Deeper Learning Networks: Taking Student-Centered Learning and Equity to Scale

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Abstract

One of the mysteries of education reform is how leaders and educators can successfully instantiate, sustain, and spread student-centered pedagogical practices from a few schools to many others. Advocates for *deeper learning* grapple with this mystery as they seek to transform teaching and learning to prepare students to meet the demands of the 21st century and to close the opportunity gap between advantaged and disadvantaged groups. While research suggests that deeper learning strategies that support critical thinking and problem-solving can yield improved student outcomes, implementing these strategies is not easy, as they require reimagining school environments and changing traditional approaches to teaching. This brief highlights how three networks of schools engaged in deeper learning have managed this feat. It describes the systems and structures the networks have used to instantiate their equitable deeper learning models in diverse public school settings to serve students in more personalized and productive ways.

The full report can be found online at https://learningpolicyinstitute.org/product/deeper-learning-networks.

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There is a long tradition of progressive educators seeking to transform schools and systems in ways that allow more student-centered and inquiry-driven approaches to flourish and that improve learning for the country's most vulnerable youth. Yet sustaining and re-creating these models have remained a challenge. Classrooms and schools characterized by student-centered learning practices typically deviate from the norms of transmission teaching and the "grammar of schooling,"[1] causing them to confront institutional obstacles as they seek to implement and spread high-quality models with fidelity.

These institutional barriers include those related to the technical elements of teaching and learning—the instructional shifts that can allow students to consistently engage in meaningful applied learning experiences aimed at higher-order thinking and complex problem-solving while they are supported to close gaps in their understanding and skills. Developing and retaining "infinitely skilled teachers" who can engage students in student-centered learning has also been a consistent challenge in sustaining progressive education reform.[2]

Other impediments have included incompatible curriculum and testing policies, as well as policy churn, teacher and administrator turnover, inequitable school funding, and periodic disinvestment in public education, which have exacerbated challenges to enacting lasting change. In addition, leaders seeking to enact, sustain, and spread these student-centered approaches have confronted entrenched norms that govern school structures. These school structures were developed to promote standardization in the era of the assembly line, as well as social interactions in schools grounded in institutionalized racism and beliefs about student ability. These elements of change, which require ongoing efforts to shift mindsets and mitigate bias, have often stunted the implementation of promising teaching and learning practices.

