

SHOULD SCHOOLS REPLACE TEXTBOOKS WITH TABLETS?

As technology progresses, more and more schools are considering the use of tablets in the classroom. Should K–12 schools shift their learning model from physical textbooks to tablet learning? There are both benefits and disadvantages to this change.

Pros

Even though tablets cost more than textbooks, they are actually the more cost-effective option over time. Each tablet has about 8–64 gigabytes of storage, meaning it can store hundreds of eBooks, as well as homework, handouts, quizzes, and other educational files. These eBooks cost about 50–60% less than physical textbooks, so a few hundred dollars for an iPad would quickly pay off in savings. Schools would pay less for each new textbook they acquired. In addition, tablets are becoming cheaper every year, unlike textbooks. Schools could also save on paper and printing costs while helping the environment.

Benefits extend to learning as well. More and more studies are linking technology-based teaching to faster, more engaged learning. Students can work with the text in a way that ordinary books won't allow; they can highlight and edit passages, write notes, use the built-in search function and dictionary, and interact with diagrams and videos. In a recent survey, 80% of teachers reported that the use of technology enriched their classrooms while 77% reported increased motivation from the kids. Studies have also found that children with tablets read more than their non-tablet peers—24 books per year rather than 15. Tablets can often make learning more fun and accessible.

The change could also benefit student health, allowing kids to carry around one lightweight tablet rather than five or more books. In 2011–12, more than 13,700 kids were treated for backpack-related injuries. Placing materials on one device could save space and reduce back strain for children.

Tablets offer the chance for customizable learning, as each student can work at his or her own pace. There are many apps that can help teachers tailor their teaching to each individual child. With the options technology offers, education doesn't have to be one-size-fits-all.

Tablets can also allow students to keep up with changing educational and technological trends. For example, standardized testing is moving towards digital learning, and more tests will take place on computers in the coming years. By practicing and learning on tablets, students can increase their scores. Tablets could aid their long-term futures as well. By 2020, employment in computer-related fields will have risen by 18%. By allowing kids to become proficient with technology, teachers can assure that their students will be prepared for the changing, modernizing world.

Cons

Purchasing new tablets for every student would be very expensive. In addition to the tablets themselves, schools would need to pay for additional hardware and software, teacher training materials, and more elaborate Wi-Fi systems. Costs could reach \$71.55 yearly for each student, compared to only \$14.26 for print textbooks. Tablets would require constant recharging (most have a battery life of only 7.26 hours) and would be expensive to fix or replace if they became damaged. Theft and hacking could also become a problem, since tablets are worth much more than individual books. Most schools would have difficulty meeting all of these costs.

Many parents cannot afford the upgrade either. About a third of students in the U.S. do not have broadband capabilities at home, which are needed in order to operate the tablets effectively. The cost of keeping up with technology can disproportionately benefit wealthy children while neglecting poorer families. This “digital divide” grows worse when wealthier districts offer such advanced technology while poorer schools are still trying to meet basic learning needs (paper, pencils, etc.).

There are also teaching concerns about tablet technology. About 87% of teachers reported feeling that students were easily distracted and lacked focus when using technology in the classroom. The temptation to go on the Internet, check e-mail or Facebook, or play games can keep kids from learning effectively. Students could cheat more easily, looking up answers rather than working through problems step by step. The introduction of tablets can shift attention away from the teacher and toward the technology, which may impact the way that students learn and remember information.

Many studies have considered the effect that technology has on reading. People tend to read and process online material much differently than written material. According to research, online text can be more difficult to process and remember than physical text, and students also read online text more slowly. Schools should consider the health problems of Computer Vision Syndrome, which can cause headache, blurred vision, and eyestrain. The strain of leaning over screens can also lead to neck and shoulder problems.

As of 2012, only 30% of textbooks were available electronically. The numbers are expected to rise, but the remaining 70% of textbooks in traditional form suggests that physical books will remain important tools in teaching for quite some time.

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