MARIISSA IS AN 11TH GRADE HIGH SCHOOL STUDENT AT A LARGE URBAN HIGH SCHOOL IN LOS ANGELES.

And though she does consider her tech skills average compared to her classmates, she leverages a wide range of emerging technologies every day to personalize her learning process, both in and out of school. Take for example a recent experience that she had in her English Literature Honors class. Her class had been doing a unit on Shakespeare and was currently reading Hamlet. The class format included oral reading of the play with class discussion on the themes and intent of the different passages. During one particular class, the topic of discussion was Hamlet’s discovery of the skull in the graveyard and its meaning within the play. Marissa could not wrap her head around the meaning of certain Old English words in Act V; thus, she did not understand the context of the passage or the importance of the skull as an important thematic symbol. But everyone else in the class seemed to get it! Her school is on a block schedule and so this was going to be a long class — and the more Marissa tried to comprehend the passage, the further she was falling behind the class discussion. She remembered that she had cheer practice that day after school and then had to babysit her little cousin. It was going to be late at night before she would be able to get help on this passage. Marissa really had to address this problem now. So, she used her smartphone to look up information on the Internet about Hamlet and the symbolic nature of the skull. After scanning through a couple of sites, she got it! She was able to immediately jump back into the flow of the class and even participate in the class discussion. Whew — good thing that her teacher did not see her using her smartphone under her desk or she would have ended up in the principal’s office!
INTRODUCTION

Marissa’s story is not unique on several levels. Every day, students are seeking ways to personalize their learning by more effectively and efficiently using the mobile devices in their pockets and backpacks. They are using these technologies to collaborate with each other on history projects, to receive reminders about upcoming assignments and tests in math, and to take photos and videos of science labs to review later. They are using mobile apps to organize their schoolwork, check on grades, take notes in class and learn about school activities. And like Marissa, they are using the “always on” Internet connectivity capabilities of these devices to self-remediate or gain new insights on a challenging class subject—right at the exact moment they need that support.

However, just like in Marissa’s school, learning that is enabled by mobile devices and wireless connectivity is not often supported, encouraged or even allowed. In the Speak Up 2011 national results, we learned that a majority of middle and high school students (56 percent) identified “not being able to use their own mobile device” as a major obstacle to using technology at school. As explained in earlier Speak Up reports, today’s students have a clear vision for how technology, in particular mobile devices, can transform their learning process. That vision is centered around a new school paradigm that takes advantage of the collective advancements in technology to create more personalized learning environments; environments that are social-based, un-tethered and digitally-rich—just like the learning environment that Marissa was trying to create for herself within her English class.

Each year, Project Tomorrow®, a national education nonprofit organization, facilitates the Speak Up National Research Project and, as part of this initiative, tracks the increasing interest and growth in the use of emerging technologies to address the specific needs and aspirations of students, parents and educators for 21st century learning environments. Since 2007, Project Tomorrow has partnered with Blackboard Inc. to create a series of annual reports that focus on key trends in the use of technology to increase student achievement, teacher productivity and parental engagement. As outlined in the Speak Up 2011 national reports, many emerging technology products and services are not only addressing instructional needs, but are also enabling greater personalization of the learning process, both in school and out of school. Within this context, the use of mobile devices such as tablet computers and smartphones combined with wireless accessibility and social media tools stand out increasingly as a game changer in this movement to more personalized learning.

Since our last focused report on mobile learning in 2009, the environment for mobile learning has matured with greater clarity around the key opportunities and challenges associated with student use of mobile devices within instruction. Several factors have contributed to this greater clarity today. The ongoing local fiscal challenges within school districts have propelled many school boards and superintendents to explore new ways to leverage technology options as a means to decrease costs or increase revenues. Per the Speak Up 2011 national results, a quarter of district administrators identified allowing students to use their own mobile devices as a cost-cutting measure that they were currently exploring within their districts. The explosion in personal access to highly powerful, fully featured computing devices such as smartphones and tablets had been a contributing factor to that view as well. This personal access has a greater value than simple availability for usage however. As teachers and administrators have become mobile device users, or mobilists, their appreciation for how these devices can support and enhance learning is exponentially increased. Finally, this clarity about the potential transformative nature of mobile learning is also enriched by the national interest and momentum around personalizing learning.

