

If at First You Don't Succeed in Your Instruction Methodology, Try, Try Again

Katelyn Angell, First Year Success
Librarian, LIU Brooklyn

Eric Shannon, Reference and Instruction
Librarian Franklin Pierce University



Critiques of Lecture-based Instruction

Low level of student engagement (passive)

Attention span limitations

Does not employ a variety of learning styles/skill sets

Information transmission fallacy (Schmidt et al., 2015)

Creates a chasm between theory and practical applications

What is Active Learning?

“Active learning is generally defined as any instructional method that engages students in the learning process. In short, active learning requires students to do meaningful learning activities and think about what they are doing” (Prince, 2004)

Active Alternatives

Problem-based learning

Cooperative learning or team-based learning (Loo, 2013)

Game based learning (Broussard, 2012)

Clickers/audience response systems (Funnell, 2017)



Three Case Studies

1. Online information literacy tutorials for Franklin Pierce first years
2. MLA citation game for LIU sophomores
3. Amazing Library Race orientation for LIU Brooklyn first years

Online Information Literacy Tutorials at Franklin Pierce University

- Small primarily undergraduate liberal arts college in NH
- About 1450 undergraduates
- Primarily residential
- DPT, PA graduate programs and online students



First Year Inquiry

- Required First year seminar
- Information Literacy one of the Learning Outcomes
- All classes have a required research project component



The Traditional One Shot for First Year Students

<http://libguides.franklinpierce.edu/FYI>

- Three years ago, we developed a libguide and a worksheet for the traditional one shot session
- We see all sections of FYI and all FYI classes meet MWF at either 9 AM or 2 PM
- Class covers research basics such as
 - Inquiry questions
 - Background information
 - Basic catalog and database keyword searching
 - Developing keyword terms

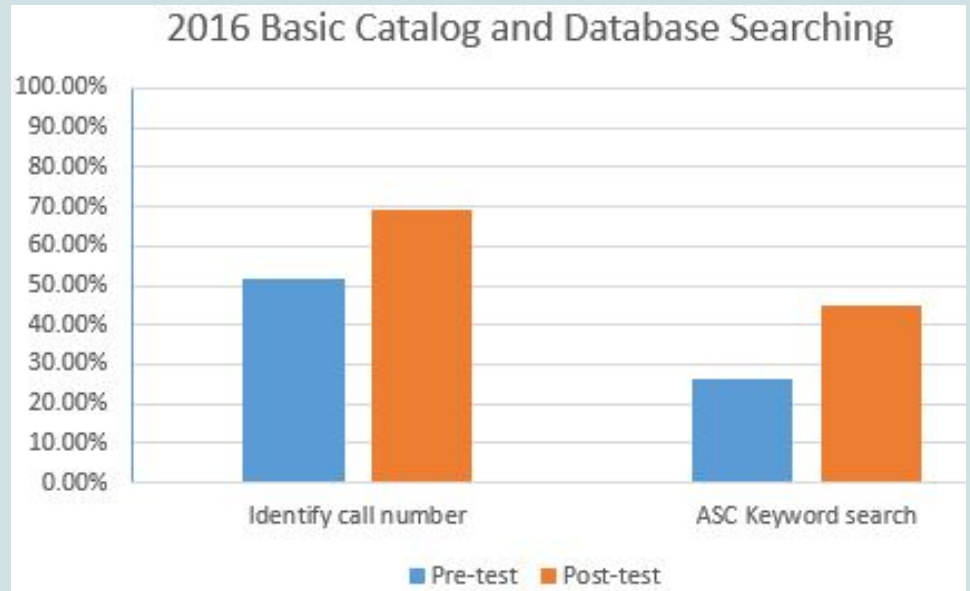
Problems with the Traditional One-Shot

- **Timing/Scheduling**
 - Many classes come to the library well before they have been introduced to their research project
- **No Inquiry Question**
 - Many students come to the library without an inquiry question that they can use to complete the worksheet
- **Information overload**
 - We are bombarding them with too much info for a 50 minute session



