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Deeper learning: A primer for state legislators

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A growing number of schools across the country are working hard to provide a "deeper" learning experience for their students, and state legislators are being asked to create policies that support wide-scale implementation of 21st century learning practices. This primer is created for state policymakers seeking to modify instruction and assessment policies to better engage today's students. The primer defines *deeper learning*, explains how it overlaps with other active learning strategies and describes how it can be, and is being, accomplished at the state policy level. Resources that examine deeper learning in further detail are also available.

> "To deeper learning advocates, the focus of education should be on creating the conditions in which students will want and be able to learn."

KEY TAKEAWAYS

Deeper learning strategies facilitate the development of students' collaboration, critical thinking, creative problem-solving and civic skills that are not typically addressed through traditional instructional practices.

Although standards in most states now call for some level of deeper learning, instruction is still working to catch up. As a result, deeper learning has yet to dramatically alter the way curricula are delivered to most students.

Proponents of deeper learning advocate for states to pass a comprehensive set of deeper learning policies. No single policy on its own is likely to produce the changes these advocates seek.

What is deeper learning?

"Education is a long-accepted tradition, but when compared with nearly every sector of the economy, is also one that's lagged in adapting to the times. That's the culprit of a big learning disconnect with the most diverse and connected generation in history."[1]

Deeper learning, a concept coined and promoted by the William and Flora Hewlett Foundation, seeks to bridge the disconnect between traditional instructional practices and modern student learners. Deeper learning occurs when teachers act less as "lecturers" and more as "overseers," with the primary role of stimulating the learning process. As a result, students transform from passive recipients to active seekers of information and knowledge. When students are actively engaged in the learning process, they are better able to:

- Master core academic content in subjects like reading, writing, math and science.
- Think critically, analytically and creatively.
- Collaborate with others.
- Communicate effectively.
- Direct their own learning.
- Trust their own abilities to achieve success.[2]

The concept of deeper learning is being supported throughout the states under a variety of terms, including, for instance, 21st century skills, college, career and civic readiness and next-generation learning.

Deeper learning strategies facilitate the development of students' collaboration, critical thinking, creative problem-solving and civic skills that are not typically addressed through traditional instructional practices. Examples of strategies that promote deeper learning include:

- **Project-based learning:** Students work on their own and in groups to apply learned concepts to real-world problems.
- **Service-learning:** Students learn through community engagement and service.
- **Individualized learning plans:** Students' varying interests and talents are explored, opportunities for multiple pathways and learning outside of the classroom (through internships, work-based learning, blended and online learning, and independent studies) are encouraged and learning delivery systems are adapted to student successes and setbacks.
- **Competency-based learning:** Seat time requirements are waived in full or in part and students progress through school as they demonstrate mastery of academic content areas.
- **Performance-based assessments and portfolios:** Formative and summative assessments include opportunities for critical thinking and analytical responses, and end-of-year portfolios and capstone projects are used to evaluate student achievement.

Proponents of deeper learning advocate for student learning outside of traditional constructs. Twenty-three states, for example, allow or require school districts to award credit toward graduation for service-learning projects.[3]

These and other active learning strategies can and often do overlap to form a deeper learning experience for students.

Student learning in the 21st century

Proponents of deeper learning argue that classrooms built for 19th and 20th century learners cannot adequately reach today's learners and prepare them for life and work in the 21st century. They maintain this is because:

- The student body today is unlike the student body of decades past.
  - **Diversity:** The student body is becoming increasingly diverse.[4] This changing composition calls for greater implementation of *personalized* learning experiences at school.

- **Connectivity:** The student body is increasingly connected through the use of technology and smart devices at home.[5] Online platforms allow students to more actively explore their interests, form opinions and become civically engaged.[6] Student exposure to interactive technologies and learning experiences at home beckons greater implementation of *interactive* learning experiences at school.
- **Disengagement:** Today, nearly half of students between 5th and 12th grade report being "not engaged" or "actively disengaged" from school.[7] Student disengagement calls for greater implementation of *meaningful* learning experiences at school.