In this new special report therefore, we examine the Speak Up 2011 national findings to both answer some of the questions first posed two years ago but also to present an updated perspective on the role of mobile devices within K-12 education.

The key findings from this report include:

- Mobile devices when combined with social media and wireless connectivity are enabling more personalized learning opportunities for both students and educators.
- Driven by several factors, the incorporation of student owned devices within classroom instruction is quickly becoming a viable solution for many schools and districts.
- Increasingly parental support for mobile learning is changing the district conversation.
- Changing teacher practice is the critical challenge today to expanding mobile learning.
- The future of mobile learning depends upon a shared vision for how to personalize learning.
PERSONALIZING THE LEARNING PROCESS FOR BOTH STUDENTS AND EDUCATORS

The prospect of a wireless device in every student’s hand with real-time assessment and feedback presents the potential for a sweeping paradigm shift to learner-centered education.

— DISTRICT CTO/CIO, CALIFORNIA

Despite all of the recent attention on personalized learning, the basic idea of contouring learning to meet individual student’s different strengths and weaknesses, interests and ways of learning is not new. Collective advancements in technology coupled with increased accessibility to these technologies are enabling new opportunities to personalize the learning experience for many more students both efficiently and effectively. It is not surprising, therefore, that alongside many discussions around personalizing learning is a parallel conversation about the value of using mobile devices within instruction. And it is the increased accessibility to mobile devices by students, parents and educators that is proving to be the trigger for the extended use and greater acceptance around mobile within learning.

As noted in the Speak Up 2011 National Report, “Mapping a Personalized Learning Journey—K-12 Students and Parents Connect the Dots with Digital Learning,” (Project Tomorrow 2012), increasingly students (as well as their parents) are mobile device users. The increase in the number of K-12 students who have personal access to a cell phone, a smartphone and/or a tablet, though a compelling headline, really does not tell the whole story about the impact of that increased accessibility. Rather, it is the shift in the type of device that students are carrying in their pockets and backpacks over just the past five years that is truly illustrative of the linkage between personalized learning and mobile devices. As noted in Chart 1, for example, in 2006, 66 percent of middle school students and 83 percent of high school students reported that they had personal access to a cell phone. In 2011, those percentages had plummeted by 27 percent and 41 percent respectively. Students did not retreat back to an era before mobile devices, however, but instead that cell phone with limited functionality and no Internet access was replaced by a smartphone or tablet, and in some cases, both. Now, seven out of ten high school students that have a tablet also have a smartphone.

A key tenet of personalized learning is the ability of individuals to choose the right tools for the right tasks. Students are demonstrating their desire to choose the tools that best support their learning tasks through their interest in leveraging mobile devices. As the functionality of the devices increases and especially the ability to tap into applications and tools that support more personalized learning, we will continue to see students opt not for exclusive device usage but for a mix and match of devices, each carefully chosen to support a particular educational goal.

This move to increased functionality in the palm of your hand is evident in the Speak Up data from parents, teachers and administrators as well.

<table>
<thead>
<tr>
<th>CHART 1: CHANGE IN STUDENT ACCESS TO MOBILE DEVICES — 2006 VS. 2011</th>
</tr>
</thead>
</table>

© SPEAK UP 2011
• In 2011, two-thirds of parents of school aged children (67 percent) noted that they have a personal smartphone; an increase of almost three times from 2006.

• In the past three years, teachers’ access to a smartphone has more than doubled from 20 percent in 2008 to 54 percent in 2011.

• District office administrators are almost twice as likely now to be carrying a tablet computer (55 percent) than a simple cellphone that does not have Internet access (31 percent).

• And administrators’ interest in using a smartphone or a tablet computer is not dependent upon their years of experience. Administrators with 1 to 3 years of experience are only slightly more likely to use a smartphone or tablet than their peers with 16 or more years of experience.

Moving beyond access: leverage mobiles and social media to personalize learning

If the foundation is having a mobile device, the next step in building a personalized learning environment is in how the students are adapting a variety of social media to meet their learning needs. When asked about how they are using technology to support their schoolwork, students provided clear insights that they are using technology both to increase the effectiveness of “how they do school” in a traditional sense as well as how they are directing their own learning through the use of emerging tools. The students’ adaptation of several social media tools for schoolwork purposes is particularly enlightening because of the connection to particular kinds of mobile devices.

