Here is a story about a student that illuminates several important points about learners and learning. In Leaving to Learn: How Out-of-School Learning Increases Student Engagement and Reduces Dropout Rates, we used the story to show the power of out-of-school learning and demonstrate the variety of ways students who are engaged through their interests can develop highly valued real-world competencies.

From the time he was a young boy, Huber was interested in maps, places, and his community. While at the Big Picture Learning School in Oakland, he travelled to Chile and Thailand and observed the changes taking place in those countries. On his return, Huber decided that he wanted to bring about some changes in his community. Through his internship in a mayoral election campaign, he noticed a relationship between voting...
Dialing, Authenticating, Connecting: Thinking Differently About Student Engagement

and Deeply

Deeply About Student Engagement

by Elliot Washor & Charles Mojkowski
While we applaud this renewed focus on engagement—it has been at the core of our Big Picture Learning design for the last twenty years—we see the challenge as being both broader and deeper and, therefore, propose programs and strategies that build on and enhance current strategies to better achieve our common goal.

**HOW WE SEE THE CHALLENGE DIFFERENTLY**

Recognizing the past and current contributions of theory and research to our understanding of engagement, we wish to highlight a few dimensions of the concept that appear to be missing from policy and practice.

First, we need to be clear about the goal, which we see as creating lifelong learners who are eager to learn and strive beyond the minimums required. They are self-starters. They engage in learning even when their teachers “aren’t looking.”

Second, we need to be clear on what we mean by engagement. We know that students are engaged when they want to learn something. Seymour Sarason, a longtime professor of psychology at Yale University who deeply influenced our work, called this “productive learning,” by which he meant a “learning process…that engenders and reinforces wanting to learn more.”

Here we use Huber’s story—not at all unique in describing how students learn in our Big Picture Learning schools—to make a few points about student engagement (this year’s *déjà vu* in the education community), particularly authentic and sustained student engagement in deep and productive learning. Numerous research studies have documented the high levels of student disengagement from what the schools offer students—disengagement that is at high levels even among high-performing students. And let’s not even talk about the chronically high dropout rate.

Proving perhaps that knowledge in education is more cyclical than cumulative, researchers, policymakers, and educators are discovering yet again previous research and literature on student engagement, blending in a bit of new research and, somewhat narrowly in our judgment, crafting strategies for increasing student motivation to engage more deeply in the course of study they have designed to address the Common Core State Standards and related learning standards.

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Third, we believe it is important to see the challenges more systematically. Disengagement results not only from a chasm between learners and the content of the curriculum, but from the total student experience, including both emotional and cognitive engagement. Our own
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experience is that schools are actually designed for disengagement, with, for example, their impersonal organization, rigid curriculums, and inflexible schedules. Adding a few strategies to that disengaging structure and culture is not likely to give us the results we want. Strategies for increasing engagement must be consistent with the ecology—the entire system. This is not, therefore, about uncaring or incompetent teachers. It’s about a system that produces boredom and disengagement from productive learning.

Fourth, we believe it is essential to see the problem from the students’ point of view. How do they experience school? Why are they not paying attention to what their schools have to offer? What is the learning experience they expect their schools to provide?

We view recent research conducted by Duckworth, Dweck, and others on student motivation and engagement as insightful and illuminating, but view most school reformers’ proposed interventions around this research as overly narrow in that they deal with symptoms and not with the underlying features and components of schools—those cultural and organizational features and components actually baked into the design of schools. What many reformers miss is that the structures of schools and schooling actually produce disengagement and mitigate the effectiveness of their proposed strategies.

Lacking this system perspective and unwilling to address structural and cultural inadequacies, many experts and practitioners propose strategies that constitute little more that trying to convince learners that what the school has to offer is good for them, both presently and in the future. This cajoling produces, at best, a superficial and temporary commitment to engage. These strategies focus on convincing students to pay attention to the school’s agenda rather than the students’ interests. Research and experience indicate that extrinsic motivations are unlikely to produce deep and sustained engagement.

In short, we believe that the way most schools go about increasing engagement is actually counterproductive, as these strategies teach students the wrong things about learning. Schools are addicted to the kinds of extrinsic rewards and threats that research and practice have consistently discredited. Teachers engaging students around course content and students getting more persistent to strive through those courses only look at the problem from the perspective of the school and not the student. Pursuing this “external motivations” strategy for engagement is not likely to succeed. The harder schools push, the harder students will push back or move away.

Notice in Huber’s story that his learning did not begin with his academics, but rather with his own interests. This simple difference changes the nature of the engagement goal from one of trying to convince Huber that he should engage in what school has to offer to one in which the school shows him how the academics can contribute to his pursuit of his own personal and career interests. In such a high-engagement context, the teacher can push and support Huber to go deep in his learning.

