contexts. These networks enable districts and communities to understand, evaluate, assess, plan, and prepare for new approaches, offering learning supports and professional development along the way.

They have also created district-level supports that clear the path for redesigning schools, knowing that, even when they achieve better outcomes, distinctive school models confront long-standing traditions and expectations, including a geological dig of policies designed to hold the factory model in place.

New York City's success in sparking an entire system of redesigned secondary schools of choice was launched in 1989 by an invitation from then Chancellor Joe Fernandez for educators, parents, and community organizations to invent new school designs. This invitation was accompanied by awards of funding for successful proposals and supports from organizations like the Coalition of Essential Schools and the Center for Collaborative Education that offered already-successful models. This work was facilitated by an innovation protectorate in the form of the Alternative Schools Superintendency—which buffered schools from many regulations and forged new solutions to old bureaucratic problems—and by a rich array of professional resources in support of reforms. The resources included expert practitioners who created networks of learning and support; a large set of partnering universities offering expertise and intellectual resources; philanthropists; and researchers who provided additional professional and political support to these efforts.

The United Federation of Teachers (UFT) ran its own teacher center, and many of the teachers engaged in this professional development were involved in the new schools initiative. Over time, the UFT incorporated supports for reform-oriented schools into its contracts—first through waivers and later through changes in collective bargaining agreements—and became part of the protection for further reforms. Even when frequent changes in leadership might have led to abandonment of the new schools initiative, these forces kept the reform momentum going.

Oakland Unified School District (OUSD) undertook a small schools movement in the 1990s and early 2000s—supported by the Bay Area Coalition of Essential Schools—which created a number of innovative secondary school models. Shortly thereafter, OUSD adopted a whole-district approach to creating community schools, which, over time, led to districtwide supports for health care and other integrated supports in schools, then to supports for social and emotional learning and restorative practices. It led most recently to the integration of Linked Learning academies that offer community connections, experiential learning, and personalized supports such as advisory programs in many high schools. These strategies were supported by state policy shifts after 2013, and in the ensuing decade, graduation rates improved dramatically and OUSD became the fastest-improving district in California, continuing its positive trends even during the COVID-19 pandemic.

Sustaining Change

If redesigned schools are to become the norm, districts and states must move beyond the pursuit of an array of ad hoc initiatives managed by exception or waiver to a vision for whole child reform that guides fundamental changes in district operations and policy. Both school districts and state agencies need to take a systemwide view of redesign, rethinking regulations while building capacity and allocating resources in more equitable ways.

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Redesigning Districts

Throughout the 20th century, most urban districts adopted increasingly bureaucratic approaches to managing schools, creating extensive rules to manage every aspect of school life, ranging from curriculum, instruction, and testing to hiring, purchasing, and facilities, also creating complex, departmentalized structures to manage these rules and procedures. These approaches have often been reinforced by federal and state policies that add another layer of regulation, monitoring, auditing, and reporting to the management of categorical programs.

As a result, siloed bureaucrats have had the mission of administering procedures that often get in the way of practitioners' instructional efforts rather than managing quality by being accountable for figuring out ways to support success. If redesigned schools are to succeed, educators cannot spend all their time struggling against red tape. Just as many U.S. businesses have moved away from top-down, hierarchical governance, so too states and school districts need to set broad goals for outcomes and then give schools considerable flexibility to decide how to reach those goals. This means, within parameters that protect civil rights and student welfare, giving schools the opportunity to design key aspects of their programs and then holding them accountable for results. To create a new paradigm, the role of the education agencies at the local, state, and federal levels must shift:

- from enforcing procedures to building school capacity to enable student learning;
- from managing compliance to managing improvement;
- from rewarding staff for following orders and "doing things right" to rewarding staff for getting
 results by "doing the right things";
- from rationing educational opportunities to a small number of students—whether selected by presumed ability or allocated by lottery—to expanding and replicating successful approaches; and
- from ignoring (and compounding) failure in schools serving the least powerful to reallocating resources to ensure their success.

To a large extent, these changes represent a switch from bureaucratic accountability to professional accountability; that is, away from hierarchical systems that pass down decisions and hold employees accountable for following the rules, whether or not they are effective, to knowledge-based systems that help build capacity in schools for doing the work well and hold people accountable for using professional practices that enable student success.

In a new paradigm, the design of the district office will also need to evolve from a set of silos that rarely interact with one another to a team structure that can integrate efforts across areas like personnel, professional development, curriculum and instruction, and evaluation, with the goal of creating greater capacity in a more integrated fashion. These supports should include:

 recruiting a pool of well-prepared teachers and leaders from which schools can choose—and building pipelines to facilitate their training for redesigned school practices;

- organizing access to high-quality, sustained professional development and resources, including skilled instructional mentors and coaches that schools can call upon and that can be deployed to diagnose problems and support improvements in schools that are struggling;
- ensuring that high-quality instructional resources—curriculum materials, books, computers, and texts—are available; and
- providing services, like purchasing and facilities maintenance, to school consumers in effective and efficient ways.

