

## Annotated Bibliography - How technology can benefit learning

Bonk, C. (2009). *The world is open: How Web technology is revolutionizing education* (1st ed.). San Francisco, CA: Jossey-Bass.

Technology and the Internet are creating avenues for people to learn anything at any time. Through the continuous sharing of resources, free educational availabilities, people are able to collaborate and access knowledge and receive an education never before accessible. Based on a vast audience and years of research, this book gives a glimpse of education now and in the future. This book uses the acronym WE-ALL-LEARN. Web searching in e-Books, E-Learning, Availability of open source, Leveraged Resources, Learning object repositories and portals, Learner participation, Electronic collaboration, Alternate reality learning, Real-time mobility and portability, Networks of personalized learning. This book amazes the reader with untapped knowledge and educational opportunities that are within accessible reach.

Breithaupt, D. L. (2000). Educational technology plans: Keys for successful implementation and accountability. *Society for Information Technology & Teacher Education International Conference: SITE* (Vol. 99).

The design, planning, and implementation of technology standards in educational curriculum is what makes these standards effective. Through this planning, evaluation, data, and research schools can set and achieve technology goals. Schools can then ensure that proper technology funding sources are available and apply for new sources. Annual reviews of these standards will allow a revolving planning process and ensure that technology is being used in curriculum effectively. Having a plan and use of the technology standards will create a continuous and aligned goal that demonstrates its effectiveness in classroom education. Though helpful in creating and justifying standards through some examples this article reads as a manual with only a few listed resources.

Honey, M., McMillan-Culp, K., & Spielvogel, R. (2005). *Critical issue: Using technology to improve student achievement*. Retrieved from <http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te800.htm>

Technology in schools requires extensive funding and initial investment. Therefore, schools are accountable and must verify that technology in education is worth this investment. Using data to prove the justification of technology in education, displaying factors that support technology's effective use in school, providing resources districts use to help them plan for technology will have a positive impact on student achievement and justify the investment. Supplying data driven research, schools can show the world that technology is beneficial in schools. Many different types of technology, multiple ways for students to demonstrate their learning, and providing multiple entry points for students to motivate and engage students, can be used to achieve this goal. There may be expectations that technology will solve all the school's problems with student learning and achievement. To be justified, technology must be used to promote new learning goals and teaching strategies that are student-centered, self-directed, and demonstrate increased

thinking skills. Through extensive, ongoing research, illustrated case examples, and a long list of contacts, the authors prove their understanding and experience of this issue.

Johnson, R.M. (2001). *Faculty training and utilization of technology in preservice education*. Tallahassee, FL: ICTE.

There are barriers that prevent teachers from incorporating integrated technology in the classroom. One of these barriers is professional development. Another barrier is incorporating the ISTE standards or the NCATE standards. Through proper training and integration teachers will be better able to make technology education available to students. The most interesting part of this article is the survey results of most frequent usage of technology by teachers in the classroom. Most teachers agree they would like to utilize technology more in the classroom but need more resources and more development opportunities.

Protheroe, N. (2005). Technology and student achievement. *Principal-Arlington*, 85(2), 46.

There must be evidence that technology leads to higher learning. Research presented indicates computer-based instruction moderately improves learning. Research also indicates that educational technology for drill and practice of basic skills helps students do better than expected, measured by test scores. Teaching and learning are supported by technology through collaboration, constructing of knowledge, and planning effective technology use.

There are many articles available for educational technology, however, not many have the extensive research to back up claims. This article focuses on extensive research to validate claims that educational technology is relevant and utilizing it can be helpful for students.

Roschelle, J. M., Pea, R. D., Hoadley, C. M., Gordin, D. N., & Means, B. M. (2000). Changing how and what children learn in school with computer-based technologies. *The Future of Children*, 10(2), 76-101.

With the new demands on schools to prove their effectiveness through student achievement, it is helpful to integrate technology to help schools raise their achievements. There are various ways computer technology can improve how children learn in the classroom. Through active engagement, group participation, interaction and feedback, and connections to the real-world illustrate ways technology can help students learn. The main focus of technology in the past has been science and math and more research is needed to enhance how students can learn with technology multi-curricular such as desktop publishing and desktop video. With real examples and tested research this article technology can be effective in the classroom as long as it is continually revised.