



Technology and Student Engagement

By Lauren DeGroot, L.V. Rogers Secondary School, SD 8 - Kootenay Lake

Last week, to illustrate how DNA replicates itself, my biology teacher brought up a video clip on YouTube. Far from a dry textbook explanation, this was a three-dimensional narrated animation which interested the class in a way “turn to page 572” never could. In that same class, however, it’s common to see several hands texting discreetly inside purses or behind desks, or students with white iPod cords dangling from inside the hoods of their coats. Technology is thus a double-edged sword when it comes to engaging students in the classroom; its applications can simultaneously connect, teach and distract.

This year I saw a “Smart Board” for the first time. An electronic whiteboard, it allows the teacher to write notes, bring up interactive games and the internet, all using the same device. While it was entertaining, and perhaps slightly more engaging than a traditional projector or blackboard, it seemed to me like a waste of money. The teacher still showed videos on VHS tapes, and having pink and purple notes with rainbow titles doesn’t make chemistry any easier. This is a case where I think technology and gimmicks were taken to an unnecessary point; a chalkboard would have accomplished the same thing, with equal student interest.

Regardless of technology used, the course content and how the teacher presents it will decide primarily how engaged students will be in the subject. For example, my comparative civilizations class this year had a two-hour discussion on the role of religion in schools and the creation versus evolution debate. I have never seen an entire class discuss an issue with such insight and interest, with no technology involved. It challenged my views in a way a movie has never done, and kept me thinking long afterwards.

While conversation is great when it contributes to class learning, the group discussing weekend party plans at the back of the class is always a challenge for teachers. Cell phones have allowed this problem to reach a new level; not only can students whisper to their neighbor, they can now text with anyone in the world. While cell phones are banned in the classroom, it is difficult for a teacher to enforce, unless the student is caught outright. I’m always amazed at their inventiveness when it comes to hiding electronics, effort that could be better spent focusing on the course. iPods present a similar problem; while fine for individual work, it’s impossible to focus on a lecture with music playing over top of the teacher’s voice.

Conversely, technology can be a huge benefit to students struggling to keep up in a course, or learning from home. In math class I had trouble reading, copying and understanding the notes as fast as the teacher would write them. I discovered the “Charged up for Math and Science” application on the provincial education website, however, and with its help, was able to pull off an A in the course. It’s a simple idea; recorded lessons in math and biology with fully worked out solutions on an electronic “whiteboard.” It lined up with the lessons we did in school, and I could pause and fast-forward as much as I wanted, to work out problems at my own pace and then see the solution. A second feature on the website, “Live Tutor” is also an example of technology engaging students outside the class. You can work with a real person on a question, for up to twenty minutes. I often found that explaining my question and why it wasn’t working was enough to make me see new solutions. As my level of math is now higher than my parents can easily help with, these programs gave me a substitute teacher I could access from anywhere.

So how do teachers decide which technology to allow and use in the classroom to maximize student interest? I think this is a question which depends on the individual course and teacher. Technology is often only as effective as the person who uses it, and in the case of expensive ideas like the “smart board,” teachers must seriously consider whether or not it makes the course easier to understand. Using only new gadgets and videos to instruct gives students the impression that there will always be an animated movie or tutor to help, which isn’t true in most aspects of life. On the other hand, avoiding these methods can prevent a visual learner, or an otherwise unengaged student, from reaching their potential in the class.

During my three years in high school, I’ve seen and used a range of technologies in and out of the classroom. The internet provides a myriad of possibilities for learning; from e-mail exchanges with students in another country for language courses, to online calculus lessons. Students today have access to a world of information, and it is a teacher’s challenge to channel this into relevant course teaching. While technology has the potential to distract, I believe that when used properly it can increase student involvement and interest.