First Year Information Literacy Assessment

- Pre-test at beginning of first year prior to library instruction
- Post-test at the end of first semester
- Learning outcomes
 - Basic keyword searching in catalog and database
 - Identification of important keywords of an inquiry question
 - General information literacy knowledge



Observations from Teaching FYI

- Two FPU librarians taught FYI in the fall of 2016 (Shannon & Ingles, 2018)
- Structured class environment
 - Able to come up with keyword terms
 - Use keyword terms in databases and catalog
- Solo research
 - Lacked initiative
 - Forgot about keyword terms and library databases
 - Entered entire inquiry question into catalog search box
 - Googled research question

Why Online Tutorials?

- Scaffolding instruction
 - Ability to introduce concepts to students a little bit at a time throughout the semester
 - Avoid information overload
- Timing
 - Increased ability to delivery online tutorials when students are working on a particular concept
- Videos can be revisited for increased understanding
- Images and graphics have potential to enhance learning

Why Online Tutorials?

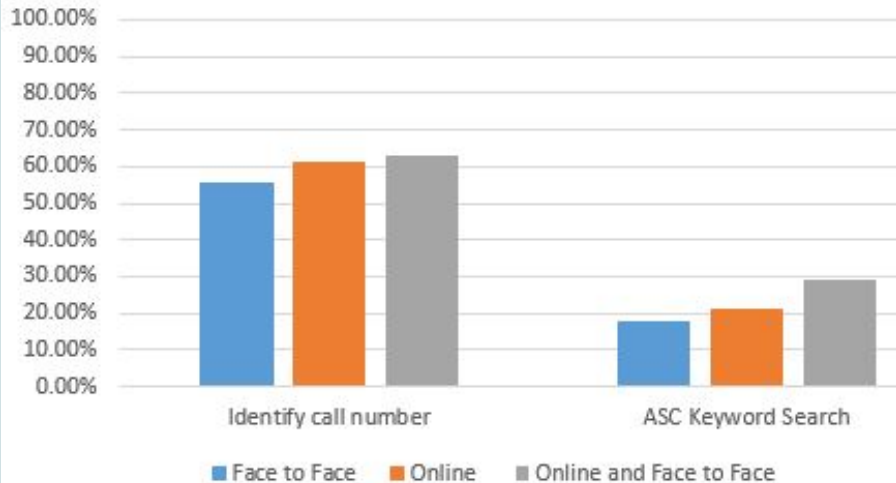
- Identifying areas of concern
 - By creating quizzes that students must compete, instructors can see where students are struggling in order to identify concepts that need more work
- Students get practice using library tools without an instructor present
 - Must must problem solve and think for themselves instead of simply doing
- Face-to face sessions can be focused on personal research
 - If sections do come to the library, the session can be geared more to individual research since students will have already received training through the online tutorials

Creating the Tutorials

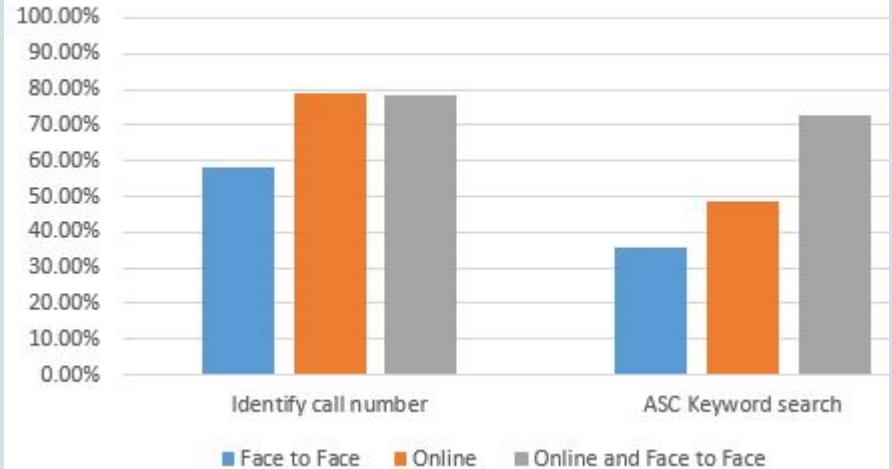
- Canvas LMS quizzes
- Each tutorial corresponds to a tab on the FYI libguide
 - Inquiry question, keywords, catalog, database
- Videos
 - Pre-existing creative commons licensed library tutorials
 - Google vs library resources, scholarly vs popular
 - Screencastomatic created videos
 - Website navigation, catalog, and database searching
- Active Learning
 - Students must actually use the catalog or use academic search complete tutorials
- Tutorials added to canvas commons and professors must import into class

