Learning in the 21st Century: 2010 Trends Update
Each year, Project Tomorrow®, a national education nonprofit organization, facilitates the Speak Up National Research Project and, as part of this initiative, tracks the growing student demand for online learning and how schools are meeting that demand. This 2010 Trends Update, published in collaboration with Blackboard Inc., examines the Speak Up 2009 survey data collected online from K-12 students, parents and educators in the fall of 2009.

As outlined in the Speak Up 2009 national report, “Creating our Future: Students Speak Up about their Vision for 21st Century Learning” (Project Tomorrow, 2010) students reveal a new and compelling vision for learning that is highly-personalized, un-tethered, socially-based and digitally rich. Students clearly see, based on their own experiences, the blueprint for incorporating emerging technologies in their learning, in and out of the classroom.

The Speak Up 2009 data reflect students’ eagerness and desire to personalize their learning experiences using technology. Online classes provide an effective strategy for creating a more relevant, engaging, and productive learning experience for students. Students who participate in online learning environments report they are more motivated to learn and feel more connected to their school. Correspondingly, educators and parents are increasingly recognizing the value of online learning, for themselves and students.

This 2010 Trends Update, the latest installment in a series of updates to the landmark report “Learning in the 21st Century: A National Report of Online Learning” (Project Tomorrow and Blackboard Inc., 2007) highlights how students are embracing technology to explore and experience learning at a higher level. Key trends highlighted in the report include:

- The number of high school students who are taking online classes for school credit has almost doubled since Speak Up 2008. Students are seeking out online classes to increase their productivity as learners and also, to customize the learning process to meet their own needs.

- While the number of teachers who have taught online classes has tripled since Speak Up 2008, we still have more work to do to help teachers learn how to effectively leverage online learning to drive student achievement and increase their own productivity. Only 10 percent of teachers say they are currently tapping into online classes to enhance student achievement.

- Even as aspiring teachers are gaining experience with online classes (52 percent) and online professional learning communities (38 percent) as part of their teacher preparation programs, only 4 percent report that they are learning how to teach online classes in their instructional methods courses.

- Administrators are beginning to shift their focus on online learning from professional development for teachers to online classes for students. Sixty-seven percent more administrators selected students as their primary audience in Speak Up 2009 compared to the Speak Up 2008 findings.

- Thirty-three percent of parents report they have taken an online class for their own professional needs or personal interests. Parents’ personal experiences with online learning are affecting how their children view the benefits of online learning as well.

Who is learning online? An update from students, parents and administrators

The recently released U.S. Department of Education’s National Technology Plan emphasizes virtual and online learning as a viable path for using technology to improve learning (March 2010). While Speak Up has documented increasing student interest in online learning each year, the emergence of significant administrator and parent interest is new to the discussion. As administrators and parents become more familiar with the benefits of online learning, they are appreciating the advantages that this kind of learning experience can offer their students and children. This is especially relevant today as schools, districts and communities are struggling with how to increase the relevancy of education at the same time they are facing financial challenges. The views and ideas of students are becoming more important to the discussion around education reform and students’ experiences and aspirations for online learning are at the heart of these discussions.

The Speak Up 2009 national data findings reveals an increase in the number of middle and high school students taking an online class. Twenty-seven percent of high school students and 21 percent of middle school students report taking an online class for either school or personal reasons.

The increase in student access to online classes from 2008 to 2009 (Table 1) is most significant among high school students with almost double the number of students who report taking online classes.

Table 1: Growth in student participation in online classes

<table>
<thead>
<tr>
<th>Grade</th>
<th>2008</th>
<th>2009</th>
<th>2009-2008 change</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th-8th grade</td>
<td>13%</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>9th-12th grade</td>
<td>8%</td>
<td>13%</td>
<td>5%</td>
</tr>
</tbody>
</table>

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Additionally, 38 percent of high school students and 33 percent of middle school students who have not previously taken an online class say they would also be interested in doing so.

