Game Design as Educational Pedagogy

Kathy Cleson & Meghan Adams
University High School – Normal, IL

Michael K. Barbour
Wayne State University  Detroit, MI

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)


What Does School Have To Offer?

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

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

<table>
<thead>
<tr>
<th></th>
<th>Control Group</th>
<th>Experiment Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>78.83%</td>
<td>76.61%</td>
</tr>
<tr>
<td>Post-Test</td>
<td>85.14%</td>
<td>84.36%</td>
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<tr>
<td>Average Difference</td>
<td>+ 6.32%</td>
<td>+ 7.75%</td>
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</tbody>
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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

It's better because it's homemade!

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

Contact Information

Kathy Clesson
Teacher
University High School – Normal, IL
kmcless@ilstu.edu

Michael K. Barbour
Assistant Professor
Wayne State University – Detroit, MI
mkbarbour@gmail.com
http://www.michaelbarbour.com