

Technology in the classroom: Underused and misused

Theme

In this lesson, we will look at 4 ways that new technologies are either misused or underused in a classroom, and discuss a way that technology can be successfully brought into the classroom.

Ways Technology are Underused

The most obvious way that new technologies are underused in a classroom is when they are not used at all! This is especially true when technologies are brought into a classroom without the teacher's involvement. Also, technologies might sit unused if a teacher doesn't know how to use them, or simply doesn't have ideas on how to use them with students. In studies, it appears that teachers often use new technologies to prep for classes, but don't use technologies in their actual lessons.¹

When new technologies are used, they are often used in much the same way that older technologies are used. For instance, a computer, a SmartBoard, and PowerPoint are often used in a combination to replicate putting notes on a chalkboard. Using new technologies in these "old" ways ignores the capabilities of new technologies.²

Ways Technology are Misused

One way that new technology is often misused is by using automated software to replace teachers. The problem with this is that it takes students away from some important interactions that take place between students and teachers in a classroom (whether online or face to face). This is best illustrated with a discussion on two ideas, discourse and weaving.

Discourse is the interactions that take place between students and teachers in a classroom. These communications allow for genuine feedback from teachers, let students get clarification from teachers, and affirmation when they are right. It also allows students to share new ideas with teachers and get feedback/criticism on those new ideas. Although often software is set up to give some sort of "affirmation" to the user, this is not as real and genuine as when it comes from a real person. Software simply cannot replicate this type of classroom interaction.

Neither can software replicate the other important teaching action that good teachers do in a classroom, the idea of "weaving" the current learning with previous learning, other learning happening outside of the classroom, or life events and situations. "Weaving" requires a general knowledge of the students, their setting, and the events happening around the students in the school at the moment.³

¹ See "Planning with technology in mind: Preparing pre-service social studies teachers to integrate technology in the classroom" (2013) by Shand, Guggino and Costa in the *Journal of the Research Center for Educational Technology*

² See *Oversold and Underused* by Larry Cuban (2001).

³ See "Pedagogy in cyberspace: The dynamics of online discourse" by Xin and Feenberg (2006) in the *Journal of Distance Education*

Another way that technologies are misused is expecting the technologies to teach the students just because there are a lot of potentials for learning. For instance, the Internet and Web 2.0 offer an amazing amount of potentials for learning. Yet students cannot simply be given access to the Internet and be expected to learn. For most students, there are too many distractions, not enough motivation and a general lack of ability to self-direct their learning. Just because students have the potential to learn doesn't mean they will learn!

How should technologies be used?

Really, in order for a new technology to have a wide degree of success in a classroom, the students must experience the technology in a way that the teacher wants them to experience it. This is not student-led learning, but teacher-guided. The idea of students experiencing learning as shaped by the teacher is called a Mediated Learning Environment. Applied to technology, it calls up the image of the teacher standing between the student and the technology. The student is using the technology, instead of just the teacher using it, but they are experiencing it and using it in a way that the teacher wants them to and in an environment (virtual or real) that the teacher controls to some extent.⁴

Conclusion

So, new technologies can be underused in a classroom because they are not used at all or simply used in ways that replicate the way old technologies were used. They can be misused in a classroom through automated software and by expecting the new technologies to teach students just because they have the potential to teach them. Instead of these ways, teachers need to get students using technology in a "Mediated Learning Environment," shaping the way they experience new technologies.

Assignment

Explain how technology is used in your classroom (or, if you don't have one, any classroom that you have a working knowledge or memory of). Do you have technologies that are underused? Misused? Do you use a "mediated learning environment?" What is your opinion of the concept?

⁴The Mediated Learning Experience (MLE) is discussed by Kozulin and Presseisen in "Mediated learning experience and psychological tools: Vygotsky's and Feurestein's perspectives in a study of student learning" (1995) in *Educational Psychologist*.