

## Project Overview

The Mobile Information Literacy (MIL) tool is a user-friendly literacy app to help university students hone their information literacy skills through mobile technology.

Academic literature emphasized the value of teaching information literacy skills, clearly linked with critical thinking skills, as part of a comprehensive university education (Kim, 2013). Undergraduate students often lack the valuable information literacy skills that faculty want them to have (DaCosta, 2010).

The project supports the design and development of the MIL Tool and explored the best strategies for delivering and accessing learning content on mobile devices. Testing of the tool determined the effectiveness of using mobile technology to enhance students' information literacy skills. Information literacy eLearning lessons are designed to demonstrate how to locate, evaluate, and use information effectively.

## Methodology

Mixed method (quantitative and qualitative) non-experimental approach, including both pre-and post- literacy tests and student questionnaires.

Student participants majoring in social work, psychology and social development studies volunteered to test the MIL Tool (n = 99).

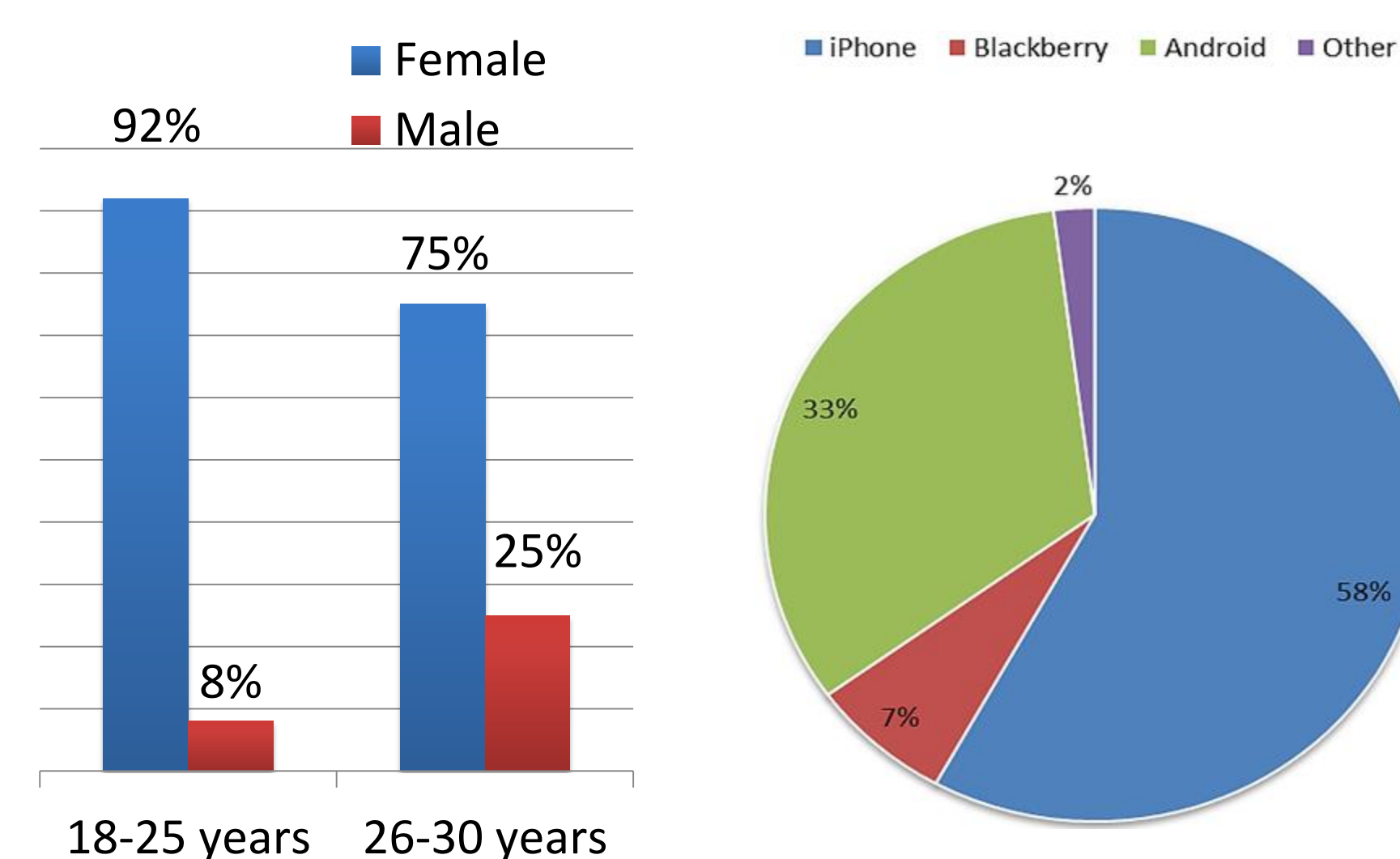


Figure 1. Age & Gender

Figure 2. Type of Phones

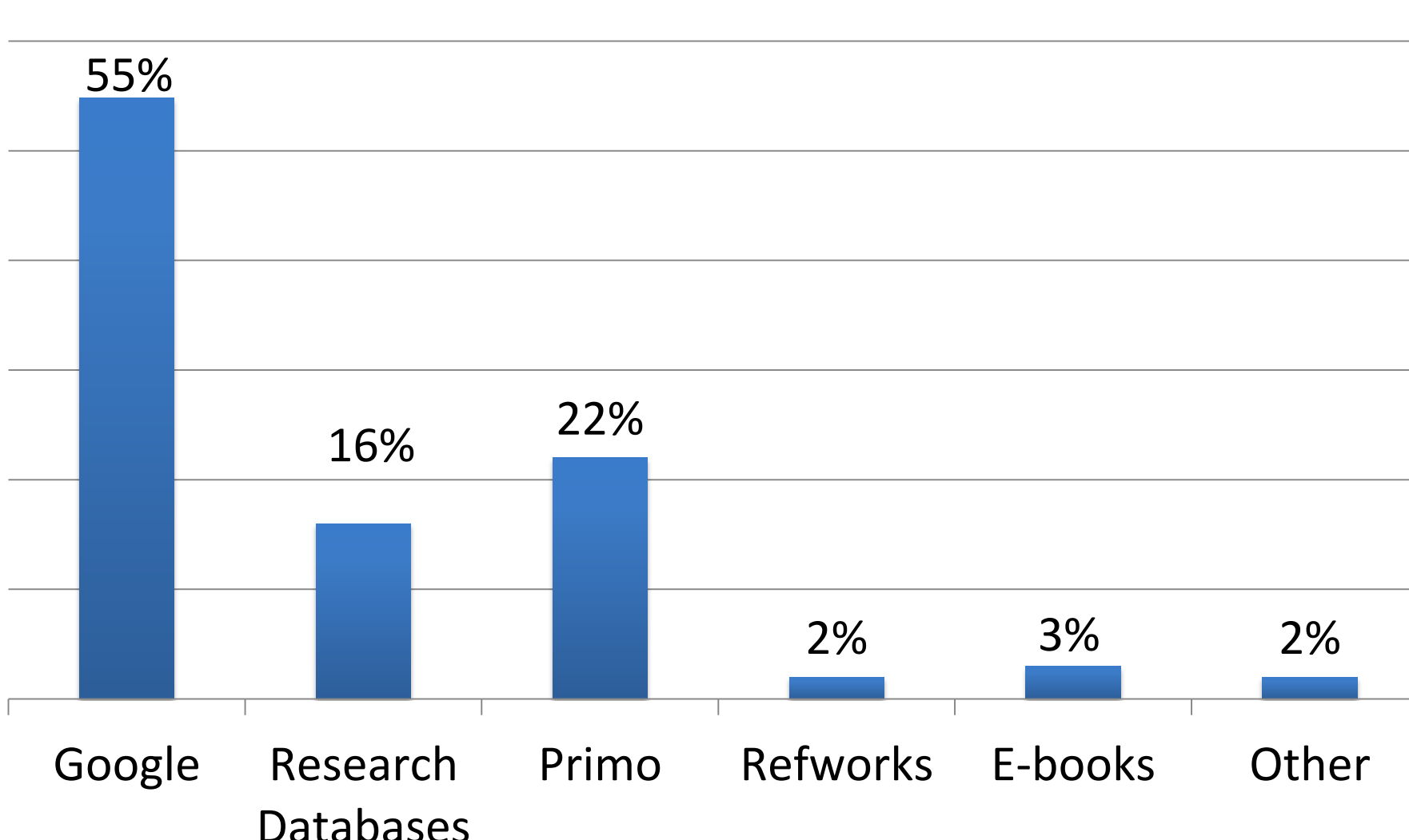


Figure 3. Accessing Search Databases

## MIL Tool Modules

### Most Frequently Accessed Lessons

Lessons	Response Percent
Locate: Lesson 1: An Introduction to Primo Central	60.2%
Locate: Lesson 2: The Basics: How to Search	44%
Locate: Lesson 3: Finding Articles	78.3% (3)
Locate: Lesson 4: Finding Peer Reviewed Journals	82.3% (1)
Evaluate: Lesson 5: Evaluating Information Sources	73.3% (4)
Evaluate: Lesson 6: Peer Review Process	60%
Evaluate: Lesson 7: Popular Vs. Scholarly Resources	73.2% (5)
Use: Lesson 8: Using the Web for Resources	67.9%
Use: Lesson 9: RefWorks	61.3%
Use: Lesson 10: When to Cite Your Articles	79.3% (2)
Use: Lesson 11: Types of Written Articles	64.1%
Use: Lesson 12: How to Approach Assignments	68.2%
Use: Lesson 13: What is a Paragraph?	56.8%

## Results

### Average Participant Use of MIL Tool: 7:59 Minutes

	Number	N	Increase	N	Decrease	N	Maintain	Total
Study Participants	67	37	55.2%	19	28.4%	11	16.4%	100%
Comparison Group	32	16	50%	4	12.5%	12	37.5%	100%

Figure 4. Information Literacy Knowledge Pre-Post Test Scores

- 71.6% of students who received information via their smartphones maintained or increased their test scores for the ability to locate, use and evaluate information.
- 28.4% of students' information literacy knowledge decreased from beginning to the end of the semester.
- 75% of online students increased or maintained the level of information literacy during the semester.

## Student Feedback

Positive experience with the info literacy lessons and the use of mobile technology:

- "short lessons but to the point."
- "easy to use."
- "creative – different test/quiz styles."

Liked the flexibility/availability of any time learning:

