

Game Design as Educational Pedagogy

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Video Games & Digital Media

- Today's student has:
 - spent fewer than 5,000 hours of their lives reading
 - more than 10,000 hours playing video games
 - another 10,000 on their cell phones
 - more than 20,000 watching television



Prensky (2006)

Prensky, M. (2006). *Don't bother me mom – I'm learning!* St. Paul, MN: Paragon House.

What Does School Have To Offer?

Thursday - January 18, 2007

"THE PRETTIEST VILLAGE IN MAINE"
Wiscasset Newspaper
"Serving Alna, Dresden, Edgecomb, Westport, Wiscasset and Woolwich"

When did your teenager last say school was fun?

Barbara Martin

If the greatest challenge you faced from some of your high school classes was trying to stay awake until the bell rang, then welcome to instruction in the 21st century. Sara Sutter, an art teacher at Wiscasset High School, runs a class called Media Marketing that does far more than just keep them



http://wiscassetnewspaper.maine.com/2007-01-18/media_marketing.html

An alternative Pedagogy

- schools typically have access to PowerPoint
- teachers already have some facility with the tool
- students are also familiar with the tool
- everyone would like to be able to use it for more than just another PowerPoint presentation

Homemade
PowerPoint
Games



It's better because it's homemade!

British Literature Project

- 2 sections of the same course
 - approximately 20 students in one section (treatment)
 - approximately 15 students in second session (control)
- taught essentially an online course in a laptop supported environment
- unit on Shakespeare, comprising of two novel studies

The Study

- Conducted on the second novel study
- Control Group
 - students worked in small groups to review the novel by using traditional methods the teacher has used in the past
- Treatment Group
 - worked in groups to create PPT Game

Methodology

- used scores from the first novel study exam as pre-test scores
- used scores from this second novel study as post-test
- compared improvement of student scores in the treatment group with the control group

Findings

- from a statistical standpoint, there were no significant difference in student performance (F value = 0.090 / α = 0.766)

Summary of Student Performance Data

	Control Group	Experiment Group
Pre-Test	78.83%	76.61%
Post-Test	85.14%	84.36%
Average Difference	+ 6.32%	+ 7.75%

Conclusions

- homemade PowerPoint Games can be as effective a pedagogical strategy as the other learning activities commonly utilized
- very small sample size (n=35)
- extrapolate out the same difference in scores over a sample of 700 the difference in improvement becomes statistically significant

Homemade PowerPoint Games



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<http://it.coe.uga.edu/wwild/pptgames/index.html>

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