- Students require a different combination of skills in order to meet the demands of 21st century employers and to effectively engage in civic life.
  - **Collaboration, critical thinking and creative problem-solving:** To be competitive in an increasingly complex global marketplace and to effectively engage in civic life, students must be equipped with collaboration, critical thinking and creative problem-solving skills.[9] Students should be able to sift through good and bad information, make reasoned decisions, develop informed opinions and solutions, and interact both in writing and in person with all persons, including those who hold views unlike their own.

Despite statewide efforts to improve college and career readiness, a 2015 survey found that over the past decade, college instructors and employers' perceptions of the preparedness of high school graduates for college-level work and employment have declined.[10]

Proponents of deeper learning argue that the fast-paced, innovation-driven economy calls for a greater supply of creative, independent thinkers capable of working alongside others to solve complex problems.

Instilling deeper learning means adopting strategies that excite today's student learners, re-engage them in the learning process and develop the skills needed to succeed in work and life.

Bring Your Own Device (BYOD)

Because many schools and districts face budget restraints that limit student access to technology, some are promoting the BYOD program and encouraging students to bring their smart devices to school. Participating teachers receive training on how to incorporate student devices into their lesson plans.[8]

A 2014 study by the American Institutes for Research found that students in schools with mature and at least moderately well-implemented approaches to deeper learning achieved higher scores on the OECD PISA-Based Test for Schools, reported more positive interpersonal and intrapersonal outcomes, were more likely to graduate on time and were more likely to enroll in four-year colleges and in selective institutions.[11]

Deeper learning in the states

Today, at least 500 schools throughout the country are a part of the Deeper Learning Network and are operating with deeper learning at their core.[12] In most cases, however, deeper learning is slowly altering, not dramatically changing, the way curricula are delivered to students and, on the whole, traditional schooling efforts remain largely intact. Changes to state policy can help ensure that the learning experience is more regularly accessible to more students.

The section that follows identifies key components states can consider when creating or modifying policies in order to better engage 21st century student learners. States may want to consider:

Including deeper learning competencies in academic standards and frameworks and providing a system of supports for adequate implementation.

Standards in most states already call for some level of deeper learning, including the Common Core State Standards and the Next Generation Science Standards. More than ever, students are expected to be able to evaluate arguments, solve non-routine problems and justify their conclusions in writing.[13] These standards require a system of supports to ensure adequate implementation.

Maine's "Learning Results" standards, for example, which were adopted in 2007 by the state legislature and revised in 2011 to include Maine college and career readiness standards for English language arts/literacy and mathematics, "emphasize more complex

content and concepts and the development of needed real-world skills like problem-solving, collaboration, critical thinking and communication."[14] Educator input was solicited when the standards were drafted and districts are given flexibility in determining how to help their students achieve the required deeper learning competencies. The Department of Education's "Center for Best Practice" and "Getting to Proficiency" webpages provide support, best practices examples and standards-aligned instructional materials for districts seeking to create "learner-centered" systems.[15] The state also supports student-directed inquiry by offering laptops to every public middle and high school student in the state.[16]

Aligning state assessments and accountability systems with deeper learning strategies and intended outcomes.

Although many Common Core-aligned assessments and newly created state tests intend to do a better job of measuring students' abilities to think critically, they cannot measure students' abilities to collaborate, plan and create. Abilities that cannot be assessed using standardized summative assessments can be assessed using locally driven assessments. These assessments may include opportunities for extended research, analysis, writing and project production. Capstone projects and portfolios can also be used to assess students' mastery of content areas.

New Hampshire's assessment system, for example, is being recreated with deeper learning in mind. The U.S. Department of Education recently approved the state's pilot of "Performance Assessment for Competency Education" (PACE). Students in four pilot districts will only be required to take Smarter Balanced Assessments in three grades instead of seven. In the years in which these assessments are not given, districts "will administer carefully designed common and local 'performance assessments' developed by the districts themselves and validated at the state level."[17] Assessments will include research papers, student projects, real-world simulations and other multi-part tasks.

