



Going Deeper

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What today's teens need most from schools is learning that fosters engagement and connection. That may mean changing everything.

As 2020 approaches, it is important for educators to look at the broader landscape of the world and acknowledge that the forces that are wracking society have made their way into schools. And today's schools, which continue to operate in the early 20th century mode in which they were created, are not doing what they can to counter these trends.

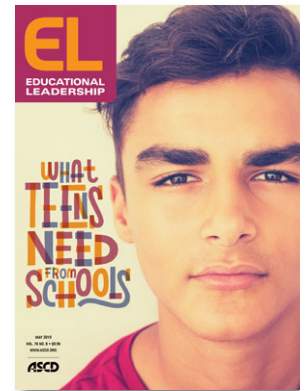
Consider: How engaged are teenagers in school? Lee Jenkins (2013) asked teachers of various grade levels what percentage of their students were engaged in learning. The trend shows a dramatic downward slope, from 95 percent in the early grades to a low of 37 percent in grade 9. Asking students directly, a 2015 Gallup poll showed 75 percent engagement at grade 5, and then a steep decline over time to 32 percent of 10th grade students reporting being engaged in schooling (Gallup, 2016). Students also seem to feel less connected to school now than in past years—and not just in the United States. OECD's PISA results from 78 countries show a steady decline in students' sense of belonging and connectedness at school from 2003 to 2015 (OECD, 2017).

These statistics should give all of us real pause. We have created schools, at large taxpayer expense, supposedly to help students learn and thrive. But both students and teachers are telling us that the longer students are in these institutions, the less purpose they see in them.

At the same time, stress and depression among young people are on the rise. In the Toronto District School Board's most recent student survey, for example, the index of "emotional well-being" declined steadily from grade 7 to grade 12 (Toronto District School Board, 2018). And the numbers are even lower than in previous years. Five years earlier (2011–2012), the decline in well-being from grades 7 to 12 was from 87 percent to 69 percent. In the most recent survey (covering 2016–2017), the decline was from 80 percent to 60 percent. In short, an increasing percentage of students show lower and lower well-being scores—trends that are evident across North America and beyond.

Schools are quite permeable institutions, and thus shaped heavily by changing external forces. Think of all the worrying trends now taking place in the world. The gap between the rich and the poorer is enormous and growing. Climate change is becoming palpably scarier on a daily basis. Globally, through technology, people are closer to each other *superficially* on a grand scale, but inwardly and socially more segmented. Jobs and the future of the labor market are increasingly unpredictable. Student debt is skyrocketing. Advanced technologies such as artificial intelligence are increasingly being interwoven into our lives with unknown, but certainly anxiety-producing, consequences. All of these forces generate more pervasive stress and anxiety, and the level of trust in society declines.

Schools—and teens—absorb these things.



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A New Moral Imperative

Yet what are we doing to help schools counter or address these trends—and thus help make schools feel helpful and relevant to teens? We are just emerging from a long period in which the central emphasis of education policy, at least in the United States, was on increasing testing and accountability—a strategy that only heightened disconnection and anxiety. The effects of this emphasis still linger.

Meanwhile, much of what is emerging as "innovative" in education is disconnected from what students need to thrive and to confront societal challenges. Filling in the blanks on a laptop is no more cognitively challenging than doing so on paper. "Maker" activities devoid of authentic integration across subjects and real-world application remain isolated activities. Stand alone project-based learning activities may only be exceptions in a day mired in rote learning. Exposing students to emerging technologies may intrigue them, but it won't necessarily develop the skill sets that will carry them confidently into the future. Students can be whizzes at manipulating technology, but not necessarily good at learning something worthwhile.

What students need instead is what we call *deep learning*—learning that helps them make connections to the world, to think critically, work collaboratively, empathize with others, and, most of all, be ready to confront the huge challenges that the world is leaving their generation. To support learning like this, we need fundamental changes to the grammar of schooling and to how and what students learn, as well as a significant recasting and broadening of the purpose of what students do in schools.