To better understand how students are leveraging mobile devices to personalize their learning lives, we examined student usage of social media through the lens of their access to cell phones, smartphones and tablets. Students’ use of social media such as Facebook, Twitter, blogs and wikis did not differ very much based upon their access to a cell phone. For example, amongst high school students that have a cell phone, 49 percent say they are communicating with others through discussion boards and online communities; 49 percent of the students who don’t have a cell phone say the same thing. While still qualifying as a mobile device, the cell phones without Internet capabilities are not driving new practices or approaches to learning. However, as noted in Table 1, middle school students that have an Internet enabled device such as a smartphone or a tablet are much more likely to be tapping into social media to self-direct learning and remediation, as well as to build collaborative learning environments, than their peers without those devices.

Students with a tablet computer are twice as likely as their non-tablet using peers to use a mobile app to keep their schoolwork organized. And students who have a smartphone are 43 percent more likely to be tapping into Facebook as a collaboration tool than their classmates who don’t have a smartphone. Student access to these devices is not simply about communication or convenience, but rather, at least from the students’ perspective, the smartphone and the tablet are important vehicles for changing the traditional classroom paradigm to incorporate more personalized learning.

<table>
<thead>
<tr>
<th>USING TECHNOLOGY FOR SCHOOLWORK</th>
<th>NO, I DON’T HAVE A SMARTPHONE</th>
<th>YES, I HAVE A SMARTPHONE</th>
<th>NO, I DON’T HAVE A TABLET</th>
<th>YES, I HAVE A TABLET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record or video a teacher lecture or class lab</td>
<td>34%</td>
<td>51%</td>
<td>24%</td>
<td>46%</td>
</tr>
<tr>
<td>Use a mobile app for self-organization</td>
<td>31%</td>
<td>55%</td>
<td>22%</td>
<td>44%</td>
</tr>
<tr>
<td>Use Facebook to collaborate with classmates on a project</td>
<td>30%</td>
<td>47%</td>
<td>22%</td>
<td>33%</td>
</tr>
<tr>
<td>Use Twitter to follow others or to share information</td>
<td>33%</td>
<td>60%</td>
<td>24%</td>
<td>44%</td>
</tr>
<tr>
<td>Read or post to blogs or wikis</td>
<td>33%</td>
<td>46%</td>
<td>23%</td>
<td>38%</td>
</tr>
</tbody>
</table>

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The linkages between self-directed professional development and mobile enabled social media use

This same treatise of device access enabling more sophisticated use of social media holds for teachers and principals as well, especially in regards to their own self-directed professional development. Slightly more than one-third of all teachers (38 percent) indicated through the Speak Up surveys that they are participating in a professional learning community. Amongst teachers that have a tablet computer the participation level jumps to 48 percent. And amongst school site principals, twice as many smartphone using principals are leveraging a social networking site to collaborate with peers and experts as their colleagues who don’t have a smartphone. As with the students, the cell phone is not an agent of transformation in this context. It is clear, however, that as with the students, the availability of personal access to a smartphone or tablet computer changes the learning dynamic for educators.

In many ways this drive to more personalized learning, both for the students and for the educators is part of a logical math formula. Increased access to highly functional, multi-featured devices such as smartphones and tablets = increased familiarity with how to leverage these devices to personalize learning. A significant wakeup call in the past few years has been that many students, even those from challenged communities, have access to these kinds of mobile devices. That wakeup call is now prompting many administrators to think seriously about how to leverage student owned devices within the classroom as an alternative to school provided devices.

A NEW APPROACH — USING STUDENT OWNED DEVICES AT SCHOOL

Technology is a tool that can assist in the transitions needed for 21st century learners. The ability to incorporate the devices that students already use into the educational programs will be critical to the future direction and success of schools. Making school buildings accessible to these devices is as critically important as training teachers and staff to be able to incorporate the devices.