Video Tutorials vs. Traditional One-Shot Assessment

2017 FYI Pre-Test Scores by Instructional Method



2017 FYI Post-Test Scores by Instructional Method



LIU Brooklyn

Home of the Blackbirds!

Urban campus located in
Downtown Brooklyn, New York

About 4200 undergrad students
and 2700 grad students

Offers 200+ degrees and programs



AMERICA'S NEXT
top CITATION



Why Games?

Difficult to gauge student comprehension from lecture

Collaborative learning

Active learning

Incorporation of technology

Population

Who: First and second years

What: Active and collaborative MLA game titled *America's Next Top Citation*

When: 75 minute library session

Where: Library lab

Why: To teach citing in an enjoyable, interactive, and effective method



Poll Everywhere

User-friendly audience response system

Free up to 25 participants

Submit responses via web, text, or Twitter

Multiple choice or open-ended polls

Used successfully in library instruction (O'Connor; Hoppenfeld)

Sample Task

If Miley Ray Cyrus wrote a book how would you list her name in a Works Cited page?

 When poll is active, respond at PollEv.com/katelynangel076  Text a **CODE** to **37607**

Cyrus, M.R.	366221
Miley Ray Cyrus	366222
Cyrus, Miley Ray	366223

Assessment

Well-received by students and instructors

Anecdotal evidence

- Teamwork

- Relevance

- Enjoyment

Future steps

- Pre-test/post-test evaluation

**THE AMAZING
LIBRARY
RACE**

Learning Outcomes

Provide general information about collections and services

Foster connections between:

- Students and library faculty

- Students and their peers

Reduce library anxiety among new college students

Have fun! An alternative to lecture-based orientations

Legs of the Race

1. Online Research

Look up book by Jay-Z; Identify parts of MLA citation

2. Circulation

Complete Mad Lib about borrowing; Locate a book and draw its cover

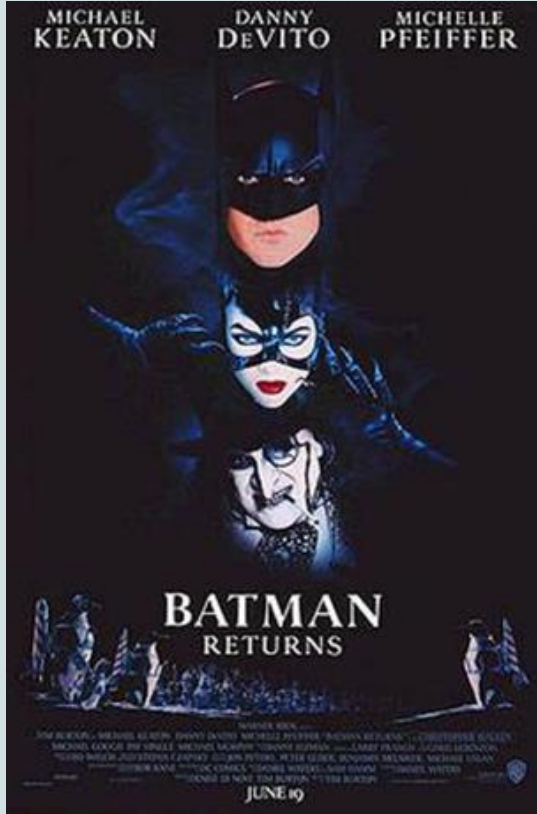
3. Media Center

Recreate DVD cover

4. Reference

Look up information in reference book

Media Center



Assessment

Observation Rubric

Measures student engagement

Learning Comprehension Rubric (pictured)