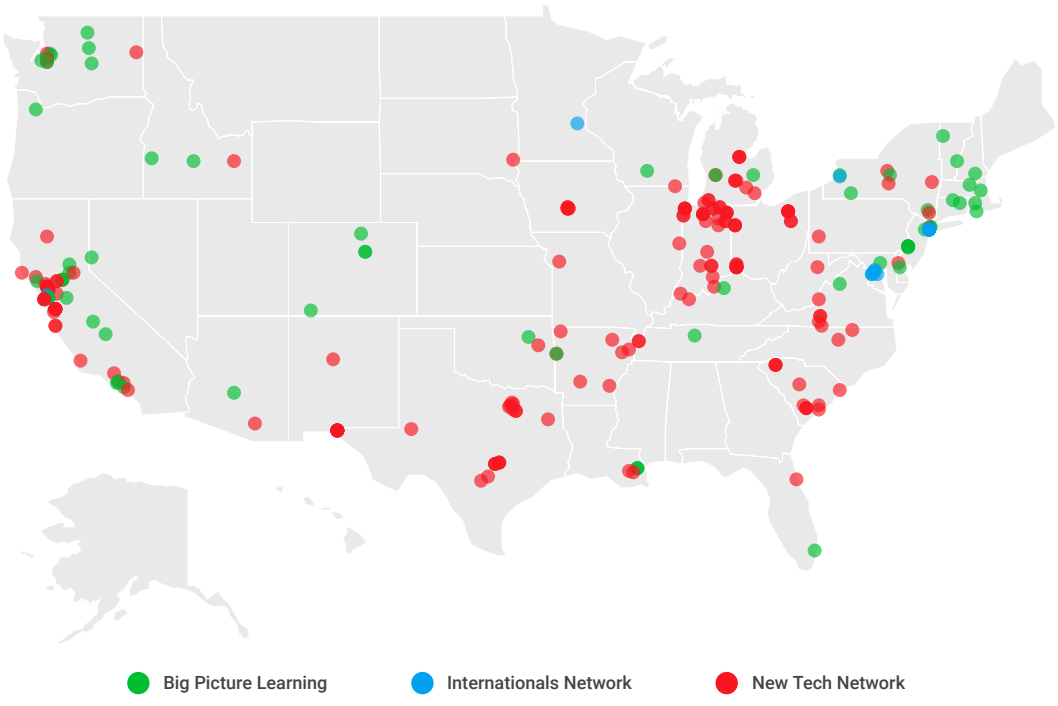
This Study

Given the elusive nature of change, this study investigated several networks of schools that had successfully instantiated, sustained, and spread progressive educational practices in ways that advance equity and produce greater success for traditionally marginalized students. It then considered the systems and structures that practitioners have used to anticipate and overcome the challenges that often accompany efforts to enact and spread deep changes to teaching and learning.

We examined three school networks (see Figure 1), all of which engage students in inquiry-based learning that has resulted in positive outcomes for students, most of whom are students of color from low-income families:

- Big Picture Learning, which offers an experiential and interest-based learning approach grounded in personalized, transdisciplinary courses of study and workplace learning that typically takes place in internships;
- The Internationals Network for Public Schools, which serves newcomers with an activity-based pedagogical model that features collaborative, inquiry-based learning for English learners who have had widely variable levels of education before coming to the United States; and
- New Tech Network, which offers a whole school model grounded in interdisciplinary, project-based learning that is technology supported, including resources for both teachers and students to facilitate collaborative learning.

Figure 1
Map of Big Picture Learning, Internationals, and New Tech Network Schools



Data sources: New Tech Network. (n.d.). Our schools. https://newtechnetwork.org/schools-2/ (accessed 09/01/19); Big Picture Learning. (n.d.). Our network schools. https://www.bigpicture.org/apps/staff/ (accessed 09/01/19); Internationals. (n.d.). Schools and academies. http://internationalsnps.org/schools/ (accessed 09/01/19).

While each network has a distinct approach, they all ground their instructional approach in *deeper learning*—teaching and learning practices that enable students to learn core academic content in ways that apply their knowledge to relevant problems. Deeper learning approaches, including project-based learning, work-based learning, and performance assessments, help students think critically and solve complex problems using mathematical, scientific, and creative reasoning.

To this end, teachers engage students in learning experiences that require collaboration, effective communication, and self-directed inquiry, enabling students to "learn how to learn" and develop mindsets that increase perseverance and productive learning behaviors. These practices enable students to develop versatile skills and mindsets that are powerful and relevant to their lives and interests. In doing so, they generate improved outcomes for student learning and the development of interpersonal and intrapersonal skills.[3] Especially in teaching diverse learners who come to school with many different experiences and levels of prior knowledge, these approaches require sophisticated pedagogies that many teachers have never experienced or learned to enact in their classrooms.

In this study, researchers investigated how the three networks have instantiated and re-created their unique models across the country, thus increasing access to deeper learning for a much wider range of students, including marginalized economic, racial, and linguistic groups.

Systems for Planting and Sustaining Deeper Learning Models

Through an analysis of qualitative data sources, the report shows that Big Picture Learning, Internationals, and New Tech Network share common systems that have helped to instantiate their deeper learning school models in new settings.

Designing Schools for Deeper Learning

Big Picture Learning, Internationals, and New Tech Network intentionally design schools for deeper learning and rethink the structures surrounding teachers' work, the use of time in schools, and the ways in which students demonstrate their progress. These school design features, often discussed as prerequisites for entering local partnerships with districts, include:

- course structures that allow for interdisciplinary learning;
- teacher teams that share students and sometimes loop with them for more than 1 year;
- flexible schedules that provide teachers and students with ample time to engage in collaborative and applied learning;
- advisory systems that create time and structures for small groups of students to work with the same advisor who supports their social, emotional, and academic needs over multiple years; and
- means for students to earn credits as they engage in real-world tasks and performance assessments.

To build schools with these structures, the networks actively seek to secure policies and conditions in Memos of Understanding (MOUs) and/or through state or district policy waivers that enable their models to take hold.