The aspirations that students have for online classes to be part of their everyday school experience are also significant. When asked to design their ultimate school over one-half of high school students requested online classes as a feature of their desired school. Online classes are not just for high school students however; even 3rd-5th grade students (46 percent) and 6th-8th grade students (48 percent) envision online classes in their ultimate school. Middle school students (in grades 6th-8th) represent the largest gains in demand for online classes in their ultimate school representing a three-fold increase from Speak Up 2008.
The Speak Up 2009 data reveal that student demand for online classes is, in part, driven by the experiences of the adults in their life. Over one-half of middle school students and about two-thirds of high school students report they know someone who has taken an online class. And one-third of parents of K-12 students say that they have taken an online class for work or personal interests. High school students who have a parent who has taken an online class are twice as likely to take an online class or, at a minimum, research taking an online class. They are twice as likely to take an online class outside of school for their own interests if their mother or sibling has taken an online class and three times more likely if their father has taken an online class. This familiarity with online learning within the family or friend circle appears to be significant for the student’s personal interest. Students who do not know anyone who has taken an online class are less interested in taking one.

Administrators continue to report that their primary focus for online learning is teachers (55 percent), followed by students (43 percent) and then, administrators (32 percent). However, there is substantial growth since 2008 in the number of administrators (67 percent) who report they are providing online classes for students. Online classes are being offered to students in traditional school settings (26 percent), to meet the needs of at-risk students (21 percent) and to students in continuation schools (9 percent).

District administrators indicate that they are facilitating online learning for students through a variety of instructional models ranging from a blended class format that incorporates a mix of online and face-to-face participation (17 percent), a 100% online class facilitated by a teacher (20 percent), or through self-study online classes (5%). Students’ experiences with online learning, however, reflect a different reality with more students saying that they have taken an online class led by a teacher or a self-study class than the blended model seemingly preferred by some district administrators. (Figure 1).

Students speak up about the value proposition for online learning

Technology is empowering students to take responsibility for their own learning and giving them opportunities to create more personalized learning experiences by leveraging an ever-expanding range of learning resources, tools, applications, outside experts, and each other. These “free-agent learners” (Project Tomorrow, 2008), are not waiting for their schools to catch up with them. They are, in fact, adopting and adapting these emerging technologies such as online learning to increase their own productivity as a learner and to personalize their learning process.

Online learning expands students’ opportunities.

Learning is not tethered to the traditional school or classroom in students’ vision for 21st century education. In this student view, geography, time, resources, teacher quality, community access or other constraints no longer limit their learning. Expanding beyond the boundaries of their classrooms and communities, students see the world as their classroom and view technological devices and online learning, in particular, as essential elements to creating a truly 21st century learning environment.

Students see multiple advantages to participating in online learning both in terms of increasing their productivity as a learner, and satisfying their desire for a more personalized learning environment. From a productivity standpoint, high school students across the board highly value the ability to earn college credit through an online class, to take a class that better fits their schedule or to have access to courses not offered at their school. However, the Speak Up 2009 data reveal a new disconnect in the online learning value proposition for students. These perceived productivity benefits are higher for students who envision online learning as part of their ultimate school than for students with first
hand experiences. (Figure 2) So, while 63 percent of students who identify online learning as a “must have” for their ultimate school feel that earning college credit is the most significant benefit of online learning, only 48 percent of students who have actually taken an online class feel the same way. This reality check may indicate that the potential of online learning to meet the expectations of students is not yet being fully realized, and thus presents a new opportunity for schools and districts to incorporate the views of students in the planning for online learning implementation.

Students personalize learning through online classes. Students also value online learning because it gives them the ability to gain more control over their learning experiences. As reported by previous Speak Up reports, today’s students are increasingly taking their educational destiny into their own hands by seeking out learning opportunities outside of school and leveraging technology tools and applications to customize the learning process to meet their specific needs. We hear this loud and clear through the value statements about online learning in particular. Students tell us that online learning provides an environment where they can get extra help in a subject that is hard for them, review classroom material as many times as needed, or feel more comfortable asking their teachers questions. They believe that online learning also facilitates a more collaborative relationship with their teacher and their classmates. Most importantly, both middle and high school students say that being able to work at their own pace and be in control of the learning process are the greatest advantages to online learning, even outpacing the productivity benefits.