— DISTRICT SUPERINTENDENT, MINNESOTA

Since the advent of the mobile era, school and district administrators have been reluctant to allow students to use their own devices at school, whether for instructional purposes or personal communications. The stated reasons behind these polices have included a concern about the distraction factor with the devices (“kids going on Facebook rather than paying attention in class”) as well as anxiety over network security and student safety. While a majority of district administrators (52 percent) continue to support a “no personal device allowed at school policy” for students, a growing cadre of education leaders are starting to look at this situation differently. With one-half of district administrators acknowledging that their education technology budgets have decreased in the past three years, it is not surprising that 27 percent of these leaders are now exploring the idea of having students use their own mobile devices (smartphones, tablets, laptops) in class, rather than having the district assume the significant financial burden of providing a one-to-one environment for all students. For some districts, despite their best intentions, the option of providing school owned devices is simply no longer viable within their current budgets. For other district and school leaders, however, their interest in a “Bring Your Own Device” model is driven by a strong desire to create a more personalized learning environment for their students. Their personal use of these devices has been the proof concept for them on the potential value of these devices.

School principals across the board thoughtfully identify a variety of benefits of having students use mobile devices within instruction including increasing student engagement and extending learning beyond the school day. However, amongst principals who say they are actually likely to allow students to use their own mobile devices at school for instructional purposes, the intensity on those benefit statements increases significantly as noted in Table 2. For example, the principals that are adopting, piloting or evaluating the concept of BYOD are 17 percent more likely to see the value of students using their own tools as a means to create a more personalized learning environment, than the principals that are sticking with their increasingly antiquated “no devices allowed policy.”

In addition to the benefits for students, we see that principals are also interested in leveraging a BYOD model to address one of their other seminal challenges—how to increase the capacity of their teachers for using technology more effectively within instruction. This conundrum of how to address the training needs of their teachers is often one of the top barriers identified by principals when discussing their implementation plans for the integration of emerging technologies including online textbooks and blended learning classes. It is significant, therefore, that the “BYOD friendly principals” are also 24 percent more likely to see the inclusion of those devices in the classroom as a catalyst for improving teachers’ skills and over a third identify increased teacher productivity as a benefit of mobile learning.
Educators’ views on mobile learning, therefore, are indeed changing. The administrators’ motivations behind these evolving views include school and district fiscal challenges as well as their own personal appreciation of the potential of a mobile device to be an agent for a new teaching and learning paradigm. Administrators are also realizing that new conversations around the use of mobile technologies within school are resonating with many parents, and especially with parents who are themselves mobile device users.

**CHANGING THE DISCUSSION — WITH PARENTS’ INPUT ON MOBILE LEARNING**

Although schools provide Internet accessibility and computer usage during school hours, rural districts need technology accessibility throughout the school communities so not only students, but also their families may access technology in their homes. If global learning is to extend beyond the classroom doors to the community, Internet accessibility is essential to allow the learning to flow.

— DISTRICT ADMINISTRATOR FOR PROFESSIONAL DEVELOPMENT, NORTH CAROLINA

Parents are feeling the impact of the recession-induced tighter school and district budgets. When asked to identify their top concerns (besides funding) regarding their child’s school, 41 percent of parents noted that their child’s class is too big, an increase of over 40 percent just since 2009. The rise in class size nationwide over the past few years exacerbates parents’ always present concern that their child is not getting enough personalized attention from their teacher. Parents have a heightened concern that their child’s education be focused on learning the right skills to be successful in the future (73 percent) and the lack of personalization in the learning process seems to undermine that objective for many parents. Additionally, parents are very interested in how schools are leveraging emerging technologies such as mobile learning to not only create those more personalized learning spaces, but also to ensure that their child is well prepared for the future. And yet, we continue to see a disconnect between parents’ value statements on the importance of technology within learning and how well their child’s school is doing with that task.

• 87 percent of parents say that the effective implementation of technology within instruction is important to their child’s success (50 percent label it as “extremely important”).

• But only 64 percent say that their child’s school is doing a good job of using technology to enhance student achievement (and only 12 percent strongly agree with that statement).

