So Far, So Good: Measuring the Information Literacy Skills of Transfer Students
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The Research Project
The libraries at the University of Wyoming (UW) and Western Wyoming Community College (WWCC) partnered with Credo Courseware in the summer of 2019 to test the effectiveness of the Instruct Information Literacy Modules in transfer students. This is a three-year project that evaluates the information literacy skills of WWCC transfer students, other community college transfer students, and current 4-year UW students to determine if the Credo Courseware modules are an effective tool for bringing transfer students up to the same information literacy standards as 4-year students. WWCC is currently using the Credo Courseware modules in their first year studies programs. This study contributes foundational research to the state of Wyoming by measuring information literacy, which has been established as a significant indicator of student success, and the academic library’s role in relation to transfer students and community colleges.

Partnership with CREDO
- Credo Instruct served as an IL point of reference between the University of Wyoming, and Western Wyoming Community College, and helped to inspire a research relationship between the two colleges.
- A strong professional relationship between UW, Western, and Credo set the tone for a successful research collaboration.
- Credo adds an element of neutrality to the research study that two ‘competing’ colleges might otherwise struggle to maintain.
- Credo, UW, and Western signed an MOU to establish high standards for research outcomes:
  - Credo funds student participation incentives.
  - Funding is not contingent upon research results.
  - All research results are publishable.
- The research design was approved by IRB.

Qualitative research - survey and product testing
- Year 1: establish a baseline
  - Research questions:
    - Effectiveness of Credo Instruct Modules
    - Does information literacy instruction contribute to student success?
  - Are transfer students from WWCC on the same information literacy level as their non-transfer peers?
  - Recruitment - using surveys to find qualified students
    - Recruit transfer students from Wyoming Community Colleges and out of state
    - WWCC has required the Credo Instruct modules in their first year seminar. Will eventually have WWCC transfer students who have taken the modules.
    - Recruit 4-year students from University of Wyoming, junior or seniors only.
  - Successful recruitment - 350+ student responded to our survey
    - Offered an incentive for qualified and selected students ($45 amazon gift card, provided by Credo)
  - Testing - invited qualified students to attend the testing session
    - Selected three students from each category (WWCC transfers, Wyoming CC transfers, out of state CC transfers, 4-year transfers, 4-year UW students) totaling 15 students
    - All students invited showed up.
    - Students took the Credo Instruct Pre-Test, selected modules, and the Post-Test.

Establishing a Baseline
We were only able to conduct one round of testing in the Academic Year 2019-2020 due to the COVID-19 quarantine. We wanted to establish a baseline of Western CC students who had not taken the Credo Instruct modules, as well as 4-year UW students who also had not taken the modules.

- Testing in Fall 2019
  - We recruited 15 students and all 15 showed up to the testing session. All students received their incentive gift card.
  - Students were put into a custom Canvas course where the pre-test, modules, and post-test were housed.

 Changes to the Study
- Laramie County Community College, the largest community college in the state of Wyoming, subscribed to Credo Instruct in FY 19. All remaining community colleges in Wyoming followed suit and subscribed to Credo Instruct in FY 20.
- With this major change to the way Wyoming Community Colleges approach information literacy instruction, we will be sending out an annual survey to see how each community college is using Credo and delivering information literacy instruction.

Future Goals
- Getting back on track after COVID-19 detailed our spring plans.
- Collect meaningful data to share with administration to champion information literacy instruction and hopefully show that sustained, embedded instruction makes a difference.
- Advocate for a standard of information literacy instruction across the state to ease the transition from community colleges to 4-year schools.

Initial Analysis
There was a slight miscommunication about how to correctly submit the pre- and post-tests in the Canvas course, which resulted in two outliers that were removed from the dataset.

The following chart shows the difference in the average scores on the pre-test and post-test scores (out of 20 questions).

<table>
<thead>
<tr>
<th>Student Type</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Year Transfer</td>
<td>15</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Western CC</td>
<td>14</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Wyoming CC</td>
<td>14</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>UW Juniors/Seniors</td>
<td>14</td>
<td>15</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: CC = Community College

COVID-19 Contingencies
COVID-19 stopped us from being able to collect data during the Spring 2020 semester. In order to prevent this in the future we have submitted a change form to our IRB office to allow us to conduct our testing via zoom in the future. This allows us to adapt to the ever-changing environment of COVID-19 if needed. Instead of meeting in person we will conduct our testing in small groups via zoom, placing students in breakout rooms to allow them to ask questions but still have a controlled environment. We will then mail out incentives to students.

Questions? Do you have questions about our poster or our project? Use this form to submit them: https://tinyurl.com/CREDOposter
Contact Janice Grover-Roosa: librarians@westernwyoming.edu | Samantha Peter: scob13@uwyo.edu | Kristina Clement: kclement8@uwyo.edu

Goals
- Successfully establish a baseline with one more round of testing. After that point, the WWCC students who transfer to UW should have taken the Credo Instruct modules as a part of their required first-year seminars.