Our experience in our Big Picture Learning schools has taught us that starting with a student’s interest was important—yet this obvious truth is often overlooked in the research and in practice. The key question is: How do we design the student learning experience so that it leads to sustained engagement in deep and productive learning? What strategies and tactics will we use to motivate/predispose students to own and go deep in their learning?
DESIGNING STRATEGIES FOR ENGAGEMENT DIFFERENTLY

For nearly 20 years, Big Picture Learning schools have been using strategies and developing programs to engage students in deep and productive learning. We call these features and components the “Expectations” because they define the student experience that students expect of their schools. Our view is that efforts to improve, reform, or redesign schools will fail without attention to these questions regarding their Expectations:

- **RELATIONSHIPS**
  - Do my teachers and others who might serve as my teachers know about me and my interests and talents?
  - Do my teachers help me form relationships with adults and peers who might serve as models, mentors, and coaches concerning my career interests?
  - Do my teachers help me build relationships in the school community and in out-of-school communities?

- **RELEVANCE**
  - Do I find what the school is teaching relevant to my interests, including my career interests?
  - Do my teachers help me understand how my learning and work contribute to my community and to the world?

- **CHOICE**
  - Do I have real choices about what, when, and how I will learn and demonstrate my competence?
  - Do my teachers help me make good choices about my learning and work?

- **CHALLENGE**
  - Do I feel appropriately challenged in my learning and work?
  - Am I addressing real-world, high, and meaningful standards of excellence?

- **AUTHENTICITY**
  - Is the learning and work I do regarded as significant outside school by my communities of practice and by experts, family members, and employers?
  - Does the community recognize the value of my work?

- **APPLICATION**
  - Do I have opportunities to apply what I am learning in real-world settings and contexts?
  - Do I have opportunities to contribute to solving the problems my community and the world are facing?

- **PLAY**
  - Do I have opportunities to explore—and to make mistakes and learn from them—without being branded as a failure?
  - Do my teachers coach me in tinkering, experimenting, and speculating?

- **PRACTICE**
  - Do I have opportunities to engage in deep and sustained practice of the skills I need to learn?
  - Do my teachers guide me in practicing correctly?

- **TIME**
  - Do I have sufficient time to learn at my own pace?
  - Am I allocating sufficient time for my learning—to go deep as well as broad?

- **TIMING**
  - Can I pursue my learning out of the standard sequence?
  - Do my teachers help me determine what is the right time for pursuing a project or taking a course?
Big Picture Learning schools start with a truly personalized learning experience for each student that addresses the student’s interests, including career interests, which may be just emerging or in some cases are firmly established. We help students identify their interests, and then wrap what is in essence a career academy around each and every student. We allow our students real choices that draw them into the school environment and engage them in deeper learning. We have developed a way to do school that successfully and deeply engages many more students by increasing their agency (i.e., ability to act for him or herself) in working with their teachers and community-based adult mentors, who serve as their fiduciaries (doing what is best for each student). Our attendance, graduation, and college acceptance data attest to the success of our approach. President Obama has praised our schools, which allow students to learn outside of school and earn academic and graduation credits for their work.

We see authentic and sustained engagement as emanating from a highly personalized program of studies built around each student’s interests that many times lead and connect to careers. We have been doing that for 18 years and are heartened when research like Bloom’s and Sosniak’s supports our practice. Both researchers examined how children develop their talents and concluded that it takes a deep and sustained interest on the part of the child, long-term successful development of those interests, and many committed adults working for the achievement of just one child.
Their conclusions are at the core of the Big Picture Learning design.

When it comes to deep engagement, it is assumed that students need to be cajoled by teachers into having an internal conversation to try harder or be grittier in order to succeed in school. Or, that it is up to the teacher to make the course material more interesting. We have no quarrels with student grit or persistence in their courses or for teachers making material more relevant. What we see in the system, however, is a lack of trust in every student’s agency.

We understand from our practice that once student engagement is in play, grit increases and is sustained. Then, persistence and deep and productive learning follow. We understand that students in the right environment and with the right teacher support will be articulate about their interests, identify what they need to learn, and figure out how to get it. They will be quite open to bringing the academics to their learning and work.

We see the lack of student agency in schools as a school culture and school program issue. Courses are assigned and, if in a college track (isn’t that all students?), there is little choice in what students take and how they learn it. Nor is there much choice in the way some students are prepared for a technical college. Competency-based systems, as promising as they are, will do little to change the nature of the learning experience. The same can be said for promising project-based learning approaches that follow a scope and sequence laid out as a mandated course structure and are built solely at the level of a group of students.

Through our work with the network of Big Picture Learning schools and with other schools in the United States and abroad, we have developed a wealth of instructional strategies and materials for deliberately paying attention to each student’s interests. For example, all 9th grade students complete a “Who am I?” module that jump starts the careful attention to what really turns them on—what they are interested in learning about and how they would like to learn it. This and related modules build student agency and responsibility, while informing teachers of possible ways to capitalize on these sources of intrinsic motivation and bring academics to those interests to broaden and deepen learning. The result is that students genuinely own their learning. They embrace important standards, such as the Common Core, that contribute to advancing their career development and interests.

