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**Reading, Writing and Video Games**

March 20, 2013By PAMELA PAUL

Here’s what I learned: At a certain level on Microwave, the music from the bar scene in Star Wars comes on. If I am at the front line when aliens descend to Earth, we’ll all be in trouble. Also, dealing opium in the South China Sea is more lucrative than trading in commodities.

In short, I didn’t learn much of anything. My parents didn’t expect me to. I just had fun. 

Today, educational technology boosters believe computer games (the classroom euphemism for video games) should be part of classroom lessons at increasingly early ages. The optimistic theory is that students wearied by the old pencil-and-paper routine will become newly enchanted with phonemic awareness when letters dressed as farm animals dance on a screen.

Meanwhile, many parents believe that games children play on home computers should edify children, improve their hand-eye coordination and inculcate higher math skills. The most popular apps in the Apple store for toddlers and preschoolers are educational. Even parents who scoff at the idea of toddlers learning from Dora gleefully boast about their 2-year-olds’ having mastered basic math on Mommy’s phone.

The concepts of work and play have become farcically reversed: schoolwork is meant to be superfun; play, like homework, is meant to teach. There’s an underlying fear that if we don’t add interactive elements to lower school curriculums, children won’t be able to handle fractions or develop scientific hypotheses — concepts children learned quite well in school before television.

In a 2012 survey of elementary and middle school teachers by [Common Sense Media](http://www.commonsensemedia.org/research/children-teens-and-entertainment-media-the-view-from-the-classroom/key-finding-2%3A-types-of-media-effecting-performance), 71 percent of teachers say entertainment media use has hurt students’ attention spans “a lot” or “somewhat.” The findings have had no apparent effect on palpable enthusiasm for interactive teaching. When experienced teachers express skepticism about the value of computer games in school, they’re often viewed as foot-draggers or change-resistant Luddites. A 2012 [Project Tomorrow report](http://blogs.kqed.org/mindshift/2013/02/are-teachers-of-tomorrow-prepared-to-use-innovative-tech/) (paid for in part by the technology industry), found that only 17 percent of current teachers believe technology helps students deeply explore their own ideas.

Technology firms are understandably eager to enter the lucrative school market and acquire customers at the earliest age. News Corporation plans to introduce in schools a [new tablet computer](http://www.nytimes.com/2013/03/06/business/media/news-corp-has-a-tablet-for-schools.html?pagewanted=all&_r=0) that directs a child’s wandering gaze with the on-screen message: “Eyes on teacher.” Perhaps the child would have done just that had he not had a colorful screen blinking in front of his face. Take-home games for the device include one in which Tom Sawyer fights the Brontës. (Lest children avert their attention to the actual books.)

Alarmists warn that schoolchildren won’t excel in the i-economy if they aren’t steeped in technology. Many schools boast of their iPad-to-kindergartner ratio on the theory that children should learn early on how to use a touch pad. Really? Any parent with an iPhone can tell you how long it takes a small child to master the swipe.

OBVIOUSLY there is a place for technology in the classroom. For students of a foreign language, interaction with a native speaker is invaluable. Distance learning can connect a talented inner-city child with a math professor at M.I.T. Schools that cannot manage an incubator in the classroom will benefit from observing an egg crack open on-screen. High school students can study programming, and yes, even learn to design games.

In classrooms, apps may supplement traditional lessons in handwriting, letter recognition and math drills. Digital puzzle games offer none of the tactile effort involved in turning a shape and trying — and trying again — to get it to fit. Multiple studies show that skills learned on-screen don’t always transfer to real life. Is it really advantageous for [GarageBand](http://www.apple.com/ilife/garageband/) to replace school orchestras?

Many of the games marketed as educational aren’t as much fun as video games children would play if left to their own devices. But the added bells and whistles still make it harder for them to focus on plain old boring work sheets and exams. Imagine how flat a work sheet would seem after a boisterous round of Zap the Math From Outer Space.

Technologists aim for educational games that are “immersive” and “relevant,” “experiential” and “authentic,” “collaborative” and “fulfilling” — adjectives that could easily apply to constructing an art project out of found objects. It’s easy to foresee a future in which teachers try to unpeel children from their screens in order to bring them back to such hands-on, “real world” experiences. To renew their “focus.” “Imagine if kids poured their time and passion into a video game that taught them math concepts while they barely noticed, because it was so enjoyable,” [Bill Gates said](http://fluency21.com/blog/2012/08/09/bill-gates-why-game-based-learning-is-the-future-of-education/) last year. Do we want children to “barely notice” when they develop valuable skills? Not to learn that hard work plays a role in that acquisition? It’s important to realize early on that mastery often requires persevering through tedious, repetitive tasks and hard-to-grasp subject matter.

How’s this for a radical alternative? Let children play games that are not educational in their free time. Personally, I’d rather my children played [Cookie Doodle](http://www.shoethegoose.com/CookieDoodle.aspx) or [Cut the Rope](http://www.cuttherope.ie/) on my iPhone while waiting for the subway to school than do multiplication tables to a beep-driven soundtrack. Then, once they’re in the classroom, they can challenge themselves. Deliberate practice of less-than-exhilarating rote work isn’t necessarily fun but they need to get used to it — and learn to derive from it meaningful reward, a pleasure far greater than the record high score.

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This article has been revised to reflect the following correction:

**Correction: March 19, 2013**

An earlier version of this article incorrectly described the release of a free version of the role-playing game SimCity for classrooms. While [GlassLab](http://glasslabgames.org/), a project of the [Institute of Play](http://www.instituteofplay.org/), an nonprofit educational design organization, last week unveiled an [online resource](http://www.simcityedu.org/) for teachers, based on SimCity, it does not plan to release a version of SimCity for students to use in classrooms until this fall.