Including deeper learning in teacher training and staff development.

If changes to instruction are expected as a result of changes to standards and assessments, teacher training and development is required. New teachers should enter the classroom knowing how to apply alternative teaching methods that promote deeper learning, and experienced teachers should be provided with the tools and training they need to successfully implement deeper learning teaching strategies.

For example, **Delaware** has created a system of supports to encourage teacher adoption of deeper learning strategies. Teachers are coached on how to use student data to personalize learning, are given 90 minutes of collaborative planning time every week, receive observation rubrics that emphasize deeper learning and are evaluated in part according to their ability to create more engaging classroom environments.[18]

Allowing for and funding district- and school-inspired innovation.

Rigid and outdated funding systems can stifle district and school-inspired innovation. Most state education funding formulas fail to account for new methods of curricula delivery. Seat-time-based allocations, for instance, do not support competency-based models of education; strict budgetary guidelines and categorical allocations limit district flexibility and innovation; and beginning-of-year student counts fail to promote student attendance, persistence and achievement. Currently, school funding in most states is targeted toward districts and recently is targeted toward schools in some states. States can create an "innovation friendly" funding system if they allow for more portable methods of funding tied to students instead of institutions, and if they look away from beginning-of-year student count mechanisms to other innovative ways of measuring student activity.[19]

For example, **California** recently adopted a revised funding system that helps encourage innovation. In 2013, the state passed a new Local Control Funding Formula to provide more resources to state districts, especially those with higher concentrations of disadvantaged students, and grant districts with more autonomy in deciding how to spend the funds. Schools and school districts are assigned with the responsibility of consulting with parents and other community stakeholders on how best to spend the money.[20] Removing rigid fiscal requirements and encouraging community feedback can help districts create locally grown innovative approaches to learning.

Final thought

The student body today looks much unlike that of decades past, and teachers are expected to equip them for success in a workplace and world also unlike that of decades past. Today's students enter the classroom having been exposed to rich and diverse learning experiences enhanced by technological development and, in too many cases, leave feeling disinterested and disengaged. Proponents of deeper learning argue that schools should adapt to the times, and policymakers should equip them with the tools to do so. To address the needs of 21st century learners, deeper learning advocates recommend that states pass a comprehensive set of deeper learning policies. No single policy on its own is likely to produce the changes these advocates seek.

A number of national organizations, researchers and businesses are working hard to advance the principles of deeper learning. A general list of partner resources and participating school networks can be accessed below. A more comprehensive list can be accessed here.

ADDITIONAL RESOURCES

Deeper learning partner groups

William and Flora Hewlett Foundation, www.hewlett.org/programs/education/deeper-learning

Alliance for Excellent Education, deeperlearning4all.org

CCSSO Innovation Lab Network, www.ccsso.org/What_We_Do/Innovation_Lab_Network.html

Getting Smart, gettingsmart.com/categories/deeper-learning-blog-series

Students at the Center, A Jobs for the Future Project, www.studentsatthecenter.org

KnowledgeWorks, knowledgeworks.org

P21 Partnership for 21st Century Learning, www.p21.org/our-work/p21-framework

Stanford Center for Opportunity Policy in Education, edpolicy.stanford.edu

Deeper learning in practice

Envision Education, www.envisionschools.org

Expeditionary Learning, elschools.org

Most Likely to Succeed, mltsfilm.org

New Tech Network, www.newtechnetwork.org

New Visions for Public Schools, www.newvisions.org

P21 Exemplar Schools, www.p21.org/exemplar-program-case-studies/list-of-exemplar-schools

The Future Project, www.thefutureproject.org

Deeper learning for the educator

Buck Institute for Education, bie.org

EdLeader21, www.edleader21.com

Teaching Channel, www.teachingchannel.org/deeper-learning-video-series

You for Youth, www.y4y.ed.gov/teach/pbl

ENDNOTES

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