Where they incorporate choice that can enable schools to adopt distinctive approaches, districts need to ensure that all schools—and within-school academies or learning communities—are worth choosing and that all students have access to good learning opportunities. This means they must continuously evaluate how schools are doing, learning from successful schools and proactively supporting improvements in struggling schools by ensuring that these schools secure strong leadership and excellent teachers and are supported in adopting successful program strategies.

Districts will need to become learning organizations themselves—developing their capacity to investigate and learn from innovations in order to leverage productive strategies and developing their capacity to support successful change. Where good schools and programs are oversubscribed, districts will have to learn how to expand and spread good models rather than rationing them, and where schools are failing, they will need to learn how to diagnose, address problems, and invest resources to improve them.

If schools are to serve the public good, it is critical to guard against the emergence of a privatized system in which schools are separated by their ability to choose their students, rather than by the ability of students and families to choose their schools. For choice to work, districts must not only provide information and transportation to parents, they must also manage parents' and schools' choices so that schools recruit and admit students without regard to race, class, or prior academic achievement, both to preserve the possibilities for integrated, common schools and to ensure that some schools do not become enclaves of privilege while others remain dumping grounds.

Building Professional Capacity

Growing successful new schools or improving existing ones is not likely to be accomplished merely by a replication strategy in which external agents seek to transplant programs or designs from one school into another. Unless they are accompanied by intensive, long-term professional development support, such efforts can rarely attend to the nuances and implications of new strategies in ways that would permit strong implementation over the long run.

Building professional capacity ultimately requires investments in effective preparation, hiring, mentoring, evaluation, and professional development for school leaders, teachers, and other staff that is rooted in what we know about learning and development—and about the construction of effective school models. Initiatives like EdPrepLab support pioneering preparation programs for teachers and leaders that are designing new approaches to preservice training, while enabling groups like the Teacher Licensure Collaborative to support state policymakers in building principles for licensure and accreditation standards that are rooted in the science of learning and development.

Research in *Preparing Teachers for Deeper Learning*¹⁵⁹ found that professional development school partnerships between redesigned schools and universities that prepare educators for deeper learning and equity provide a powerful approach to the chicken-egg problem of how to create pipelines of teachers for schools of the future. Prospective teachers learn effective strategies experientially as well as through their coursework and are more likely to succeed when they enter the profession. And when teachers have the opportunity to work in schools that provide professional collaboration time, embedded professional learning, and personalized structures that enable them to be more effective with students, they are more likely to stay. Redesigned schools that have developed such pipelines and offer strong collegial environments have many more applicants than they can hire, even when their districts have difficulty filling vacancies. When a surplus of well-prepared candidates can be hired in other schools developing similar practices, the schools and the profession benefit.

In addition, school systems can develop strategies for sharing good practice across schools. These can include disseminating findings from research about successful approaches; establishing networks of schools, teachers, and principals that refine and share practice with one another; and creating opportunities for educators to examine each other's practice and get feedback that can help them grow. These opportunities can enable educators to share departmental and schoolwide practices through collective professional development, observational visits, summer retreats, and pooling of intellectual resources.

Networks like the Center for Collaborative Education, Coalition of Essential Schools, Linked Learning in California, and the Pilot Schools initiatives in Boston and Los Angeles have provided intellectual resources, including design principles and resources for implementing them—curriculum materials; assessments; protocols for exhibitions, conferences, and other learning opportunities; and other school practitioners with whom to consult. Across districts, networks like those that support the Internationals High Schools, EL Education, New Tech schools, Big Picture, and others create partnerships between older and newer schools that provide models of curriculum, pedagogy, and school design. More established schools offer support networks for the principals and school directors; one-to-one supports for directors around decision-making and design strategies; curriculum materials; and staff development for developing curriculum, assessments, portfolio systems, and teaching strategies. Networks provide new school redesigners with many experienced colleagues to whom they can turn for advice, exemplars, and resources.

Managing and Allocating Resources

For schools to succeed with all students, they also need to be adequately resourced to do so. In the United States, disparities in funding between and among states, districts, and schools often leave those working with the needlest students with the fewest resources. Some states and cities have begun to change this by allocating resources equitably on a per-pupil basis adjusted for pupil needs. The weighted student formula approach provides an added increment for students with greater needs (e.g., those with disabilities, English learners, students from low-income families, or those experiencing homelessness), determined by estimating the costs of educating these students to the state's standards. Schools serving large concentrations of high-need students may also receive additional funds to provide the services that so many of their students require.