Used to grade activity

Assesses student learning outcomes

Student Task	Below proficient (0)	Proficient (1)	Above proficient (2)
Q1. Find a book in the library catalog and write down the call number.	2+ errors in call number or left question blank.	One error in call number.	Correct call number
Q2. Describe an Academic Libraries of Brooklyn card and four places it can be used.	Both questions wrong or left question blank.	One of two questions correct.	Both questions correct.
Q3. Identify components of an MLA citation.	One component identified correctly or left question blank.	Two components identified correctly.	Three components identified correctly.
Q4. Complete a Mad Lib about reserve textbooks.	One space answered correctly or left question blank.	Two spaces answered correctly.	Three spaces answered correctly.

References

- Angell, K. (2016). America's Next Top Citation: Teaching MLA skills to students. *College & Research Libraries News*, 77(9), <https://crln.acrl.org/index.php/crlnews/article/view/9555>.
- Angell, K. (2017, January). *Teaching MLA Skills to college students with America's Next Top Citation*. Paper presented at Metropolitan New York Library Council Conference. New York, New York.
- Angell, K., & Boss, K. (2016). Adapting the Amazing Library Race: Using problem-based learning in library orientations. *College & Undergraduate Libraries*, 23(1), 44-55.
- Boss, K., Angell, K., & Tewell, E. (2015). The Amazing Library Race: Tracking student engagement and learning comprehension in library orientations. *Journal of Information Literacy*, 9(1), 4-14.
- Broussard, M.J. (2012). Digital games in academic libraries: A review of games and suggested best practices. *Reference Services Review*, 40(1), 75-89.
- Brumfield, E. J. (2008). Using online tutorials to reduce uncertainty in information seeking behavior. *Journal of Library Administration*, 48(3-4), 365-377

References

- Castello, O., & Pfundt, A. (2017). Engaging learners through self-guided tutorials: Implementing and assessing a flipped classroom model for information literacy instruction. *The Journal of Creative Library Practice*. <http://creativelibrarypractice.org/2017/05/04/engaging-learners-through-self-guided-tutorials/>
- Funnell, P. (2017). Using audience response systems to enhance student engagement and learning in information literacy teaching. *Journal of Information Literacy*, 11(2), 28-50.
- Loo, J. L. (2013). Guided and team-based learning for chemical information literacy. *Journal of Academic Librarianship*, 39(3), 252-259.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223-231.
- Schmidt, H.G., Wagener, S.L., Smeets, G., Keemink, L.M., & van der Molen, H.T. (2015). On the use and misuse of lectures in higher education. *Health Professions Education*, 1, 12-18.
- Shannon, E., & Inglis, L. (2018). Teaching FYI: A learning experience. *College & Research Libraries News*, 79(4), 190-196. <https://crln.acrl.org/index.php/crlnews/article/view/16933>

Image Credits

Batman Returns. Retrieved April 21, 2018 from

https://upload.wikimedia.org/wikipedia/en/8/83/Batman_returns_poster2.jpg

Kilpatrick, B. (2013). LIU Brooklyn wins 2013 Northeast Conference basketball tournament [Online image].

Retrieved from <https://www.sbnation.com/college-basketball/2013/3/12/4096702/liu-brooklyn-2013-northeast-conference-champions-ncaa-tournament-berth>

University of Minnesota College of Biological sciences [Online image]. Retrieved from

<https://cbs.umn.edu/blogs/cbs-connect/groundbreaking-biology-education-effort-launches>

Questions?

Kate Angell

Katelyn.Angell@liu.edu

@kate_angell

Eric Shannon

shannone@franklinpierce.edu