Traditional instruction reformed with flipped classroom techniques

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Traditional instruction reformed with flipped classroom techniques

Jennifer Lee, Susan Beatty, Patrick Feng, Nadine Hoffman, Brenda McDermott

Flipped classroom techniques | Multiple sessions | First-year interdisciplinary course

The traditional vs. the flipped classroom

- The flipped classroom moves away from a traditional lecture-then-homework model.
- Pre-class: students prepare by watching short content-based videos or doing readings. Assessment may also be included.
- In-class: content and learning is reinforced with in-class activities, assessment results can be used to inform in-class work.
- Students: held responsible for learning, increased attendance, engagement.
- Instructors: less traditional lecturing, more facilitation.

Library & writing learning goals

1: Plagiarism, Citations, and Citation Searching

- Read a citation and identify its major components.
- Identify the type of resource from a citation.
- Cite a resource.

2: Research Process and Accessing Information

- Choose, and search a database by combining search terms.
- Use database features: full-text links, emailing references.
- Use databases to generate synonyms and other terms.

3: Source evaluation

- Distinguish between scholarly, reliable, and popular sources.
- The CRAPSy Song (aka, the C.R.A.P. Test Song) (https://youtu.be/CRApSySONg)
- Popular vs. scholarly sources video (James Madison University) (http://www.kb.jmu.edu/resources/connect.aspx?id=3247)

4: Writing/Annotated Bibliography

- Read and summarize a source and assess it in relation to your research.
- Video by the Student Success Centre: reading for abstractions, annotating, and paraphrasing.

The course: Science, Technology, & Society 201

- Inquiry-based learning
- Seminar: only library and writing sessions used flipped techniques
- 50 students
- Incorporated library and writing sessions in course design
- 4 sessions, 1 week apart, alternating with instructor lectures
- First Writing Centre-Library collaboration within a course
- Assessment: 25% of final grade
- 10% Pre-class quizzes
- 15% Summative assessment (in-class)

In-class activity

- Practice annotating and paraphrasing a student-supplied paper.
- Customized, interactive video on quotations and citations.
- Created by the Student Success Centre.
- Created with Articulate software.
- Refine search terms – search a database, then use results to discover new terms.
- Compare database content and search features.

Pre-class activity and quiz

- Search exercise/tutorial of the library homepage.
- Customized, interactive video on quotations and citations.
- Created by the Student Success Centre.
- Created with Articulate software.

Reflections and Findings

- Students benefit: instruction is linked to the skills needed for assignments.
- Time-intensive: course goals, sequencing, content prep, grading.
- Decreased workload: resource sharing for overlapping areas: citation and plagiarism.
- Tip: ensure detailed written instructions (step-by-step is not too much).

What did students think about the flipped classroom? *

Agree (n=33)

Pre-tests were helpful in preparing for the research skills sessions 79%
In-class exercises were helpful in reinforcing the content of the research skills sessions 70%

Instruction increased students’ confidence: *

Since attending, how confident are you in your…

Agree (n=33)

ability to use library resources to find information for a research project 94%
ability to find appropriate scholarly sources 94%
ability to evaluate resources 91%
ability to properly cite sources 82%
ability to paraphrase sources while avoiding plagiarism 82%
ability to write an annotated bibliography 79%

Instruction increased likelihood of future behaviors: *

Since attending, how likely are you…

Agree (n=33)

apply the strategies for summarizing to my future assignments 94%
use library databases in my research 91%
annotate sources while reading 67%