Schools and districts also need the flexibility to spend their funds in optimal ways. Among the distinctive features of successful redesigned schools is the fact that these schools use the resources of people and time very differently from traditional systems in order to provide more intense relationships between adults and students and to ensure collaborative planning and learning time for teachers, as other nations do. As we have noted, the United States spends more of its personnel budget on a variety of administrative staff rather than on teachers directly. Whereas full-time teachers engaged in instruction comprise about 70% to 80% of education employees in most Asian and European nations, they make up less than half of education employees in the United States.

This is partly because of the variety of pull-out programs and peripheral services added over time to make up for the failures of a factory-model system rather than investing in the instructional core of expert teachers given time to work productively with students whom they know well. It is also because the United States has developed several layers of bureaucracy between the state and the school, made necessary in part by the dizzying array of federal and state categorical programs that schools are expected to manage because they are not trusted to make good decisions about resources. These categorical programs themselves create inefficiencies in spending—requiring administrative attention and audit trails, as well as fragmenting programs and efforts in schools in ways that undermine educational outcomes. Often these programs and other regulations prescribe staffing patterns and other uses of resources that reduce focus and effectiveness.

States and districts will need to encourage more thoughtful and inventive uses of resources by resisting the temptation to prescribe old factory-model requirements for staffing and uses of time and funds, and by providing supports for school leaders to learn how to design organizations that are highly productive and to use resources in ways that are likely to produce the desired outcomes.

Deregulating Strategically

A challenge in scaling up more effective school designs is that the century-old model of school organization that has shaped most schools is now reinforced by layers of regulations that often do not produce the most effective forms of education. Most state regulatory frameworks for schools—enacted through assumptions made by categorical funding streams about how staffing, programs, and materials are managed; via rules for counting seat time in terms of instructional minutes; via curriculum and testing rules; and through approaches to professional development—have not yet shifted to accommodate or encourage the designs made by new school models.

Where innovations are made possible by relief from regulations, they cannot spread unless the same regulatory relief is applied to other parts of the system. Federal, state, and local policymakers need to examine how to deregulate public schools strategically in ways that would permit greater focus and success while preserving core public values. Waivers from regulations are not enough: It is critical that districts and states allow innovators to help change the rules as well as to avoid them. Regulations protecting access and providing equitable allocations of resources should provide the foundation of a redesigned system, while professional standards and investments in professional capacity that allow educators to be trusted should replace efforts to micromanage teaching and the design of schools.

Rethinking Accountability

Finally, policymakers must create accountability systems that can foster innovation and student supports while holding schools accountable to the core purposes of public education—equity, access, development of citizenship, and progress in learning. A system that is accountable to students and parents should ensure access to high-quality learning opportunities while identifying needs

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and engaging in continuous improvement to meet them. Learning outcomes should be evaluated in ways that acknowledge schools' contributions to student growth and progress, rather than by rewarding or punishing school status based at a moment in time based on high-stakes measures that create disincentives for schools to admit and keep the needlest students.

Productive accountability systems should include indicators of students' access to educational resources: well-qualified educators; a rich curriculum; high-quality teaching and instructional materials (including digital access); a positive school climate; social, emotional, and academic supports; and expert instruction for English learners, students with disabilities, and other students with particular needs. They should also include indicators of learning and progress using rich performance-based assessments that measure learning in authentic ways; completion of well-designed pathways to college and careers; and accomplishments such as biliteracy and civic engagement, as states like California and New York have sought to do.¹⁶¹

Conclusion

Over the past 30 years, thousands of redesigned secondary schools have demonstrated that it is possible to enable much greater levels of success for young people, including those who have been historically left out and pushed out of opportunities to learn. Expanding these opportunities will require redesigning systems at the district, state, and federal levels as well so they can move beyond the limitations of the factory model. Creating systems that support the learning of all students will take clarity of vision and purpose, along with consistent action to create a web of mutually reinforcing elements that strengthen opportunities for relationships; provide environments of safety and belonging; support authentic and meaningful curriculum and assessment; explicitly develop social, emotional, and cognitive skills; facilitate family and student engagement and voice; and integrate community supports, making them readily available to remove obstacles to learning.

Additional Resources

The following organizations help schools engage in redesign.

Big Picture Learning works with districts and school leaders to design schools that immerse students
in interest-based learning experiences. These learning experiences are grounded in personalized
courses of study and workplace learning opportunities that are supported with advisories, among
other personalized structures, that strengthen relationships. To date, Big Picture Learning has

worked to create and sustain over 60 schools in the United States and supports more than 100 schools internationally with the goal of advancing equity and deeper learning in personalized and meaningful ways.

