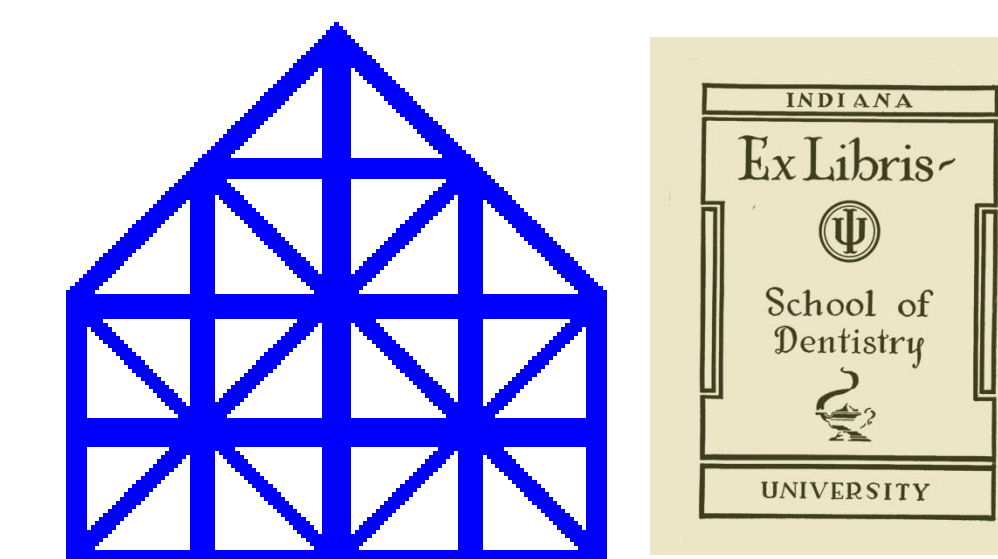


Improving First-Year Student Research And Information Literacy Pedagogy By Integrating Librarians



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ABSTRACT

A faculty member and librarian collaborated to adapt a new programmatic IUPUI Bridge/FYS information literacy curriculum to a highly disciplinary, pre-professional course (Dental Hygiene). Development of information literacy instruction that met all the needs of students in the first year experience was only allowable through the close collaboration and multiple levels of library intervention during curriculum scaffolding.

INTRODUCTION

Introductory courses are challenged with filling the needs of diverse subject matter and focus while maintaining consistent content and experiences. Programmatic curricula maximizes efficiency for instruction and assessment. In the fall of 2015, the University Library instituted a unified curriculum for the teaching and assessment of information literacy (IL). The Dental Hygiene Bridge/FYS classes make excellent test cases. Some students will continue as dental hygiene majors and should benefit from early specialized instruction while the majority of students (~90%) will change majors, in some cases to non-STEM disciplines. The goal for all students, however, remains the same and these courses must teach adequate skills for success that are transferrable to any discipline. This project focuses on determining the best way to use this new, standardized curriculum.

LEARNING OUTCOMES

FYS

- Understand and begin to practice basic communication skills appropriate for the academic setting
- Begin the process of understanding critical thinking in the university context
- Understand the role and make full use of IUPUI resources and services that support their learning and campus connections

IL Instruction

- Design searches strategically
- Evaluate sources (i.e., popular v. scholarly)
- Cite sources
- Know what services the library offers

DH FYS

- Identify the physical layout and resources of the library
- Establish a support network at the University, including faculty, staff, librarians and fellow students

In-Class

Instruction

Assignment

Explain learning objectives
Introduce the course
research guide:
<http://iupui.campusguides.com/bridge2015>

Discuss the "Research Process"

A volunteer reports their question to the group

Break down the volunteer's or other question into keywords and synonyms

Introduce the idea of Background Information and where to find it

Discuss choosing databases and searching for resources

Demonstrate using the keywords from #2
Discuss evaluating resources

A volunteer reports on the article they found. The class discusses how they know if it's scholarly

Brief discussion of why we cite and citation styles

Introduction

Strategy 1

Worksheet #1

Comprehension Check

Strategy 2

Worksheet #2

Transition

Strategy 3

Worksheet #3

Comprehension Check

Strategy 4

Worksheet #4

Define Your Question or Topic

Break It Down
Identify Keywords and Synonyms

Find Scholarly Articles
Search a scholarly database and identify a scholarly article
Explain what makes the article scholarly

Cite Your Article in the Required Style

In-class worksheets were assessed using a rubric developed specifically for this assignment. Both the Bridge and FYS classes had n=19 assessable student worksheets which were scored by both faculty members for a total sample size of n=38. The rubric measured student performance based on the described goals for the course: Production of Keywords & Synonyms, Article Quality, and Citation. Each of these areas was scored on a scale of one to three.

