

Survey Question

16. This teacher's use of technology helps me to learn in this class

Australian Professional Standard

Professional Knowledge Domain

Standard 4: Create and maintain supportive and safe learning environments

Focus areas:

- 4.5 Use Information and Communication Technology (ICT) safely, responsibly and ethically
- 4.4 Manage student safety
- 2.6 Information and Communication Technology (ICT)
- 3.4 Select and use resources

What does this sound like in the classroom?

"We spend so much time online and most of our future jobs will use it. It's great when our teachers use it in our classes, and show us ways that we can use new apps or software."

Why is this important?

Information-processing and technology skills are becoming increasingly important skills in industry and society (OECD, 2013). In addition to being a skill in itself for students to learn, when technology is used effectively in classrooms it can make learning more productive, assist in engaging students and create positive attitudes to learning.

"Technological literacy will be a valued skill in students' futures; therefore, we should help them use technology effectively and efficiently. We need to engage our students in conversations about the appropriate application of technology and allow them to help us clearly define accepted applications, as well as inappropriate practices and the resulting consequences. Being able to access information quickly, analyse search results, effectively evaluate resources, and synthesize findings are essential skills. As teachers, we can provide opportunities in class for students to learn and demonstrate their mastery using technology. We can create innovative activities and projects and allow students to use technology as part of classwork." (Landers et al, 2014)

What strategies have been shown to work in the classroom?

The use of technology needs to be clearly and purposefully planned and integrated into learning (Ashenden, 2013). John Hattie's (2009) analysis of nearly 5000 studies on the use of information technology in schools found that its use is more effective when:

- it is used as supplement to teacher instruction to expose students to a diversity of teaching strategies;

- teachers are trained how to use technology as a teaching and learning tool;
- it is used to provide multiple opportunities for learning, such as additional practice and simulations;
- it provides an opportunity for students, rather than teachers, to control their learning;
- student peer or paired learning strategies are used; and,
- feedback to students is optimised.

There are various forms and uses of technology in schools. The World Economic Forum (2015) recently reviewed how technology could be used to improve student learning (instructional technology) and help teachers (management technology). The types of technology that improve student learning includes personalised and adaptive content and curricula, open educational resources, student communication and collaboration tools, and interactive simulations and games. The types of technology that assist teachers includes digital professional development resources and teacher collaboration tools to help share expertise, as well as student information and learning management systems to enable better assessment and data collection, analysis, feedback and decision making.

What three things can I try in my classroom tomorrow?

1. Improve students' editing skills and technological literacy by using the 'Review' feature of word processing programs to track changes and monitor progress on research papers and essays.
2. Using games has been shown to improve learner motivation and outcomes. Research games and 'apps' available which pertain to your subject area. There are also many fantastic 'exit ticket' apps that students can use their iPads or smartphones to submit how well they understand the concepts covered in your lesson.
3. Check out Scootle for over 20,000 quality-assured digital resources aligned to the Australian curriculum.

What opportunities are there for collaboration with my colleagues?

Check out the rich range of opinions and ideas in the twittersphere in your subject area. Discuss these and share the inspirational links with school colleagues. The hashtag #edchat or #aussieED are a good place to start; for more subject specific information, conduct an Internet search to find common hashtags used by teachers in that particular domain. Technology platforms for sharing such as Scootle offer a plethora of resources aligned to the Australian Curriculum.

Where can I find out more?

Video

- Teaching Channel: Using Technology to Assess Learning – texting
- Teaching Channel: Google Docs in the classroom
- Ted Talks: Sir Ken Robinson – Bring on the Learning Revolution
- Ted Talks: Salman Khan – Let's use video to reinvent education

Referenced articles, books and other great reads:

- Ashenden, D. (2013) Coming Ready or Not, The Inside Story, November 2013. Accessed 13 July 2015.
- Barseghian, T. (2012) How teachers make cell phones work in the classroom. MindShift. May 10, 2012. Accessed 30 June 2015.
- Duncan, A. (2015) What can technology do for tomorrow's children? Bright. 20 April 2015. Accessed 2 July 2015.
- Edutopia. (2015) New teachers: Technology integration basics. May 7 2015. Accessed 1 July 2015. Hattie, J.C. (2009), Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement. London & New York: Routledge, Taylor & Francis.
- Moorhead, L. (2014) There's no app for good teaching. 9/3/2014. Accessed 11 June 2015. OECD Skills Outlook 2013: <http://skills.oecd.org/skillsoutlook.html>
- Schleicher, A. (2012) OECD Preparing Teachers and Developing School Leaders for the 21st Century, 2012: <http://www.oecd.org/site/eduistp2012/49850576.pdf>
- World Economic Forum (2015) New Vision for Education: Unlocking the potential of technology