- Building Equitable Learning Environments Network (BELE)—a network affiliated with the National
 Equity Project—works with educators, policymakers, school support organizations, and other
 stakeholders to create equitable learning environments that are grounded in the science of learning
 and development. Guided by its transformation framework, the network aims to create resources and
 tools that support practitioners and decision-makers in transformational change. In addition, the BELE
 Network supports and convenes partners to share learnings from this equity-oriented change process
 and to elevate the ways that the field can make equitable learning environments a sustainable reality.
- Center for Whole-Child Education (previously Turnaround for Children) works to support practitioners in
 advancing and implementing whole child educational practices. To this end, the organization produces
 research-based tools for educators, such as a toolkit on how to use a whole child vision to assess
 and plan for tiered systems of support and resources to accelerate healthy student development and
 achievement. In addition, Center for Whole-Child Education works with schools, districts, and networks
 across the country, which, to date, includes training, coaching, and support to over 220 school leaders
 in 76 schools to help create healthy learning environments that catalyze success and well-being.
- Coalition for Community Schools is an alliance of national, state, and local organizations in
 K-12 education, youth development, community planning and development, family support, health
 and human services, government, and philanthropy. It offers a range of tools and resources that
 can help educational leaders to build and sustain community school models and initiatives in
 their area, including opportunities to connect with technical assistance providers that can help
 communities improve their planning and management.
- Coalition of Essential Schools offers resources to support student-centered, equity-driven learning
 and accompanying school transformation. It also provides technical assistance to schools that have
 embraced the Common Principles.
- EL Education supports academic, social and emotional, and character learning across more than 150 schools that serve over 500,000 students. Through its work across the country, EL has created a range of free and open educational resources (e.g., curricula, videos, documents, books, and student work models) that can help educators create inquiry-based learning opportunities that engage learners and build their knowledge, skills, habits, and mindsets.
- Envision Learning Partners (ELP) helps educators, school leaders, and district officials build high-quality systems of performance assessment to engage students in rich and meaningful learning. ELP facilitates discussions among diverse teams to identify equity challenges and define the skills students need to succeed. ELP then works with practitioners to codesign high-quality performance assessments and build professional capacity to sustain that learning system. To date, the organization has supported work in over 100 districts and 45 schools to transform learning experiences for over 200,00 students.
- High Tech High Network, developed by a coalition of San Diego civic leaders and educators, opened High Tech High in September 2000 as a small public charter school with plans to serve approximately 450 students. HTH has evolved into an integrated network of 16 charter schools

- serving approximately 6,350 students in grades K–12 across four campuses. The HTH organization also includes a comprehensive adult learning environment including a Teacher Credentialing Program and the High Tech High Graduate School of Education, offering professional development opportunities serving national and international educators.
- Internationals Network for Public Schools designs, develops, and supports schools and programs
 for recently arrived immigrants and refugees. To date, it has partnered with 12 districts to develop
 28 schools that meet the needs of multilingual learners through an activity-based pedagogical model
 that features collaborative, inquiry-based learning. In addition to supporting school development,
 Internationals Network provides professional development, offering practitioners experiential
 learning opportunities that simulate the effective practices Internationals schools use to support
 multilingual learners and to share best practices.
- Linked Learning Alliance is a coalition of educators, educational leaders, and community organizations that promotes the integration of college and career preparation for young people in educational systems. Specifically, it promotes the implementation of approaches that emphasize strong academics alongside access to comprehensive student supports and real-world learning opportunities that enhance students' skills and job-related knowledge. To advance this work, the Alliance works to grow the field's understanding of the power of Linked Learning experiences, elevates policies that can enable this pedagogical approach, and facilitates professional development that grows practitioner and community knowledge.
- National Center for Community Schools seeks to transform education by partnering with schools, districts, community partners, government agencies, and other stakeholders to create and sustain community schools.
- New Tech Network partners with school districts to support comprehensive school change centered on the implementation of interdisciplinary, project-based learning. To do this, the network engages district officials and practitioners in professional development that helps them build schools that implement project-based learning and consider how to spread this deeper learning model to other schools through a supportive policy and personnel infrastructure. To date, New Tech has worked closely with over 200 districts and schools nationwide and boasts high college persistence rates through its project-based learning approach.
- Transcend works with schools and districts to provide design and implementation support as
 they advance fundamental change to their school models. For practitioners beginning to design
 or redesign schools, Transcend provides coaching, research-driven tools, and other professional
 supports that guide practitioners through a research and development process grounded in equity
 and science. For those already engaged in school design, the organization helps leaders and
 educators understand and strengthen the conditions for innovation and effective implementation.
- XQ produces tools and products to empower educators, communities, and decision-makers to
 rethink and redesign U.S. high schools so that they better prepare youth to succeed in college,
 career, and life. These resources include XQ Knowledge Modules, which are step-by-step guides to
 engage practitioners in design thinking to spur innovative school transformation that is equitable
 and responsive to each school community.