We need, in essence, a new moral imperative for schools—one that puts learning, purpose, and well-being all on the same high pedestal.

Searching for Deeper Learning

Jal Mehta and Sarah Fine (2019) recently completed an in-depth study titled *In Search of Deeper Learning*. Despite visiting schools that were identified as engaging in such learning, they found little evidence of it in practice. Only in a second round of visits did they find elements of deep learning hidden in pockets of school life. Some instances were found in what the authors called "learning at the margins" (such as in theater, sports, and other after-school activities); other examples were found in the classrooms of a very few teachers.

Mehta and Fine concluded that the richest and most consequential learning happens when learners have opportunities to develop knowledge and skills (*mastery*); when they come to see themselves as vitally connected to what they are learning and doing (*identity*); and when they have opportunities to enact their learning by producing or contributing something new and unique (*creativity*).

They also found distinct differences between the practices of teachers who foster this kind of learning and those of more conventional teachers. Figure 1 shows the breakdown.

Figure 1. Differences in Teaching Practice

Traditional Teachers	Deep Learning Teachers
Knowledge as certain	Knowledge as uncertain
Cover the material	Do the work of the field or domain
Student as receiver of knowledge	Student as creator of knowledge

Source: Mehta & Fine (2019, p. 351)

In our work at New Pedagogies for Deep Learning, a global school consulting organization, we have drawn similar conclusions. Over the last five years, we have engaged with hundreds of schools in eight countries. We work alongside educators to build knowledge and practices that develop deep learning and foster whole-systems change. Together, we are working to revitalize the nature of the schooling so that learners can discover and build on their strengths, create new knowledge using real-life problem solving, and enable each other to fulfill their talents, purpose, and passions.

Creating Connections

We've discovered that young people are looking for ways to contribute to and shape the world around them and to gain a sense of social connectedness. Indeed, if there is one concept that we would add to Mehta and Fine's triumvirate, it would be *connectedness*. Connectedness makes it very clear that deep learning is not just an individual pursuit, but also fundamentally a group and human phenomenon. What is most encouraging is that such learning is good for and attractive to all students, but especially good for students who are disconnected from learning and, possibly, from life. Thus, deep learning is one of the most powerful ways we know to effectively address inequity.

In our work, we aim to provide teachers and students clarity around desired learning outcomes. The framework we use is based on our Global Deep Learning Competencies—the "6Cs" of character, citizenship, collaboration, communication, creativity, and critical thinking—which enable schools to envision what it is to be a deep learner. In addition, our core learning elements—new pedagogical practices, learning partnerships, enhanced learning environments, and digital skills development—give teachers the direction, through rubrics and protocols, to design more meaningful learning experiences for students.

But deep learning is about more than saving students; it's about saving society. The learning paradigm focuses on "engaging and saving the world." Young people are desperate to be involved in something worthwhile. They readily and passionately learn about the world in order to improve it and create a better future (Fullan, Quinn, & McEachen, 2018; Quinn et al., 2019).

Together with partner schools and districts, we have created hundreds of examples of deep learning. The Avon Maitland District School Board in Western Ontario, for instance, has been implementing deep learning across its 40 schools (30 elementary and 10 secondary). The 10 secondary schools began with specially designed student-teacher symposia in which the students and teachers explored their learning needs. In one part, students were asked about their education and how they liked to learn. In another session, teachers were asked the same question. The parallels were evident: Both groups wanted agency in their own learning in order to prepare them for a rapidly changing future, and they sought to work and learn from peers and passionate experts. As a result, they developed a systemwide plan for transforming education across the district that emphasized choice, real-world projects, and partnerships with outside professionals.

The effect on student learning and engagement can be gathered from this example shared with us by April Smith, the district's deep learning coordinator:

Gabe is a high school student who usually enrolled in nonacademic classes geared for the workplace stream. At the urging of one of his teachers, he recently enrolled in an academic Introductory Kinesiology course because he loves sports. He didn't think he would do well but stayed with it because he loved basketball and had a strong connection with the teacher who taught the course. Through her participation with the deep learning inquiry pedagogy, this teacher had redesigned many of the learning tasks to allow students more choice on what they learned and how they demonstrated their understanding of the curriculum expectations.