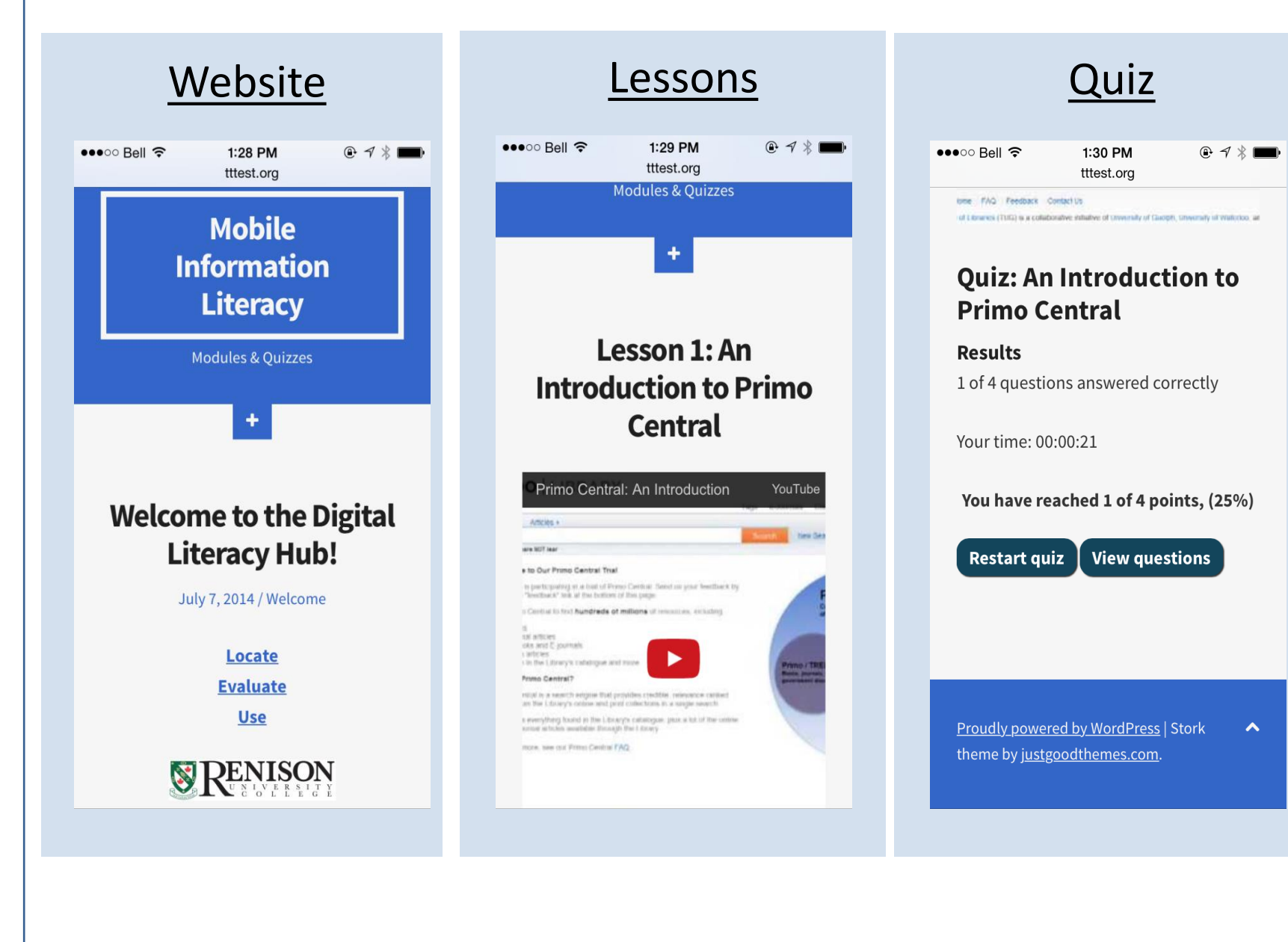
- "very convenient."
- "learn on my own time, anywhere."
- "able to review from time to time."
- "I can access and learn on Wi-Fi on campus and on the bus."

## MIL Tool Website & Samples

URL: <http://beam.to/renmil>



Figure 5. MIL Tool - QR Code



## Discussion

Gaps in participants' information literacy knowledge lead us to emphasize that **information literacy be an explicit part of the core content** in classroom curriculum.

The prototype MIL tool requires some technological and content enhancements, such as short videos and new exercises to enhance usability.

## Conclusion

Outcomes of this project contribute significantly to the emerging field of m-learning. Inclusion of information literacy in undergraduate curricula often remains an aspiration rather than a fully realized ideal and this project addresses one way to incorporate information literacy into higher education classes.

The MIL project aims to fill this gap in the research while supporting m-learning pedagogy at the higher education level and promote mobile learning among undergraduate students, the community and beyond.



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## References

- Association of College and Research Libraries (2000). Information Literacy Competency Standards for Higher education, Information literacy defined. Retrieved from <http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm>
- Ally, M. (2005). Multimedia information design for mobile devices. In, M. Pagani (Ed.). Encyclopedia of Multimedia Technology and Networking. Idea Group Inc. Hershey, PA.
- DaCosta, J.W. (2010). Is There an Information Literacy Skills Gap to Be Bridged? An Examination of Faculty Perceptions and Activities Relating to Information Literacy in the United States and England. College & Research Libraries, pp. 203-222.
- Kim, B. (2013). The Library Mobile Experience: Practices and User Expectations. (Vol. 49, No. 6). American Library Association.
- Yarmey, K. (2011). Student information literacy in the mobile environment. Educause Quarterly, 34(1), n1.