Designing Big Picture Learning Schools

Big Picture Learning's deeper learning model is grounded in its vision of making learning relevant and interest-driven "One Student at a Time." To bring this vision to life, network schools use a workplace learning model in which students seek internships to engage in hands-on learning. Big Picture Learning also uses a project-based learning approach that allows students to explore their interests in a personalized and interdisciplinary way when they are in school. Often aligning with their internships, students engage in independent study of the literary, historical, and empirical dimensions of their interests in consultation with their teachers, who guide them to resources that deepen their understandings. To demonstrate their academic and personal growth, Big Picture Learning students also participate in authentic assessments, including performance assessments, that allow students to demonstrate their progress.

Big Picture Learning's main structure for implementing its deeper learning model is advisory. Students remain with the same advisor and cohort of students for 4 years. Because of this structure, advisors are charged with managing students' educational progress, independent projects, and internship experiences. The extended time in advisories also helps to build authentic and trusting relationships between students and their advisors, often leading advisors to advocate for their students and develop a long-term investment in their progress and trajectories.

With this distinct pedagogical approach, Big Picture Learning schools must be designed so that these practices can be implemented and sustained. For example, Big Picture Learning schools must be structured to support teacher looping, since teachers remain with their students for 4 years. Additionally, the Big Picture Learning approach depends on flexible master schedules that allow students to engage in out-of-school learning and allot blocks of time for extended student learning in advisories and for teacher collaboration. Network and school leaders actively work with partner districts to secure these conditions in MOUs or secure waivers, including those around seat-time requirements or avenues for satisfying credit and graduation requirements when relevant, to allow their models to be implemented in high-quality ways.

Partnering With Districts and Communities to Implement Deeper Learning

While the three networks advocate for conditions that allow their models to flourish in districts, they do not establish or sustain their schools in a unilateral manner. Instead, each network collaborates formally and informally with district leaders, site-based educators, and community members to ensure that their models are a good fit for student and district needs and that the transformations the models bring are welcomed rather than feel imposed. Once established, network and school leaders continue to build relationships with district, community, and external partners to build community investment in the model and to extend the school's capacity to support students in deeper learning.

Building District Capacity to Support Deeper Learning in the New Tech Network

New Tech Network has a formal process for partnering with districts to establish sites. The network works closely with founding leaders through a highly articulated process, often described as co-design, to develop schools that will address local needs. Through these collaborations, New Tech Network ensures that its deeper learning model can be feasibly implemented and can provide local students with rich learning opportunities. Moreover, including local partners in the co-design process helps to build knowledge and investment among local stakeholders to support school sustainability.

New Tech Network also engages districts in professional development around deeper learning as a way to sustain its schools and to spread its practice into other district schools. For example, the network has created a suite of services, including in-person and virtual workshops and a repository of curriculum and assessment models, to support districts and local educators in understanding deeper learning practices and the school designs and policies necessary for their implementation. New Tech Network created these supports, in part, because it views every level of a school system as important. As Jude Garnier, Chief District Officer for New Tech Network, described in a New Tech Network Annual Conference session for district and school leaders, "Systems are like nesting dolls. Everyone has to be a learner. Each level is responsible for the conditions of learning for the next level down."

Implementing Multifaceted and Experiential Supports for Teacher Learning

Because many teachers are underprepared to implement deeper learning, Big Picture Learning, Internationals, and New Tech Network have built professional learning systems that create opportunities for practitioners to learn and experience deeper learning in ways that build and reinforce their knowledge.

Each network holds network-wide gatherings that introduce teachers to the foundational features of its approach. The networks also facilitate visitations to network schools, during which educators not only can learn how to enact the network model but also can see the power and potential of these approaches firsthand. Notably, teachers typically engage in these professional learning experiences in ways that mirror how students learn in their networks, strengthening their understanding of deeper learning and the student experience.

Experiential Professional Learning at Internationals

A pivotal rite of passage for every Internationals educator occurs at the summer and fall professional development conferences, where they attend a workshop centered on an essential question: "How do we help our students with limited English proficiency to access rigorous content, skills, and academic language?"