As an example of a deep learning task, the students were to explore the nutrition needs of an elite sports team of their choosing and create a nutrition supplement from all natural ingredients that would help athletes prepare for and/or recover from intense competition. During a class "marketing forum," students had to promote their nutrition products to industry experts who they had invited to get feedback. Community members such as a former professional hockey player, cross-fit gym owner, and a runner who recently completed the Boston Marathon sampled their products and asked questions about their learning. Gabe surprised himself with his commitment to this course. He said he was able to learn deeply about the topic because he was learning something that he was passionate about. He said he felt more engaged and confident and was able to demonstrate the depth of his learning. Gabe explained that he was proud of his work, and now felt that he could learn alongside peers that he had not before.

Other examples of this kind of connected, real-world learning abound.

On the other side of the province, the Ottawa Catholic School Board has also implemented deep learning in all 83 of its schools. At St. Matthew High School, students shared how exercising their agency as learners has made a difference for them. "The freedom given to us lets us develop leadership," says one student. "It lightens the atmosphere instead of being stuck in your books," says another (Ottawa Catholic School Board, 2018b).

At Immaculata School, just a few miles away, a teacher describes the impact of her deep learning "Global Solutions" project in which students worked in small groups across schools to research real-life problems and propose solutions in pitches before a panel of experts. "Students told me this was the most memorable thing about grade 12 because it was real," the teacher says. "The empathy and compassion they built with other people in the world. That's what they're going to take with them." One of her students elaborates: "Understanding what we can do to implement change in our community. That's something that writing a test won't solve. We're learning how to do these things first hand" (Ottawa Catholic School Board, 2018a).

Our simple definition of deep learning is, "quality learning that sticks." When does learning stick? When it connects to purpose and passion, when it involves a team working together to do something worthwhile, when there is an emotional connection to the endeavor, and when it makes a difference to one's local community or beyond.

The Way Forward

As our examples show, the kinds of changes that support deep learning are possible in schools and patently desirable once experienced. They are not happening on scale because they go against the grain of traditional schooling. The most important change required in education is cultural. Those individuals running systems will need to move away from notions of command, control, and ordered change from above, and instead work toward creating emergent systems that support teachers and students in owning their learning and taking it in whatever direction it goes. Similarly, those at the school and community level will need to create pockets of deep learning and push laterally with their peers and vertically within their systems.

In this vision, districts, like modern learning organizations of all types, would be more horizontal than vertical, focusing less on pre-specifying what everyone does than on building platforms that connect and support genuine learning across the system. Districts must also create flexibility in all the elements of the current structures of schooling. They might permit multi-age groupings, allow for courses that move across subjects, give credit for student opportunities outside of school, lengthen the "blocks" of classes, and give teachers more time to collaborate. Such shifts would also create opportunities for teachers to engage in similar cycles of purpose and passion as their students, which would lessen burnout and increase the attractiveness of the profession.

This level of change will involve defining and committing to a new moral imperative that displaces rote academic learning as the sole priority and replaces it with "learning and connectedness" as an integrated, synergistic capacity for all students. This can help teenage students find greater meaning and purpose in school—and greater connection to the world.

The question before us is which path we will choose. On the one side lies continuing to tinker with our existing models and leaving students increasingly disengaged, anxious, and radically unprepared for a world that confronts them. On the other

lies transforming schools to meet the needs of children—and the criteria of much of what is now known about effective learning. This transformation would also lessen the rates of depression and anxiety, improve academics in the best sense of that concept, and, perhaps most important, produce the kinds of citizens who are equipped to take on the challenges of the modern world.

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Guiding Questions

- Do you agree with the authors that high schools aren't doing enough to help students engage with meaningful challenges? If so, why do you think education has developed in this way?
- Given the authors' descriptions, what might deeper learning look like in your school or classroom?
- According to the authors, "The most important change required in education is cultural." What does this mean to you?

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