Parents’ interest in and support of mobile learning, therefore, is directly related to three key conditions:

• Concern about their child’s future success

• High value placed on the use of emerging technology within instruction to address this concern

• Their own familiarity with the benefits of using mobile devices and social media to increase their own personal productivity

Parents’ access to mobile devices has followed the same trajectory as the general public in terms of adoption. In the

<table>
<thead>
<tr>
<th>TABLE 2: PRINCIPALS’ VIEWS ON THE BENEFITS OF MOBILE LEARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BENEFITS OF MOBILE LEARNING</strong></td>
</tr>
<tr>
<td>Increases student engagement in learning</td>
</tr>
<tr>
<td>Provides way for instruction to be personalized for each student</td>
</tr>
<tr>
<td>Extends learning beyond the school day</td>
</tr>
<tr>
<td>Provides access to online textbooks</td>
</tr>
<tr>
<td>Improves teachers’ skills with technology</td>
</tr>
<tr>
<td>Improves teacher-parent-student communications</td>
</tr>
<tr>
<td>Improves teacher productivity</td>
</tr>
</tbody>
</table>

© SPEAK UP 2011
past five years, parents carrying limited feature cell phones have continued to wane as access to smartphones and tablets have increased. From 2006 to 2011, the number of parents of school aged children with a smartphone has increased almost three fold from 18 percent to 67 percent. Couple that with the 36 percent of parents that say they are tablet users, and we can see how their interest in leveraging these devices in school has exploded so quickly.

*Parents see mobile learning as the key to more personalized instruction*

We can also see the maturation and increased sophistication of parents’ thoughts on mobile learning based upon how their perceptions of the benefits associated with mobile devices in the classroom has changed in just the past two years. As articulated in Chart 2, significantly more parents are endorsing the benefits of mobile learning and for the first time, we actually see a majority of parents supporting some of the key benefits. In 2011, parents ranked access to online textbooks as the number one benefit of mobile learning; just two years ago, increased student engagement was in that top spot. Additionally, the value proposition of mobile devices as the conduit for more personalized instruction has increased by almost 50 percent, and moved up in the rankings as well.

Parents’ value proposition on mobile learning, however, is much broader than the conceptual benefit statements. Parents are, in many cases, taking it mobile themselves by enabling a “Bring Your Own Device” model with the purchase of a device for their child to use. For the past two years, we have asked parents through the Speak Up survey the likelihood that they would buy their child a mobile device, if it was allowed at school and would be used for academic purposes. Almost two-thirds of parents (62 percent) said that they would do that, thus mitigating to some degree one of the key concerns of administrators with BYOD—digital equity. As noted in Table 3, this “walk the talk” approach regarding purchasing a smartphone or tablet is not limited exclusively however to parents in suburban or affluent communities. Parents from urban as well as rural communities are also appreciating the potential value of mobile learning.

Additionally, it should be noted that parents of elementary age students (55 percent) are only slightly less likely to want to purchase a mobile device for their child to use as compared to parents of high school students (62 percent). Parents are united in their value proposition around mobile learning and community demographics and age of their children does not appear to play a significant role in their decision making on this. Rather, the driving factors are the strong desire to help their children be successful and keep them on track for achievement. Because of their own experiences with mobile devices, parents now see these multi-functional, palm sized computers as key components in their vision for a more personalized learning environment for their child. So, what is holding back greater adoption of these tools?

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**Chart 2: Parents’ views on the benefits of mobile learning — from 2009 to 2011**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>2009</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improves teachers’ skills with technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases teacher productivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improves home to school communications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personalizes learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extends the learning day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases student engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides access to online text books</td>
<td></td>
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</tr>
</tbody>
</table>

© SPEAK UP 2011
THE TWIN PARADOX OF OPPORTUNITIES AND CHALLENGES WITH MOBILE LEARNING

We have pilot classrooms using iPads, MAC books, and PC laptops. Our technology team is researching BYOD, cloud computing, and 1:1 options. We are looking at what policy changes we need to make and planning to expand our infrastructure. Cost and how to change instruction to meet 21st Century needs are our largest hurdles.

— CURRICULUM & INSTRUCTION SUPERVISOR, INDIANA

When thinking about accommodating student owned mobile devices at school, principals identify six key issues that they say prevent them from changing their existing “no device policies.”