To explore this question at the fall 2017 conference, teachers imagined themselves to be an adolescent leaving the United States for Germany with no German language proficiency. Attendees of the workshop were presented with a lesson taught entirely in German, with no scaffolding, so they could grapple with the challenges of learning in a foreign language and develop empathy for how English learners may feel in classrooms.

After the initial German classroom simulation, the workshop attendees then experienced the same lesson through the Internationals approach to teaching English learners. Still taught solely in German, the facilitator used a variety of scaffolds (e.g., hand signals, classroom visuals, native language connections) and active participation to engage teachers in a lesson in which they learned substantive content despite their unfamiliarity with the language in which the workshop was being conducted.

After the exercise, the session attendees had the opportunity to reflect on the experience of the two different lessons and to look closely at the techniques the teacher facilitator used that were effective.

Teachers reported that this workshop was a useful introduction to the Internationals approach, as they experienced learning through the eyes of their students. They expressed that it gave them confidence that the Internationals approach can work, enabling all students to overcome the challenges of learning a new language in congress with rigorous content through the use of strong differentiation techniques.

All three networks also provide their teachers with ongoing supports, including access to expert coaches who address pressing issues as they emerge in the implementation of deeper learning pedagogies and to resource repositories that include curriculum and assessment models. Coaching is carefully scaffolded so that intense support is gradually reduced as in-school capacity is developed, leaving the school with strong internal capacity for the work.

Developing Deeper Learning Leaders

Networks have also developed and maintained systems that support leaders in designing and sustaining deeper learning, which has helped them to instantiate and grow their models in high-quality ways. Each network invests in leadership development before a principal assumes the helm of a network school—engaging new site leaders in targeted professional development, intra-network visitations, and coaching sessions. Networks also engage principals in ongoing professional learning through continued access to coaches, professional development, and participation in more informal communities of practice.

Leadership Development at Big Picture Learning

Big Picture Learning brings new principals on board by involving them in vision-setting and school design. Specifically, the network asks new principals to participate in individual and collaborative trainings with network staff and to visit established, high-fidelity Big Picture Learning schools to see best practices during "The Year Before Opening" (TYBO). In addition to hosting site visits, the network hosts in-person and virtual meetings for new leaders during TYBO in which their assigned Big Picture Learning coach facilitates professional development on topics such as building a strong school culture, developing relationships with local stakeholders, and understanding operational management.

Beyond these onboarding experiences, school leaders at Big Picture Learning engage in ongoing professional development opportunities to support continuous learning. These learning opportunities include formal or regional leadership conferences that allow leaders to develop stronger communities of practice. Further, principals have continued access to coaches who help them meet their immediate and long-term professional goals and their schools' needs.

Often, leaders of new schools have been teachers or leaders in existing network schools, so they have personally experienced the system designs and pedagogies needed. To support the process that allows "network DNA" to be transferred to their various locations and new sites, the networks create leadership pipelines. By immersing both teachers and leaders in reinforcing, collaborative, and experiential professional development, they create a workforce that can successfully instantiate their deeper learning and equity-oriented models in new and existing sites.

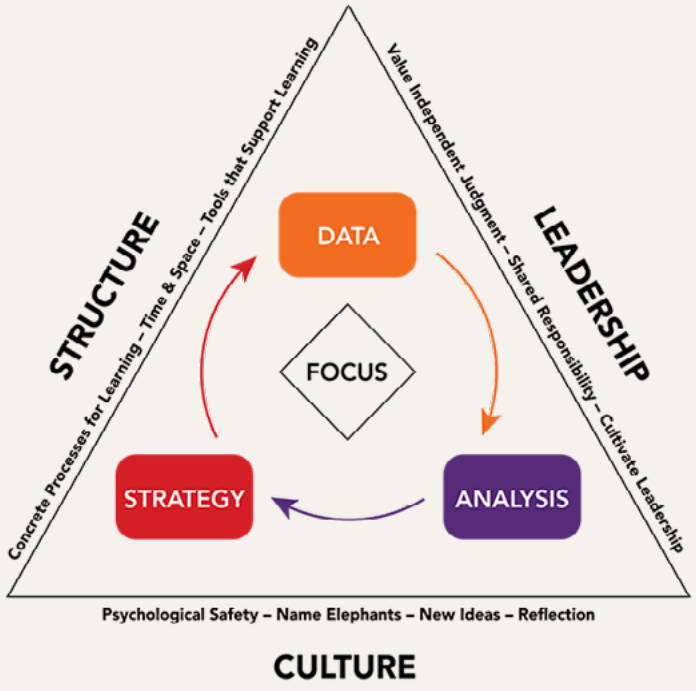
Maintaining a Learning Orientation for Continuous Improvement

