

Measuring Our Information Literacy Footprint: Assessing Games-Based Learning in Library Instruction

Katelyn Angell and Eamon Tewell, Long Island University Brooklyn

Games-Based Learning (GBL)

- Increasingly popular in public & academic library settings
- Digital, even digital, and hybrid approaches

- More fun activities, more participation, challenges, active participation

Library Instruction at LIU Brooklyn

What are the most important skills for students to have?

- Information literacy
- Library instruction
- Information literacy
- Information literacy

Special thanks to the librarians who have helped create this content!

Our Project's Origination

- Considering incorporating GBL into instruction
- Review of the literature and GBL activities
- Few answers to the question at hand:

Does playing games impact student learning in academic library instruction?

Methodology

- Sample: 86 students in ENG 16 classes
- Experimental group: students in classes using games
- Control group: students in classes without games
- Data collected via six-item pre- and post-test assessment tool
- Analyzed data with one-tailed paired samples t-tests
- Question: What other methods besides tests can be used to assess games in library instruction?**

Thank you!

Kate Angell
kate.angell@liu.edu
kate.angell

Eamon Tewell
eamon.tewell@liu.edu
eamon.tewell

White: #1907, #1908, #1909, #1910

The Games

Identifying Keywords

What are the most important keywords for the topic you have to do in library research? Keywords are the important words that describe the topic and are helpful to your search.

Click and drag into the box to identify the words that are most important for: **The Representation of Women in Film**

Citation Tic Tac Toe (JMU)

<https://www.lib.jmu.edu/tictactoe>

Doing Research: Keywords (UIC)

<http://www.uic.edu/depts/lib/reference/services/tutorials/Tutorial-Final%20Version.swf>

Limits and Conclusions

Limits

- Each instructor was assigned to only teach in one condition
- Time could have accounted for improved post-test scores
- Researchers did not create games

Conclusions

- Preliminary evidence supports inclusion of online games into information literacy pedagogy
- Findings warrant additional research on the effect games have on student learning

Experimental Group Class Outline

- Overview of class content (30 min)
- Pre-test (5 min)
- Introduction and keyword development (30 min)
- Students play keyword game (15 min)
- Continuation of keyword lesson (15 min)
- Students complete activity (10 min)

The Results

Significant differences were found between pre and post-test scores.

Students who played keyword games showed a significant increase in their scores on the post-test.

The results of this study support the use of games in library instruction.

These games are available at www.lib.jmu.edu/tictactoe and www.uic.edu/depts/lib/reference/services/tutorials/Tutorial-Final%20Version.swf.

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- Digital, non-digital, and hybrid approaches



Research Skills	Parts of a Book	Internet Smarts
100	100	100
200	200	200
300	300	300



- Key characteristics: competition, challenges, active participation

Our Project's Origination

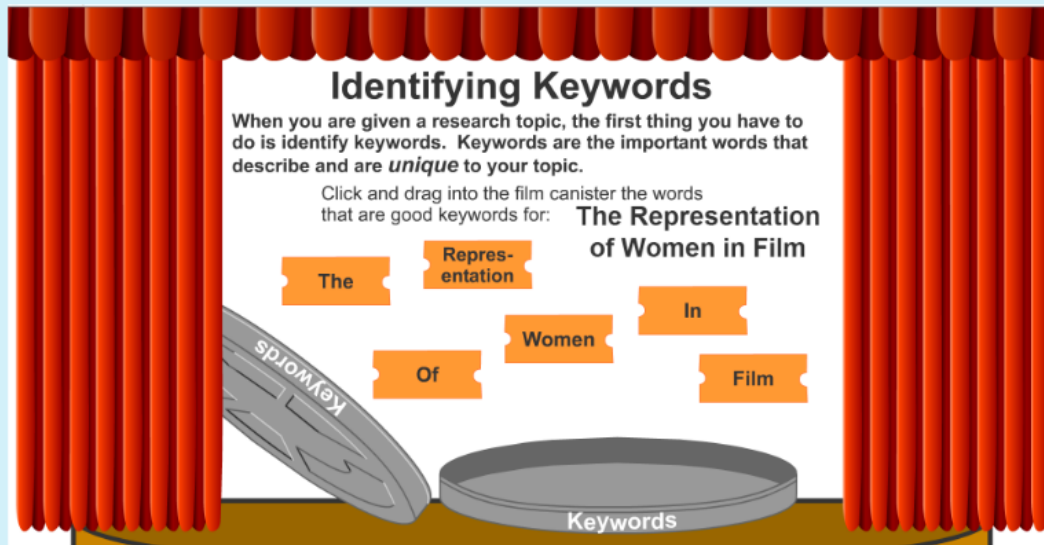
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Library Instruction at LIU Brooklyn

- Well-embedded at freshmen level: 1300 students/year
- Instructional opportunities:
 - 1 session in Orientation Seminar
 - 2 sessions in Core Seminar
 - 2 sessions in English Composition (ENG 16)
- **Question: Are some instructional scenarios better equipped for games than others?**

The Games

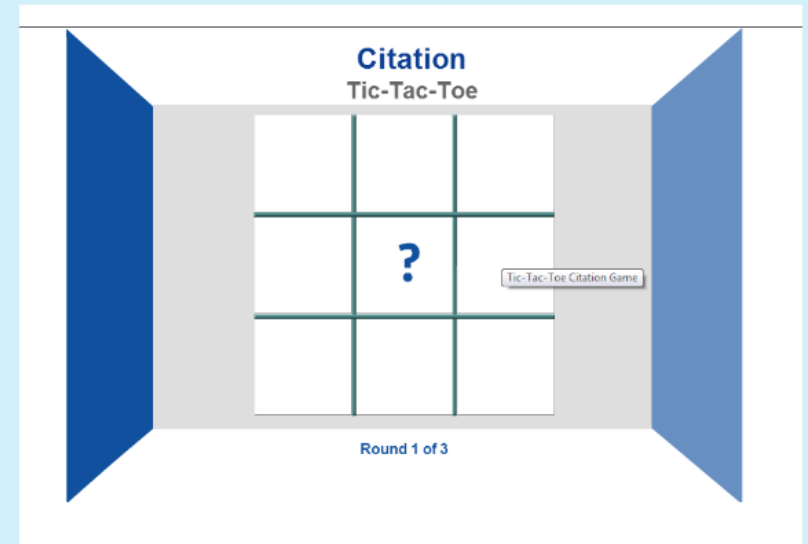


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Experimental Group Class Outline

- Overview of class content (5 min.)
- Pre-test (5 min.)
- Presentation on keyword development (10 min.)
- Students play keyword game (15 min.)
- Demonstrate 2 databases (15 min.)
- Students complete activity (25 min.)

The Results

- Significant difference between pre- and post-test scores in exp. group
 $t(42)=-3.06, p=.002$
- Student performance improved markedly on post-test (10 points)
- No significance found between pre- and post-test scores in control group
 $t(42)=-.506, p=.308$
- Results suggest incorporation of games into library instruction can improve knowledge retention

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Kate Angell

katelyn.angell@liu.edu

@kate_angell

Eamon Tewell

eamon.tewell@liu.edu

@eamontewell

Slides: tinyurl.com/games-assess