

10 Benefits of BYOD

1. HELPS TO ACHIEVE ONE-TO-ONE COMPUTING AT LESS COST

For many school districts, one-to-one computing has been an unattainable goal due to lack of funding. Allowing students who already have their own laptops, tablets, smartphones or other devices to bring them to school gets districts closer to one to one without having to buy or maintain hardware. It then becomes easier to afford equipment for students who can't provide their own. (See equity discussion, page 29).

2. TEACHES PROBLEM-SOLVING, CREATIVITY AND OTHER 21ST-CENTURY SKILLS

When schools issue students identical devices with identical software packages, this may “rob the students of the benefit of learning how to use their tools productively,” cautions Mitchell. In a BYOD environment, on the other hand, students are bringing a plethora of tools to the table, some of which may work better than others at different tasks. Students learn, as they may need to in their future careers, how best to adapt their tools to the job at hand.

“BYOD empowers students to use their devices in new ways to produce original content and solve problems,” says Mitchell. This helps them develop “innovative computational thinking.”

Schools with one-to-one initiatives in which districts have provided all students with the same device and software run the risk of “replicating a very traditional assignment in a digital way” rather than doing something new, says Mitchell. BYOD, on the other hand, “makes teachers think differently about the way they conduct instructional activities” and gives students the ability to practice 21st-century skills.

3. MORE ENGAGED STUDENTS

Those who oversee BYOD programs say students who are using their own mobile devices are more engaged in learning. They are, after all, using the tools they are most comfortable with in their personal lives.

“In our experience, given the choice, students prefer to use their own device rather than one provided to them by the school system,” says Mitchell.

Lenny Schad, CIO of Katy Independent School District in Katy, Texas, which provides smartphones to fifth-graders and began allowing students to bring in their own devices in 2011, says student engagement levels are remarkable.



“We had veteran teachers — 20-year teachers — saying that they had never seen engagement in their classes like they saw when they used Web 2.0, or when they saw the kids using the mobile learning devices.”¹⁶

4. HIGHER ACHIEVING STUDENTS

Extensive evidence exists showing that students who are more engaged and motivated are more likely to be successful learners.¹⁷ For example, studies have shown a direct link between levels of engagement and achievement in reading and mathematics.¹⁸ National Research Council studies in 2000 and 2003 show a correlation between disengagement and dropping out of school, especially among poor, minority youth.¹⁹

Mobile devices appear to increase student engagement. In one study in 2008, high school algebra students in Onslow County Schools in North Carolina were given smartphones to use in class and at home; test results showed gains in math achievement, with greater student engagement cited as one factor in the rise.²⁰ At St. Marys City Schools in St. Marys, Ohio, classes with and without mobile devices were tested; students who were allowed to use devices scored higher in geometry. Other evaluations showed gains in social studies, reading and writing for those students using mobile devices.²¹