As noted with the productivity value proposition, we again see a reality disconnect amongst students about the benefits. (Figure 3) While students who have taken an online class highly value the ability to enhance their productivity and personalize their learning, the online learning experiences that they are participating in do not fully meet the initial expectations they envision in their ultimate school. This decreased intensity in the perceived benefits of online learning may be the result of the subjects being taught in the online class, the delivery mechanism or perhaps, as suggested by the administrators’ data, the teachers’ skills in facilitating an effective online learning environment. As with the implementation and integration of other emerging technologies, a deeper understanding is needed about the most effective strategies and tools for facilitating online learning environments that will fully meet students’ vision for online learning.

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With all of this interest, what is holding back greater adoption?

Online learning clearly plays a key role in students’ vision for an un-tethered, digitally-rich, socially-based learning environment. Parents are also very supportive of that vision. Almost fifty percent of parents say that online classes are a good investment for their child’s school to make in enhancing student achievement. Still, students report that they face
barriers at their school that prevent them from accessing online learning opportunities and fully realizing the benefits. Amongst students who have not taken an online class, the primary obstacles are institutional. Over 25 percent of high school students say that their school does not offer online classes or they don’t know what classes are offered. Over one-fifth of students say that they don’t know how to access online classes or know who can help them with this at their school. Secondary obstacles include not being able to afford to take an online class (16 percent) or concern about whether this approach is a good way for them to learn (21 percent). Clearly, schools need to address the institutional barriers, real or perceived, that are limiting students’ abilities to access online learning opportunities.

TheSpeak Up 2009 administrators’ data highlight several other institutional disconnects as well between student demand and district supply. Currently, administrators are providing a limited range of online classes that address specific priorities aimed at academic remediation (32 percent), providing scheduling options (31 percent), expanding Advanced Placement course offerings (20 percent) and offering dual enrollment courses (19 percent).

Administrators also identify barriers that limit their abilities to expand online learning. Almost 40 percent of district administrators and 35 percent of principals report their ability to offer classes online is stymied by limited state funding. Student access to Internet-connected computers outside of school is also a concern for about one-quarter of the principals. Aside from the critical issues of funding and digital equity, district administrators also recognize their district’s ability to offer online learning (Figure 4) is affected by teachers’ comfort level teaching classes online (30 percent), as well as their teachers’ ability to use the tools for online classes (26 percent). Equally important, district administrators are concerned with their in-house expertise to create online courses (24 percent). District administrators’ concerns about the buy-in from their teachers are well founded. Currently, only 10 percent of teachers say that they are leveraging online classes to enhance student achievement and only 26 percent say that they are interested in teaching an online class.

Closing the demand gap for online learning

Although there is a growing trend amongst administrators to provide online classes to students, their primary focus continues to be using online learning for teacher professional development (55 percent). Participation in online professional development grew 94 percent since Speak Up 2008 and currently 52 percent of teachers report taking a blended or 100% online class for professional development. Furthermore, nearly one-third of the responding teachers have participated in a fully online course for a credential, certification or postgraduate degree. New this year to the Speak Up National Research Project, we also asked teachers about the types of things they have done on their own time to improve their teaching effectiveness, and almost 25 percent of teachers reported they found an online class to take.

Teachers’ value proposition around online classes for professional development echoes the students’ benefits statements with almost three-quarters of teachers identifying the scheduling benefits as the most important. Additionally, teachers value the ability to customize their own learning (41 percent) and to be able to review materials as needed (42 percent). Also, teachers perceive that online professional development helps them with their own productivity by saving time (37 percent).

As a result of these experiences, teacher demand for district provided online learning opportunities is increasing. More than half of the teachers want their districts to provide more online courses (51 percent) and tools for collaborating with their peers, both inside and outside their districts (40 percent) in their professional learning communities.

