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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

<table>
<thead>
<tr>
<th>TRADITIONAL</th>
<th>FLIPPED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>Lecture</td>
</tr>
<tr>
<td>Homework activities</td>
<td>Classroom activities</td>
</tr>
</tbody>
</table>

1: Plagiarism, Citations, and Citation Searching
- 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

2: Research Process and Accessing Information
- Use database features: full-text links, emailing
- Choose, and search a database by combining search terms
- Cite a resource
  - Identify the type of resource from a citation
  - Read a citation and identify its major components
  - Distinguish between scholarly, reliable, and popular sources
  - Use databases to generate synonyms and other terms

3: Source evaluation
- Ethics approval granted for survey and publication
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- Contact information (all from University of Calgary):
  - Susan Beatty, Librarian, Learning Services, Undergraduate support, liaison [Intern] Communication and Culture, Taylor Family Digital Library, sdbeatty@ucalgary.ca
  - Patrick Feng, Assistant Professor, Faculty of Arts, pfeng@ucalgary.ca
  - Nadine Hoffman, Natural Resources, Energy & Environmental Law Librarian, Libraries and Cultural Resources, nadine.hoffman@ucalgary.ca
  - Brenda McDermott, Supervisor, Student Accessibility Services Exam Centre (formerly Coordinator, Writing Support Services), bemcderm@ucalgary.ca

4: Writing/Annotated Bibliography
- Practice annotating and paraphrasing a student-supplied paper
- Select references

Library & writing learning goals

<table>
<thead>
<tr>
<th>1: Plagiarism, Citations, and Citation Searching</th>
<th>Pre-class activity and quiz</th>
<th>In-class activity</th>
<th>Reflections and Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Read a citation and identify its major components</td>
<td>- Customized, interactive video on quotations and citations</td>
<td>- Refine search terms – search a database, then use results to discover new terms</td>
<td>- Students benefit: instruction is linked to the skills needed for assignments</td>
</tr>
<tr>
<td>- Identify the type of resource from a citation</td>
<td>- Created by the Student Success Centre</td>
<td>- Compare database content and search features</td>
<td>- Time-intensive: course goals, sequencing, content prep, grading</td>
</tr>
<tr>
<td>- Cite a resource</td>
<td>- Created with Articulate software</td>
<td>- Practice annotating and paraphrasing a student-supplied paper</td>
<td>- Decreased workload: resource sharing for overlapping areas: citation and plagiarism</td>
</tr>
</tbody>
</table>

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

- The CRAPtsy Song (aka, the C.R.A.P. Test Song)
- Popular vs. scholarly sources video (James Madison University)
- Use databases to generate synonyms and other terms

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

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

Instruction increased students’ confidence * Assume attending, how confident are you in your…
- 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 83%
- ability to write an annotated bibliography 79%

Instruction increased likelihood of future behaviors * Assume attending, how likely are you to…”
- apply the strategies for summarizing to my future assignments 94%
- use library databases in my research 91%
- annotate sources while reading 67%

* Agree (n=33)

Time-intensive • Students benefit • Decreased workload • Resource sharing for overlapping areas: citation and plagiarism • Tip: ensure detailed written instructions (step-by-step is not too much)