5. ANYTIME, ANYWHERE ACCESS

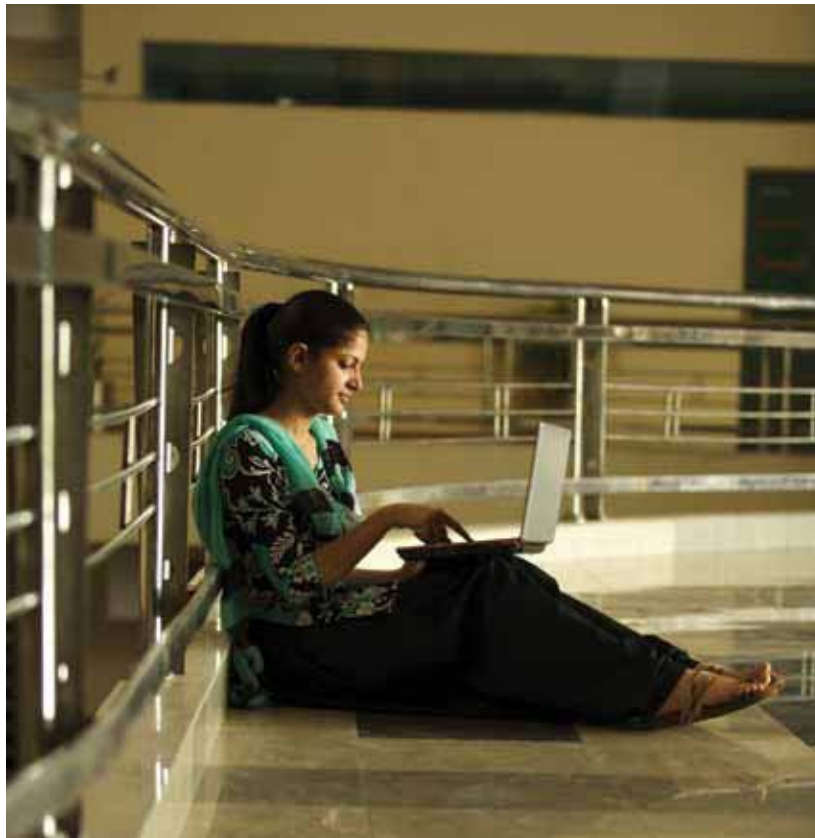
Students, teachers and staff are able to connect to the network and to each other without regard to time or place. Teachers can collaborate more easily with other teachers when outside the school grounds, as well as keep in better touch with students, when needed.

6. GREATER COLLABORATION

Mobile devices make for easier group work than traditional desktop computer labs.

“What we have experienced is that when the device is smaller and portable, students are able to collaborate and work together with greater effect than trying to gather around a row of desktop computers tethered to an Ethernet port in the back of the room,” says Mitchell.

Teachers become facilitators, helping foster collaboration among students as they seek and evaluate information.



7. BETTER STUDENT CARE OF DEVICES

When a student is responsible for his or her own device, school administrators say they are less likely to treat them carelessly than if they are school property. At South Forsyth High School in Georgia, technology-related discipline offenses dropped from 400 in 2008 and 2009 to just four in 2010 — the first year of the school's BYOT program.²²

8. SAVES MONEY ON TEXTBOOKS

If every student has a mobile device he or she can take home, these can be used as e-readers for textbooks or other digital content — and heavy, costly print editions do not need to be purchased. This can save thousands of dollars for districts. For example, a 2011 study by Simba Information found districts saving more than \$3,000 annually in printing and textbook costs by implementing mobile device use in a single classroom.²³ In Roslyn Heights, N.Y., a purchase of 47 tablet computers for two high school classes at a cost of \$35,000 is expected to save \$7,200 annually in textbook and printing costs.²⁴

9. CUSTOMIZABLE FOR DIFFERING LEARNING STYLES

Letting students use different devices lends itself to customized assignments, which can play off the strengths and learning styles of each child. So, for example, a child with a laptop may write a more traditional paper or report about a topic, while one with a smartphone may choose to create a video answering the same question; another child with a tablet might produce an animation, storyboard or blog post.

“When teachers see the opportunity for different tools to be used instead of traditional paper and pencil, this is where they’re bringing it in,” says Schad. “It’s really tapped into that different shaded learning style that we know all these kids have. Once we allowed children to do their homework in multiple avenues, that’s when we started to tap into these different shaded learning styles, and that’s where we saw creativity go through the roof, and that’s where we saw engagement go through the roof because these kids had multiple avenues to do their homework rather than just on paper and pencil.”

10. CREATING LIFELONG LEARNERS

Using mobile devices that go from home to school can create a different relationship between student and school, and indeed between a student and his or her self-identity as a learner. In the past, school was between 8 a.m. and 3 p.m., and some students built up a perception of school as drudgery. Now that line between in-school and out-of-school is blurring and technology is helping that. Students get to be the same curious learner both in and out of school, which is gradually breaking down the concept of learning being a chore. Students are becoming self-motivated lifelong learners.