Pre-service or aspiring teachers may provide another opportunity for school districts to meet thepent-up demand for online classes; however, current preparation programs are not directly addressing this need. This next generation of teachers, digital natives themselves, value online learning as a key component of their future classroom. Forty-four percent of the pre-service teachers see a learning
management system as a viable classroom tool for enhancing student achievement; 21 percent would include online classes on that list. Two-thirds of district administrators and slightly more than one-half of principals believe it is important for these aspiring teachers to gain firsthand experience with online learning by participating in an online class or an online professional learning community prior to certification. However, only one-third of district administrators and even fewer principals (20 percent) say it is important for these soon-to-be teachers to have the actual skills needed to teach an online course. Even as aspiring teachers are gaining experience with online classes (52 percent) and online professional learning communities (38 percent) as part of their teacher preparation programs, only 4 percent report that they are learning how to specifically teach online classes in their instructional methods courses.

**Students have a vision for online learning. But do our schools?**

As we have seen with other emerging technologies, teachers’ personal experiences with the technology often precedes their comfort with using these tools in the classroom. This may also prove to be true with online learning. As teachers are becoming more comfortable with online classes and the use of online tools through their own professional development and learning communities, we are seeing growth in the number of teachers interested in teaching online classes themselves. However, even with the demonstrated changes in teacher behavior between Speak Up 2008 and 2009, student demand continues to outpace supply. Furthermore, as we think about our newest teachers entering into classrooms for the first time, there is a real need for teacher preparation programs to not only facilitate online classes, but to provide our newest teachers with instruction and practice on how to be effective educators in an online environment.

The question comes down to this . . . with the demand for online learning projected to grow each year, are our schools and educators ready and able to meet the challenge? Meeting students’ needs and desires for untethered learning will require educators to grapple with professional development and funding priorities. School districts, communities and the colleges and universities which are so integral in developing tomorrow’s teachers will need to create new approaches for training educators, both at the pre-service and practicing level.

Students are ready now to seize and shape their futures, and to do so by effectively leveraging a wide range of technology tools to implement their personalized vision for 21st century education. Online learning is at the center of this discussion as it directly addresses the three essential elements of this new student vision: learning that is socially-based, untethered and digitally-rich. As the national discussion continues on how to best leverage emerging technologies to enhance student achievement, these big questions need to be part of the conversation, at both the national and local levels.

- How can we make online learning opportunities available to more students?
- How can we help teachers better appreciate the benefits of online learning and learn how to facilitate online learning most effectively?
- What should our schools of education be doing to prepare the next generation of teachers to be effective with online learning tools?
- How should administrators be tapping into the ideas and aspirations of students to inform local plans for online learning?
- How can the online learning experiences of parents help schools and students leverage online learning to enhance achievement and productivity?
About Project Tomorrow

Speak Up is a national initiative of Project Tomorrow, the nation’s leading education nonprofit organization dedicated to ensuring that today’s students are well prepared to be tomorrow’s innovators, leaders, and engaged citizens. Since fall 2003, the Speak Up National Research Project has annually collected and reported on the views of over 1.85 million K-12 students, teachers, administrators and parents representing over 23,000 schools in all 50 states. The Speak Up National Research Project dataset represents the largest collection of authentic, unfiltered stakeholder input on education, technology, 21st century skills, schools of the future and science and math instruction. Education, business and policy leaders report using the data regularly to inform federal, state and local education programs. For additional information, visit www.tomorrow.org.

About Blackboard Inc.

Blackboard Inc. is a global leader in education technology that transforms the experience of millions of students and teachers every day. Blackboard works with states, K-12 districts and virtual schools to expand educational opportunities, create collaborative learning communities and increase engagement for students, teachers, parents and administrators. With Blackboard solutions, educators are closing the gap between the way students live and the way they learn through personalized, connected learning experiences that meet the needs of the K-12 classroom and the 21st century. Blackboard is headquartered in Washington, D.C., with offices in North America, Europe, Asia and Australia. Learn more at www.blackboard.com/k12/learn.