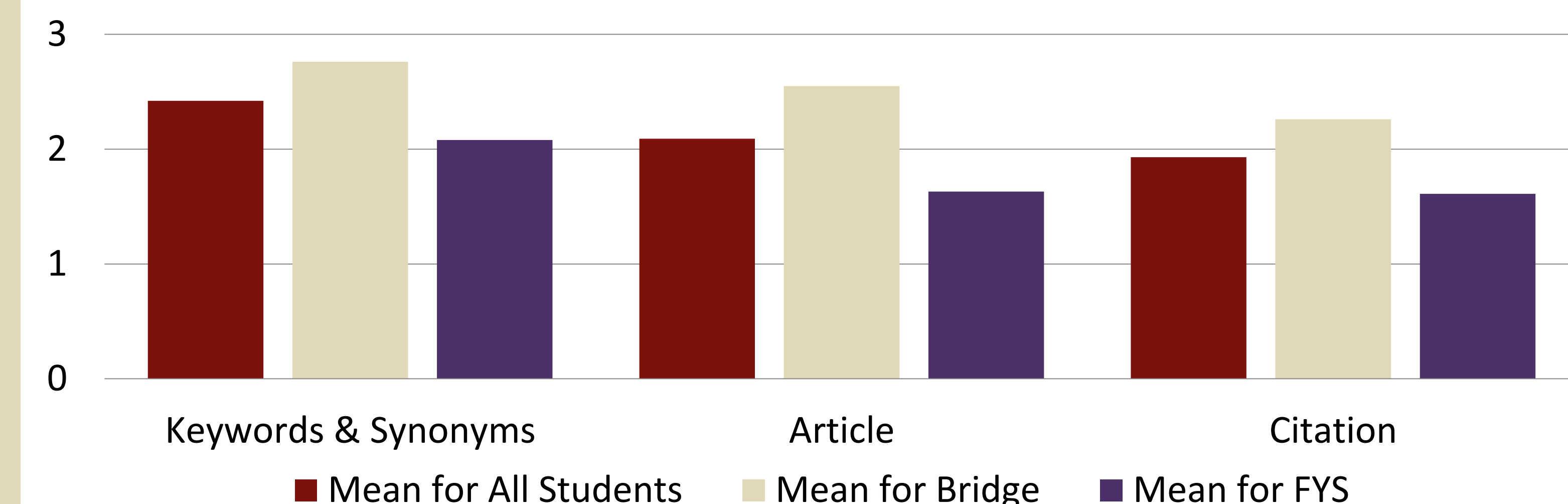
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ASSIGNMENT RUBRIC

| Learning Outcome | Level of Achievement | Student Name: | Class: |
|---------------------|---|--|--|
| | Developed 3 | Emerging 2 | Initial 1 |
| Keywords & Synonyms | Sufficient keywords and synonyms <ul style="list-style-type: none"> • Multiple keywords identified • Multiple, appropriate synonyms identified for each keyword | Insufficient keywords or synonyms <ul style="list-style-type: none"> • Limited identification of keywords • Few or improper synonyms | Minimal keywords and no synonyms <ul style="list-style-type: none"> • No keywords beyond those used in the original question/topic • No viable synonyms found for the keywords |
| Article | Source materials are appropriate and scholarly <ul style="list-style-type: none"> • Article content seems appropriate for the proposed question/topic • Article is from an appropriate scholarly journal with an explanation of how the student determined this | Source materials are inadequate or non-scholarly <ul style="list-style-type: none"> • Article is only tangentially related to the proposed question/topic OR • Article is not from a scholarly journal | Source materials are inadequate and non-scholarly <ul style="list-style-type: none"> • Article is only tangentially related to the proposed question/topic • Article is not from a scholarly journal |
| Citation | Citation is complete and in the assigned style | Citation is incomplete or not in the assigned style | Citation is incomplete and not in the assigned style |

Overall, scores are average to good. Students did best at keyword and synonym selection for searching with a mean of 2.42, and means of 2.09 and 1.93 for article quality and citation, respectively. This is not unexpected given that most students would have extensive experience searching databases in their regular lives but less experience determining scholarlyness of publications or creating formal citations manually. What is particularly interesting is the difference between the Bridge and FYS results. There was a statistically significant difference in scores for keyword selection and article quality and a non-significant but observable difference in citation scores with Bridge student scoring better than FYS students in all areas.

MEAN SCORES



While both classes did the same work and had the same goals, there were differences that likely turned out to be significant. Bridge students were allowed to choose research topics while FYS students all researched a specific topic. Interestingly, this change was made in attempt to improve the FYS class over the earlier Bridge class which was perceived as being chaotic. Given the student assignments, this inadvertently removed much of the burden of actual thought from students. Not surprisingly, students given the same topic and sample keywords came up with the same keywords and synonyms, often not going beyond those suggested in class during discussion.

RESULTS

- Student driven topic choice is superior
- Provides a baseline for student IL skills

CLASSES

- Expand IL instruction with an annotated bibliography and additional assessment
- A model for sequencing of IL into advanced DH courses

FUTURE

- Integrate IL into a new dental hygiene BS curriculum
- Keep librarians integrated into classes at all levels for IL