

## How PowerPoint Is Killing Education

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### **When teachers reduce curriculum content to bullet points, student learning suffers.**

In the old days (10 years ago), school supervisors and administrators used to ask teachers, "Are you using technology in the classroom?" No need to ask any more—in the last decade, the tech race has gotten into full swing. With regard to classroom lessons, however, this trend has not been entirely positive. In classrooms across the United States, overheads have been scrapped and replaced with digital projectors and PowerPoint presentations. The lights have gone down, and the curtain has gone up on the bulletization of education. In a field driven by essential questions, many school leaders and teachers have forgotten to ask the essential question, *How* are you using technology?

The allure of PowerPoint is understandable. Teachers used to spend hours searching through departmental reference books or other resources in the local or school library and then wait in line to photocopy the chosen materials. Or worse, they typed everything onto a mimeograph master, which later needed to be run off (and later still, sniffed by their students). With PowerPoint, teachers can Google, copy, and paste in living color. Perhaps best of all, they can store all their lessons on a portable hard drive no bigger than their thumb. No more three-inch binders that weigh 15 pounds; no more paper cuts; no more getting high in the copy room. In just a few short years, this seemingly utopian world has made converts of many. This trend is apparent across disciplines and grade levels.

### **The Root of the Problem**

The root problem of PowerPoint presentations is not the *power* or the *point*, but the *presentation*. A presentation, by its very nature, is one-sided. The presenter does everything—gathers information, eliminates extraneous points, and selects the direction and duration of the presentation. The role of the audience is to sit and absorb the information. Yes, they may ask questions, but typically only those queries that directly relate to the slides are deemed worthy of responses. What happens to thoughts and ideas that are not part of the presentation? This approach does little to promote creative thinking—or any thinking at all.

In fairness, teachers must always edit information when creating a lesson, simply because there would be no end to it if we fully examined each discipline's nearly infinite breadth and depth. However, more than an "old-fashioned" lesson, a PowerPoint presentation conveys to students that there are only two types of information: things we need to know (what is on the slides) and things we do not need to know (everything else). Faced with that visual cue, only the bravest—or brightest—students will challenge the rigidity of the presentation. Thus, facts travel from the teacher, to the PowerPoint slide, to the students' notes with little or no opportunity for discussion, analysis, or evaluation.

While students mindlessly copy the slides' bullet points into their notebooks, teachers frequently lecture. Who can blame them? It would be incredibly boring to watch students copy notes. Inevitably, the slower students negotiate for more time to copy, while the speedier kids (or those who don't even bother to work) sit idly by. The teacher must now select among the following three undesirable options: create down time for some, speak while students are otherwise engaged in copying, or move on to the next slide, leaving the slower students behind.

### **Vroom!**

Imagine the following scenario: You, a school administrator, enter a high school biology classroom and find each of the six chalkboard panels covered with chart paper. The bell rings and the teacher begins his lesson on cell reproduction. As he speaks, he tears off the first piece of paper to reveal the definition of mitosis. The students, in true Pavlovian fashion, scramble for their pens and begin copying.

The teacher then removes another piece of paper, which reveals a display of the various steps of mitosis. This time, he makes a cool "vroom!" sound as he takes down the paper. Perhaps a hand-drawn diagram accompanies the bulleted text. The teacher repeats this pattern (alternating sound effects) until all six panels are exposed and the day's class notes are fully visible. By the dismissal bell, the teacher has explained cell reproduction, and the students have filled several pages with notes.

How would you rate this lesson? Allow me to help out: This is essentially a poorly constructed PowerPoint presentation without the computer. It has not encouraged students to investigate, inquire, or engage in critical thinking. The teacher may erroneously believe that he has somehow injected life into the monotony of copying bulleted information by using gimmicks, such as sound effects. Unfortunately, far too many lessons now unfold in this manner.

### **"Covering" Material or Dumbing It Down?**

Why have so many lessons, in so many classrooms, in so many schools devolved in this fashion? One reason, and perhaps the easiest target of all, is the era of high-stakes testing. It started long before No Child Left Behind,

although that legislation poured gasoline on the fire. PowerPoint is a very effective tool for deftly "covering" material.