As the networks have grown, they have encountered challenges related to meeting the learning demands of a growing workforce and a diverse student population. All three networks have turned these growing pains into both formal and informal opportunities for reflection and improvement. By maintaining a learning orientation, the networks have evolved in their practices, allowing them to adapt their approaches in community-responsive ways while maintaining fidelity to their models.

New Tech Network's Learning Organization Framework

At New Tech Network, habitual reflection is embodied in the network's Learning Organization Framework, a tool the organization has developed through its involvement in continuous improvement science. This framework is based on the premise that any meaningful effort for change starts with a clear focus on something specific. That goal becomes the focus of the change effort and is at the center of the cycle of inquiry that includes data, analysis, and strategy. New Tech Network uses this framework to improve its support to schools and encourages schools to embrace the framework as well.

Figure 2
New Tech Network's Learning Organization Framework



Source: New Tech Network. (2016). The learning organization framework. https://newtechnetwork.org/resources/learningorganization-framework/ (accessed 04/23/19).

Implications

Through these systems and structures, Big Picture Learning, Internationals, and New Tech Network have been able to re-create their deeper learning models in context-sensitive ways, allowing them to grow and sustain their organizations in partnership with local communities. Their practices elevate important lessons. Among these are insights that can inform districts and schools seeking to expand access to deeper learning and equity in a wide range of settings:

- **School design and pedagogy are intimately linked**: Deeper learning pedagogies require other structural changes that reorganize time and relationships within schools, including those that enable long-term relationships between teachers and students (e.g., through looping and advisories), those that permit longer blocks of time for project-based learning inside the school and interest-based internships in the community, those that allow teachers to work collaboratively in teams, those that support authentic assessments within and across classrooms, and those that provide the additional academic and social-emotional supports students need to succeed. Pursuing changes in pedagogies without pursuing new school designs is unlikely to succeed in producing sustainable models with strong outcomes.
- **Every member of the school community must learn deeply about the new approaches and why they matter** in order to make decisions and contributions that sustain these approaches: In addition to teachers and school leaders, central office leaders, school board members, teachers unions, parent and community groups, and local businesses need to understand deeply what new models of practice are seeking to accomplish and how they intend to do it. Each stakeholder has a key role to play in enacting and sustaining the changes over time.
- **Developing the sophisticated pedagogies needed to teach for deeper learning with equity requires new approaches to professional learning:** After-school workshops are not enough. Strategies include cross-school conferences and scaffolded coaching for leaders and teachers; observations of successful schools and classrooms; residencies; and curriculum supports, such as unit and lesson plans and authentic assessments. With these approaches, teachers can build on the tools that expert teachers have developed and then adapt them to their needs. Educators thus have the opportunity to learn in ways that model the deeper learning they seek to create, that demonstrate models and artifacts of practice that they can observe and emulate, and that build continuous collaboration in communities of practice.
- **School leaders must have significant knowledge of learning and successful experience in the new model** to be able to redesign the school and help enable the innovative practices it requires: If leaders do not understand both the pedagogies and system supports needed, they will struggle to create the environment needed for teachers to teach deeply and the supports needed for a wide range of students to learn in ways traditionally reserved for a small, select group of students.

Considerations for Districts and Schools

District leaders and practitioners seeking to expand deeper learning opportunities across schools or academies can:

