ARE YOUR STUDENTS REALLY TECH-ING?

by **Adrienne Smith**

Adrienne is an Educational Technology Specialist in Pearland ISD and a doctoral student at the University of Houston in Curriculum and Instruction with a focus on Learning, Design, and Technology.

As a new educational technology specialist, I was determined to transform our campus with technology. I was sure of my plan to get everyone actively engaging students in new ways using devices. I could see myself winning the President's Award for Excellence in Technology Integration. A round of applause broke out as I prepared to make my acceptance speech …

In reality, I walked down the silent hallway, stepping lightly so as to not disturb classes with the click-clacking of my high heels. As I glanced in the doorways of classrooms, I kept seeing the same thing, again and again – the beam of a PowerPoint, displaying text on a screen. Students were slumped down in their seats, heads drooping, looking completely uninterested.

Many teachers I met with were enthusiastic about technology and genuinely believed that they were actively integrating technology in their classrooms, but the students were seeing it differently.

Out of the Mouths of Babes

Mr. Westbrook is an enthusiastic teacher known for being willing to try new things, and he identifies himself as an advanced technology integrator. He is a good teacher and his students like him. He reports using a document camera and projector on a daily basis to deliver instruction, and considers his use of technology effective.

When I first came to Mr. Westbrook's classroom, he introduced me to his students as the new technology specialist. Immediately, a students asked, "Why can't we use technology in here more often?"

Mr. Westbrook laughed, "We use technology in here every day."

"No. Not we. You. You use technology in here every day with your PowerPoints," said the student. "But we don't get to use it."

The Disconnect

Many teachers I have spoken with, like Mr. Westbrook, use technology to deliver instruction, and that is a great start. That is not necessarily the perspective of the students. They were telling me they didn't get a chance to make much use of technology themselves – the teachers did all the "teching," and the students were just on the receiving end.

Okojie, Olinzock & Okojie-Boulder (2006) found, ten years ago, that the majority of teachers were adamant that technology was strictly a tool to deliver instruction, and they failed to realize its potential for enabling students to interact with the curriculum in more significant and effective ways in efforts to reach mastery. Things have not changed much since then. In Aydin, Dogan, and Kinay's 2012 study, they reported many teachers do not understand the difference between technology use and technology integration.

In many of our classrooms, technology is used mainly to deliver content – "teching" at students, using technology to transmit information. Some teachers also create technology-based content (i.e. PowerPoint, iMovie) for their classes to enhance student interest. These steps can and do improve learning, and they are important, but using technology solely to provide instruction or deliver content is not true technology integration. We are not fully utilizing the potential of these devices if we stop there.

I believe that technology integration calls for students to actively use technology, rather than just viewing technology-based content created by teachers or publishers.

Technology integration requires focusing on the learning task at hand, not the technology. The technology should be used as a transparent tool that fits the tasks, thus enhancing learning. For example:

Subject: World History

Topic: World War II battles

Objective: Students research and learn about the battles (the learning task at hand).

Activity: Students recreate the battles using their devices and Web 2.0 tools or apps

Commentary highlighting different parts of the battle is required.

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Subject: Math

Topic: Graphing

Objective: Students should know whether to use less than or greater than when adding an inequality, whether to restrict the domain or range, how to modify an equation to move a parabola to the left or the right, etc. (learning task at hand)

Activity: With an online graphing calculator, use expressions and restrictions to draw pictures, developing skills in graphing lines and parabolas and restricting domains and ranges.

This is a time of opportunity for all educators. We all want students who are engaged and invested in learning, and we want them to be prepared for a digital future.

It is our job to find the balance between (1) using technology to instruct and deliver and content (2) integrating technology so that students use it to help themselves learn and create. ●

References

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