- Concerns about theft of the devices and who would be responsible for those devices (50 percent)
- Concerns about network security with students’ devices (45 percent)
- Digital equity considerations—how to ensure a level playing field for students who may not have personal devices (43 percent)
- Teachers who are not trained in how to use mobile devices within instruction (43 percent)
- Devices having the potential to be a distraction from the core learning process (40 percent)
- Student Internet safety concerns and associated district liabilities (39 percent)

The principals’ issues include a mixed bag of mythology as well as legitimate concerns. Many schools and districts who have adopted a BYOD approach say that their prior concerns around device theft were unwarranted. Contrasting, many BYOD districts say that they underestimated the impact to their infrastructure and did not provide enough teacher training to fully support the use of student owned devices within instruction. Increasingly, districts are realizing that BYOD is sometimes accompanied by “BYON” or “Bring your own network” with students having the technological ability to circumvent the district network and filters to gain more personalized access to the Internet. It is the potential change to teacher practice, however, that provides administrators with both the greatest opportunities as well as the most perplexing challenges. Interestingly, administrators who are smartphone or tablet users identify teacher training issues as their number one barrier to mobile learning.

While teachers share a similar uneasiness with their principals over digital equity (66 percent), their highest anxiety points around mobile learning were more inter-classroom focused with three-quarters of teachers (75 percent) citing the potential for their students to be distracted doing other things with their devices. Additionally, the teachers noted a lack of knowledge on how to integrate the devices into instruction (27 percent), that their curriculum does not support mobile device use (26 percent) and that they were unsure how to teach their students responsible use of the devices (26 percent). And over one-third of the teachers (35 percent) continue to express a concern about the potential of their students to cheat on tests using mobile devices. Unlike the changes we have seen in the administrator and parent data, personal access by teachers to smartphones or tablet computers appears to have only a slight impact on their views about mobile learning challenges. For example, 72 percent of teachers that use a tablet say that distraction is their top concern for mobile learning; only slightly less than the 75 percent of all teachers who voiced that same apprehension.

Each of the teachers’ worries around distraction, curriculum and cheating point back to the administrators’ key barrier to implementing mobile learning: how to change teacher practice to effectively leverage the capabilities of these multi-functional devices within instruction. It is not sufficient anymore to simply overlay the technology onto pre-existing pedagogy and practice. Rather, mobile devices combined with wireless capabilities and social media tools provide a long overdue catalyst for educators to re-think the education enterprise and create more personalized learning environments for all students.

| TABLE 3: PARENTS’ SUPPORT FOR MOBILE LEARNING : WILLINGNESS TO PURCHASE A DEVICE |
|-----------------------------------------------|----------|----------|----------|----------|
| PURCHASE A MOBILE DEVICE FOR MY CHILD TO USE AT SCHOOL? | URBAN | SUBURBAN | RURAL | TITLE 1 |
| Likely | 61% | 59% | 58% | 57% |
| Unlikely | 13% | 15% | 13% | 14% |

© SPEAK UP 2011
ENDING THOUGHTS — THE FUTURE OF MOBILE LEARNING

As educators, we are challenged by traditional classroom structures. Often we present the same lesson to a classroom of students offering them the same amount of time and resources to learn the material. However, this teaching approach is based on the premise that all students learn the same way and at the same rate. And although we maintain high expectations with an intense curriculum, this is not an ideal learning environment. In a student-centered classroom, the teacher begins with mastery of the core standards in mind. However, the methods and pace in which students reach and exceed mastery look very different based on their educational needs and interests. Learning becomes the constant; time becomes the variable; and students leave our classrooms with the most crucial lesson we can present: how to keep learning.

— DISTRICT CTO/CIO, INDIANA

The genie cannot be put back in the bottle. As evident from the Speak Up 2011 findings, students, parents, teachers and administrators are all increasingly tapping into mobile devices and social media to personalize learning, enhance collaboration and increase professional productivity. And while more thought and consideration is definitely needed to address the identified challenges around digital equity, infrastructure and teacher training, the desire across all of the stakeholder groups to use an “always on — take it anywhere” device is well established now. The new questions that should be discussed in parent forums and school board meetings are the following:

• Do we have a shared vision for leveraging mobile devices to personalize learning?

• If not, where do we share some key values around education technology use that can be the building blocks for creating that new shared vision?

