Do Online Learning Modules Have a Role in Information Literacy Instruction?

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CHAPTER 10. Assessment in Action Case Study: Do Online Learning Modules Have a Role in Information Literacy Instruction?

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Research Question & Hypothesis
• **RQ:** Does the addition of online tutorials and quizzes in a 50-minute session positively impact student learning of IL concepts?

• **H1:** Adding online tutorials and quizzes to 50-minute library instruction sessions reinforces learning of IL concepts and engages learners.
Learning Outcomes

• Evaluating information (Scholarship as Conversation & Standard Three)
• Using information responsibly (Information has Value & Standard Five)
We support faculty in the pursuit of teaching excellence.

Together, we can master both the art and a science of teaching and learning through open dialogue and collaborative research. Additionally, our educational resources can help you navigate the latest classroom technology.

The mission of the Center for Teaching and Learning (CTL) is to support faculty members in their pursuit of teaching excellence. To fulfill this mission, the Center will:

- Illuminate and educate the Cal Lutheran community on the art and science of teaching and learning.
- Promote open dialogue on the use of sound teaching techniques.
- Advance the scholarship of teaching and learning through collaborative research.
- Encourage student success through the creation of educational resources.
Faculty Partners

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• Private, faith-based university located in Thousand Oaks, California.
• 2,800 undergraduate students pursuing 36 majors and 35 minors.
• 1,300 graduate students pursue master’s degrees in business, information technology, education, psychology, and public policy.
• Doctoral programs in educational leadership and clinical psychology.
• Information literacy assessment program first implemented in 2005.
Tutorial Levels

- First-Year (Level 1)  
- Sophomore/Junior (Level 2)  
- Senior (Level 3)  
Best Practices

Blummer & Kritskaya (2009) conducted a comprehensive review of literature and identified 5 best practices:

1. Identify tutorial’s objectives.
2. Use ACRL. Standards/Framework.
3. Content & design improve through collaboration.
4. Strive to engage users.
5. Evaluation component. facilitates accurate assessment.
Study Design

• Classes were selected using a convenience sample

• Two conditions:
  • Library session/Tutorial
  • Library session/No tutorial
Participants

- 10 undergraduate classes
- 81 students total
- 64% were in Tutorial Group
- 36% No-Tutorial Group
- 47% took Level 1 tutorial
- 4% took Level 2 tutorial
- 49% took Level 3 tutorial
Demographics

![Bar chart showing student levels]

- Freshman
- Sophomore
- Junior
- Senior
• 45.7% First-Year
• 7.4% Sophomores
• 16% Juniors
• 29.6% Seniors
Gender

- 28 Male
- 52 Female
- 1 No response
Research Assignments

- Most students needed to write papers that integrated multiple sources at least weekly (35.8%) and monthly (38.3%)
Measures

• An information literacy test adapted from the Beile Test of Information Literacy for Education (Beile, 2005) administered as pretest and posttest.

• Multiple choice items measured all five ACRL standards.

• Two subscales:
  Evaluation subscale.
  Responsibility subscale.
Key Findings

• Significant positive correlation for Evaluation and Responsibility scores.

• Students who scored well on Evaluation questions also scored well on Responsibility questions. Observed both at beginning and at end of semester.

• More advanced students (Seniors) scored higher on Evaluation and Responsibility than first-year students in beginning of the semester. Already exposed to concepts?
Did Tutorial Improve Responsibility Scores?

• Regardless of whether or not the participant took the tutorial, scores for “Responsibility” were similar in beginning of semester and at end of semester.
• Students in no-tutorial group had slightly lower scores at end of semester than at beginning.
• Students in tutorial group had slightly higher scores at the end of semester than at the beginning of the semester.
• Neither findings statistically significant.
• Tutorials could contribute to “inoculation” effect; “Responsibility” scores drop at end of semester for typical students, but for student taking tutorial, stay the same, or even increase slightly.
Did Tutorial Improve Evaluation Scores?

- Participants did not score higher or lower on the Evaluation questions at the end compared to beginning of semester regardless of whether or not they took the tutorial.
Limitations

• Lacked enough participants at every level to fill every condition of the design.
• No Level 1 students in the no tutorial condition.
• Very few participants in Level 2
• Level 3 condition we had participants in both the Tutorial condition and no tutorial groups.
• Most participants who received tutorial are novice freshmen, and most of the participants in the No Tutorial condition were experienced seniors.
• No Tutorial scores are slightly higher than the tutorial numbers; those students are further along in their academic career and perform better.
Considerations

- Level of tutorial
- Participants were given tutorial appropriate for their level of education.
- Level 1 tutorials covered different information than Level 2 and Level 3, however, the assessment questions were the same for everyone.
- Freshmen in broad overview courses given different tutorial (Level 1) than seniors in capstone classes (Level 3).
Thoughts on Evaluation Scores

• Perhaps Senior (Level 3) students did not improve because they were already scoring high on EV questions at the beginning of the semester and they essentially hit a “Ceiling” and could not score higher?