- **Redesign schools for deeper learning**
  - Local leaders and practitioners can develop explicit **deeper learning visions** that serve as guidelines for the design of deeper learning schools and assess what structures or systems need to be in place to implement their visions.
  - They can also redesign schools to include **personalization and relationship-building structures** so that students can be known and supported. Such structures include creating small schools or learning communities within schools, looping teachers with students for more than 1 year, creating advisory systems, supporting teaching teams, and organizing schools with extended grade years. Researchers have found that all these structures strengthen relationships and support students in deeper learning.
  - District leaders can provide schools with **flexibility** in meeting state or local requirements (e.g., the best ways to demonstrate graduation readiness, credit fulfillment, and seat-time requirements) and in scheduling to allow for longer learning blocks and teacher collaboration within teams and departments. To allow deeper learning models to flourish, schools and districts should identify and seek out potential avenues that would allow for more flexibility in these areas or should reconsider these mandates.
- **Partner to implement and sustain deeper learning**
  - Districts and schools can invest in personnel who **facilitate partnerships** and communicate with local businesses, community organizations, and professional organizations about deeper learning to build support for these practices and their implementation. Deeper learning schools are best supported when multiple stakeholders are involved in the school's design and implementation and can extend school capacity and student learning.
  - Developing partnerships can also be a way to ensure that **integrated student supports** are available to promote students' health, mental health, and social welfare in deeper learning environments. These supports provide the foundation for productive learning and the rigor that deeper learning requires and can enhance students' well-being and sense of inclusion and belonging.
  - Districts and schools can also consider **partnering with deeper learning experts**, including deeper learning networks, to support the instantiation and sustainability of deeper learning schools.
- **Maintain multifaceted systems of professional learning for teachers and leaders**
  - Districts can work with higher education partners to design **pre-service preparation programs** for both teachers and administrators that provide a strong foundation in deeper learning and skills for supporting students' holistic needs. These should provide supervised clinical experiences in schools that are good deeper learning models with positive school climates, including network schools. Administrator preparation programs should help leaders learn how to design and foster such school environments.

- Districts and schools can offer **in-service development** on deeper learning to build teacher expertise and facility with implementing its practices. Productive strategies would include districtwide or whole-school professional development that is sustained over time, with opportunities for teachers to build and try new curriculum and practices and reflect with each other to improve them; collaboration within professional learning communities; and opportunities to observe deeper learning approaches in action through within-school classroom observations and site visits to other schools.
- Districts and schools can develop or secure access to deeper learning **curriculum and assessment resources** through online repositories and forums.
- Districts and schools can invest in **deeper learning coaches** so that teachers and administrators can receive ongoing, on-site support in implementing deeper learning practices from those that maintain expertise in this complex approach.
- Districts can foster a **pipeline of leaders** from the pool of increasingly expert teachers that can design and transform schools and academies to support deeper learning and equity. More systematic development of educators' abilities to implement deeper learning can support district schools in creating leaders who can effectively implement these complex approaches across school sites.

- **Develop processes that support continuous improvement**
  - Districts and schools should develop and implement systems that allow them to reflect on and improve deeper learning practice and dissemination. These can include internal routines that periodically allow districts and schools to diagnose challenges, develop and implement improvement strategies, and assess their progress. They can also include ongoing professional learning alongside other organizations to share and hone best practices. Engaging in a thoughtful evaluation of assets and potential challenges can help local leaders and practitioners develop a well-informed and strategic approach to designing and improving schools that ensure equitable access and success for all of their students.

Conclusion

This study has suggested how to plant and grow new approaches that move beyond traditional constraints to provide deeper learning that promotes equity on a large scale. In examining how some networks have re-created and sustained deeper learning models in dozens and sometimes hundreds of schools, this study found that they have done so by attending to multiple dimensions of change, ranging from structures to redesign schools and sustain deeper learning environments to partnerships with local stakeholders, robust systems of professional development, and systems for continuous improvement. The processes and systems have coalesced to support the sustainability and growth of these deeper learning models over time and helped push against the obstacles that often impede fundamental change.

Significant work remains to extend these kinds of practices beyond educational niches to entire districts and states. We hope these findings demonstrate some of the strategies that may eventually give young people universal access to the learning they need to succeed in the complex, fast-changing world they live in and will soon lead.

Endnotes

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The Learning Policy Institute conducts and communicates independent, high-quality research to improve education policy and practice. Working with policymakers, researchers, educators, community groups, and others, the Institute seeks to advance evidence-based policies that support empowering and equitable learning for each and every child. Nonprofit and nonpartisan, the Institute connects policymakers and stakeholders at the local, state, and federal levels with the evidence, ideas, and actions needed to strengthen the education system from preschool through college and career readiness.

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