In a recent *New York Times* article (Bumiller, 2010), various members of the U.S. military railed against PowerPoint. They were sick and tired of their commanding officers using digital presentations to oversimplify military objectives and mission details, reducing complex directives to a handful of bulleted slides. Brigadier General H. R. McMaster called PowerPoint an internal threat. McMaster told the *Times* reporter, *It's dangerous because it can create the illusion of understanding and the illusion of control. Some problems in the world are not bullet-izable.* (p. A1)

Many classroom teachers are making the same errors that corporals and generals are making—attempting to convey convoluted and difficult information without first teaching learners the skills required to comprehend these higher-level constructs. Whether they are learning about cell reproduction or the strategy for securing the Swat Valley, people need to understand concepts. Dumbing information down promotes less understanding, not more. Most standardized tests are not designed to assess conceptual understanding. In addition, standardized assessments are now given far too frequently. Schools under pressure to cover more material and prepare for more tests are understandably limited in the amount of time they can devote to developing students' deeper understanding. It is difficult to blame an individual teacher, school, or school district for settling for "coverage" when state departments of education and the federal government have been sending out the wrong signals. For those who are unmoved by the pedagogical argument against the misuse of PowerPoint, consider for a moment the visual ergonomics of the classroom. Let us even assume (falsely) that PowerPoint is the greatest teaching tool since the invention of chalk. When projecting their presentations on a wall or screen, most classroom teachers dim or shut off the classroom lights so that students will see the projected images more clearly. If one teaches the entire lesson as a presentation, students are essentially sitting in the dark throughout the class period. How can we expect our students to perform at their peak when we create a classroom environment that is conducive to sleeping? Not to mention the potential eyestrain (Vreeman & Carroll, 2007) that can result from looking back and forth from a screen to written notes in dim light through several class periods a day.

## Using PowerPoint Effectively

Perhaps PowerPoint's greatest offense is that it creates a false sense of accomplishment. Just as making a YouTube video may fool us into thinking that we have made art, creating a colorful Power Point lesson may fool us into thinking that we have "taught."

Creating effective lessons is not easy—it is incredibly challenging and time-consuming. It takes proper training and a constant cycle of evaluation and self-assessment involving both teachers and administrators. No application, piece of software, or shortcut can eradicate the need for that interaction.

So should we turn back the clock to the mid-20th century and forego all subsequent technological advances? Of course not. Arguably, the technology of the last 15 years has created an unparalleled seismic shift in the way nearly everything gets done; we are only now beginning to feel the first of many ripple effects. Incorporating technology—including PowerPoint and other applications—into instruction is essential.

The good news is that teachers do not need to jump off the technology train; they just need to change cars. They need to uncover methods of using technology to help students develop oldworld skills that are also 21st century skills, such as critical thinking, problem solving, perseverance, and creativity. Too many of today's young people have adopted a text and Twitter mentality, reducing thoughts to those that can be summarized in just a few characters. This societal shift increases the importance of teaching for understanding, rather than simply covering content using bullet points.

Today's teacher preparation and staff development should include using technology effectively. For those who currently use PowerPoint presentations, here are a few suggestions.

*Remove many bullet points.* Class notes should be derived from discovery and discussion, not a predetermined list of facts. Create presentations that are rich with images, videos, political cartoons, diagrams, and maps—presentations that feature questions rather than answers.

*Don't waste time with fancy transitions and sound effects.* That time is better spent unearthing additional ways to challenge students to think and create.

*Perhaps most important, keep the classroom lights on.* Whether a student learns from a teacher will be determined over time, but we can guarantee that a teacher is hurting children if he or she forces them to work in the dark.

Despite the severity of gang violence in and around some of our schools, the bullets that we should fear most are the ones projected on the screen—and aimed directly at the brains of our students.

## References

Bumiller, E. (2010, April 26). We have met the enemy and he is PowerPoint. *New York Times*, p. A1. Retrieved from [www.nytimes.com/2010/04/27/world/27powerpoint.html](http://www.nytimes.com/2010/04/27/world/27powerpoint.html)

Vreeman, R. C., & Carroll, A. E. (2007, December). Medical myths. *British Medical Journal*, 335(7633). Retrieved from [www.bmj.com/content/335/7633/1288.full](http://www.bmj.com/content/335/7633/1288.full)

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