To help communities tackle these questions, the Speak Up data as illustrated in Chart 3 provides a clear and concise roadmap to understanding where to start.

Creating a shared vision requires both the why and how components of a strategic plan. Per this sampling of Speak Up data, we see, for example, that students, parents and educators share a common desire for leveraging technology to help students organize their schoolwork and academic interests. Many of the key stakeholders also buy into the idea of collaborating with others via social media tools as important ingredients for their ultimate school. Others see ubiquitous Internet access on the school campus as a must-have. The mobile devices when combined with these social media tools provide a foundation for transforming not only the student experience but the teachers’ practice as well. The end result is the realization of the student vision for a more social-based, un-tethered and digitally rich learning landscape. The end result is very much the kind of personalized learning environment that Marissa was trying to create for herself within her English class. The new equation for learning in the 21st century is straightforward: mobile devices + social media = personalized learning.

Our students need to use the tools that are found in their world today and be ready to use the tools of tomorrow. Social media, online classes, mobile devices and other tools will help them become global communicators, digital learners and be able to adapt to the rapidly changing world of technology.

— DISTRICT CTO/CIO, CALIFORNIA

---

**CHART 3: WHAT TECHNOLOGY WOULD BE ESSENTIAL FOR YOUR ULTIMATE SCHOOL?**

<table>
<thead>
<tr>
<th>Technology Type</th>
<th>District Administrators</th>
<th>Principals</th>
<th>Teachers</th>
<th>Parents</th>
<th>Students Gr. 6 – 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools/apps for organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tools/apps for collaboration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schoolwide internet access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School provided tablets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School owned devices</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

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About Project Tomorrow and Speak Up 2011

Project Tomorrow® is the nation’s leading education nonprofit organization dedicated to the empowerment of student voices in education. With 16 years of experience in the K-12 education sector, Project Tomorrow regularly provides consulting and research support about key trends in K-12 science, math and technology education to school districts, government agencies, business and higher education.

The Speak Up National Research Project is a national initiative of Project Tomorrow. Speak Up annually polls K-12 students, parents and educators about the role of technology for learning in and out of school and represents the largest collection of authentic, unfiltered stakeholder voice on digital learning. Since 2003, over 2.6 million K-12 students, parents, teachers, librarians, principals, technology leaders and district administrators have shared their views and ideas through Speak Up. K-12 educators, higher education faculty, business and policy leaders report that they regularly use the Speak Up data to inform federal, state and local education programs.

In fall 2011, Project Tomorrow surveyed 330,117 K-12 students, 44,006 parents, 36,477 teachers, 2,025 librarians, 814 district administrators, 3,319 school administrators representing 5616 public and private schools from 1,250 districts. Schools from urban (24 percent), suburban (41 percent) and rural (35 percent) communities are represented. Over one-half of the schools that participated in Speak Up 2010 are Title I eligible (an indicator of student population poverty). The Speak Up 2011 surveys were available online for input between October 10th and December 23rd 2011.

The Speak Up surveys included foundation questions about the use of technology for learning, 21st century skills and schools of the future, as well as emerging technologies (online learning, mobile devices and digital content), science instruction and STEM career exploration. In addition, educators shared the challenges they encounter integrating technology into their schools and districts and how budget challenges have impacted these decisions. The data results are a convenience sample; schools and districts self-select to participate and facilitate the survey-taking process for their students, educators and parents. Any school or school district in the United States is eligible to participate in Speak Up. In preparation for data analysis, the survey results are matched with school level demographic information, such as Title I, school locale (urban, rural and suburban), and ethnicity selected from the Core of Common Data compiled by the National Center for Education Statistics (http://nces.ed.gov/). Speak Up data are cross-consulted with NCES statistics to ensure that data represent nation-wide school demographics. The data is analyzed using standard cross-tab analysis. Key variables (such as internet and device access) are tested for statistical significance.

About Blackboard

Blackboard 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’s website, online learning, mobile, and mass communication 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. Learn more at www.blackboard.com/k12.

1. Marissa’s story is a true story, related to Julie Evans, Project Tomorrow CEO, during a panel discussion with high school students in October 2011. Marissa’s name has been changed for this report.