• Level 1 students who took the tutorial scored similarly on the EV scores at the beginning of the semester and end of the semester.

• Level 1 students who took the tutorial scored similarly on the R scores at the beginning of the semester and end of the semester.
Qualitative Findings: Student Recommendations

- **Format** – Shorter overall, more video, less information on slides
- **Engagement** – High degree of interaction to capture & maintain interest
- **Relevance** – Real life examples, course/assignment-related
- **Incentives** – Extra credit to motivate students
- **Delivery** – Integrate with information literacy instruction
Qualitative Findings: More Recommendations

- Repurpose learning modules/create shorter tutorials
- Use with First-Year Seminars
- Create modules for specific majors, courses, assignments
- Use senior tutorial in research methods classes
- Use modules in “flipped” instruction sessions
Consider this library research scenario and the question:
Let’s say you’re doing research on early childhood education and technology. While researching the Pearson Library you come across the following article. “A Head Start with Computers: Kids Learn ABC’s and Floppy Disks,” written in 1990. Now unless you are writing a historical paper on the use of “floppy disks”, this library resource is going to be of little value to your research. Evaluating the resource helps you to ensure it is relevant.

What criteria is used for evaluating this resource?
Choose the correct one from the following 5 options.
Sophomore-Junior Tutorial Scholarship as Conversation

10 Scientific Studies Proving GMOs Can Be Harmful To Human Health

The language on this website is dramatic and emotional. The author will likely stick to evidence that supports his or her opinion.
Unintentional Plagiarism

Did you know that you can plagiarize unintentionally by forgetting to cite, losing a citation, or even forgetting an in-text citation?

Examples of unintentional plagiarism include:

• Failure to cite a source that is not common knowledge.
• Failure to “quote” or block quote author’s exact words, even if documented.
• Failure to put a paraphrase in your own words, even if documented.
• Failure to put a summary in your own words, even if documented.
• Failure to be loyal to a source. This means that you incorrectly attribute information to a source or change the meaning of the information. An example is something called Patchwriting, which is when you use words or phrases from one or more sources and patch them together.
Senior-Level Tutorial
Scholarship as Conversation

How might the conversation of a topic change based on the academic discipline? Consider the different disciplines below along with their related headlines.

Psychology
Depression in late adolescence: a cross-sectional study in senior high schools in Greece

Environmental Science
How Many Cancers Are Caused by the Environment?

Biology
Gene Breakthroughs Spark a Revolution in Treatment for Lung Cancer
Sophomore-Junior Tutorial

Information has Value
When using media in your school presentations, it is vital that you obtain the media legally and follow the guidelines on portion limitations. You know the perfect song to accompany a PowerPoint presentation that you are giving in class so you download the song from the peer-to-peer network PirateBay and use 30 seconds of it during your presentation. Is this legal?

- Yes
- No
- There is not enough information to determine
Senior Tutorial
Information has Value

As a student, you will be using copyrighted material in your papers and projects.

Copyright owners have the right to control a lot of uses of their work such as the amount of copies made, distribution, showing or performing that work in public, and making new works based on existing ones.

There is an exemption to copyright known as fair use. Under fair use you can use a limited amount of copyrighted material without the permission of the owner as long as you follow certain guidelines.
How Are Tutorials Being Used?

• Librarians visit 15 out of 30 seminars each fall
• Level 1 tutorial easily integrated into First-Year Seminars
• Level 1 tutorial used by librarians as activity
• Some faculty assign tutorials on Blackboard

Image from California Lutheran University Writing Center
Going Forward: Course Integration

- Integration of tutorials into online information literacy learning modules via Blackboard by fall 2017.
- Target existing first-year courses e.g. English, Religion, Political Science, Biology.
- Modules feature six asynchronous online sessions encompassing lessons, online discussions, tutorials, and activities.
- Content will be accessed through the Blackboard platform.
- Faculty can select pertinent modules and add to Blackboard portal.

Image from: libraryconnect.elsevier.com/articles/constant-evolution-information-literacy
References & Recommended Readings


Q & A
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