Our strategy for achieving authentic and sustained student engagement in deep learning is guided by paying serious attention to our students’ needs—indeed, to the needs that are part of being human. One way of thinking about this is to recall the old telephone dial-up systems and protocols for getting online. Recall the three-step process of dialing, authenticating, and connecting (DAC) that we endured as we waited to get online. After dialing in, you listened for the high-static buzz that signaled the host site was authenticating your computer. Then you waited to receive a message that you were connected.

This brief sequence of dialing, authenticating, and connecting also describes a way to look at what happens when students go through a process of engaging the world in deep learning and connecting back to school. We see dialing as an apt metaphor for students’ reaching out to others and identifying what they want to learn, authenticating as a way of getting validated for who they are and what they know and can do, and connecting as establishing two-way communication, much like what E. M. Forster was thinking when he wrote in his novel, *Howards End*, “Only connect!” This is the human quest—reaching out with who you are, obtaining validation, and connecting at all levels.

Big Picture Learning schools help all students successfully navigate the dialing-authenticating-connecting continuum over and over in all aspects of their learning program first inside the school with their advisers and ultimately with lots of adults who serve as mentors, coaches, and teachers out in the community who are doing the work the students would like to do. In this scenario, the student is building the social capital between the school and the community in the present and into the future. It is the student who is in control and is in the center of their learning. For us, this is social networking at its finest. It is social networking that builds social capital.

The Big Picture strategy works with every student, because that is where we start—with each student. We see learners not as objects of policy, but as individuals with interests and aspirations that must be
attended to if they are to regard us as their teachers.

Our Big Picture Learning schools have developed a system that deeply engages students by having them dial in through their interests to adults who share similar interests, using projects of real consequence that are authenticated by the school as academically rigorous, and finally deeply connecting them to what they love to do in communities that share a similar affinity for the work. This handspring has students go broad academically and meta-cognitively as they go deep into academic content. We have thousands of examples where this protocol works. You can view a sampling of some of these as videos on the Teaching Channel, Edutopia, Big Picture Learning, and Leaving To Learn websites.

Given that DAC is a digital protocol, you may ask what role technology plays? We are not concerned here about online learning systems for skills development, although our schools strive to use these systems appropriately. Instead, our focus is on how students learn to use technology tools as expert practitioners in their areas of interest as they are used in the real world. How, for example, do chefs, architects, farmers, and expert practitioners in every profession use technology to be more effective and efficient and to achieve craftsmanship, mastery, and artistry in their performance? Big Picture Learning schools require students to seek out answers to these questions and to use those answers to guide their own applications of technology. Hence, students dial into appropriate technologies, authenticated by their teachers and mentors in a community that uses these tools in meaningful ways.

Dialing, authenticating, and connecting allows for all types of measures and assessments to be used. DAC is not driven by the accumulation of points or credits without meaning. We all know when we have done something well or not and whether we understand something. When the time is right, we also seek out people and places we connect to who can authenticate our understandings and let us know how to get better. It is in these ways that students have the academic mindsets where they collaborate, communicate, think critically, and create going deeper and broader with the acquisition of academic skills and information.

We are heartened at the renewed interest in motivation and engagement. We see such movement as an endorsement of our work over the past 20 years. We are incorporating the insights from the most recent research into our practice, and we continue to share that practice with districts and schools with which we work throughout the country and around the world. Schools need to develop and support systems where schools follow and trust young people in a system that knows what they are doing, why they are doing it, and how well they are doing it so they can become productive learners and citizens.

Our work has influenced the development of supportive policies such as requiring personalized learning plans for each student and requiring multiple forms of assessment. Such policies have in turn made our work easier in schools. Other policies, much less common, would also advance our practice. These include broadening the definition of what constitutes success, supporting alternative learning pathways open to all students, recognizing the value and validity of assessments that are non-verbal and non-written, and providing credit for learning accomplished outside of school, particularly learning accomplished through non-traditional means. Such policies would contribute significantly to engaging all students in deep and productive learning.

Eliot Washor is co-founder and co-director of Big Picture Learning and Charles Mojkowski is an independent consultant, author, and senior associate at Big Picture Learning.


2For more on Angela Lee Duckworth and her definition of “grit” as a learning trait, see http://www.ted.com/talks/angela_lee_duckworth_the_key_to_success_grit.html.

3See Professor Carol Dweck, “Teaching a Growth Mindset” at http://www.youtube.com/watch?v=kXihbrCmsyQ.

4Recall Csikszentmihalyi and Schneider’s research showing that even students in AP courses typically did not exhibit high levels of deep engagement in what the teacher was addressing: M. Csikszentmihalyi and B. Schneider, Becoming Adult: How Teenagers Prepare for the World of Work (New York: Basic Books, 2000).


8See Angela Lee Duckworth.