

The Condition of Technology in Arizona: 2005

Executive Summary

The use of computers and technology in the classroom is essential for preparing students for the future. Three of the most extensive studies regarding computers in the classroom conclude that when used properly, computers increase student achievement, allow students to learn more and to learn faster, and improve students' attitudes toward their classes. In 2003, the Arizona Department of Education (ADE) began to close the gap in technology access among public schools by wiring schools and installing computer equipment. The data show, however, that most Arizona teachers are not proficient at using computers in the classroom. While ADE offers teachers professional development opportunities and curriculum resources through ASSET (Arizona School Services through Education Technology), the author of this brief concludes it is not enough to bring teachers to the level of technological proficiency required by the dawn of the Information and Knowledge Age.

Recommendations

It is recommended that:

- The Arizona Department of Education (ADE) direct discretionary grants to schools to make up-to-date technology, fast connectivity, and teacher support on-site available for Pre-K-12 teachers.
- Pre-K-16 schools, with the financial support of ADE, develop an in-house corps of highly-qualified teachers in technology integration issues across content areas and grade levels at each school building to coach other teachers in their technology use.
- School principals, backed by school district superintendents, allow Pre-K-12 teachers time to learn how to use different technologies, including release time for training.
- ADE identify representative schools across the state to fund a 1-to-1 student-to-computer ratio to model best practices for technology integration on a statewide basis.
- The Arizona State Legislature and ADE plan for future state-level funding to build on lessons learned through technology use at model schools and at different technology initiatives to generalize the use of technology-rich environments in all public schools.
- The Arizona State Legislature and ADE, through monetary incentives, support schools in forming alliances and partnerships between high schools and colleges, and/or high schools and businesses, particularly those in the knowledge industries, to provide a specialized workforce that will enable the state to attract more knowledge and information industries.