Where: Otero Junior College, a small, rural community college in southeastern Colorado.

Who: 88 biology students

When: Fall 2014

What we wanted:
- Baseline information
- Participation from three biology and two nursing classes.
- 80% would show an improvement of 10% or greater from pre- to post-test.
- Look for differences between traditional and non-traditional students.
- By end of project, students would identify strengths.

How we did it:
- Before and after survey
- Use of ResearchReady™ modules
- Encouraged students to take before and after survey and ResearchReady™ pre-test, modules, and post-test

What went wrong:
- Miscommunication; dropped nursing classes
- 73 biology students took survey; 61 took pre-test, only 12 finished all modules and post-test, only 5 took after survey

What we got:
- Useful information about comfort levels
- Difference noted between traditional and non-traditional students (Non-trads less familiar with technology and research skills)
- Students who took post-test did improve their scores by at least 10%, with most reaching a much higher percentage (Non-trads had higher increase than traditional students)

(Note: The above information is not statistically significant due to low numbers)

What we’ll do:
- Collaborate more with English department on use of modules
- ResearchReady™ modules will be administered in English 122 composition classes (modules can be used as assignments so students will be more likely to complete them)
- Give before and after survey to the English 122 classes
- Library staff will be available as needed and will visit English 122 classes at least twice through semester
- Offer workshops on information literacy, including one tailored to non-traditional students
- Continue offering information literacy instruction tailored to classes in other content areas (not just English)

OJC’s Assessment in Action Team:
- Tami Stephenson, Assessment Coordinator
- Laurine Szymanski, STEM Director
- Warren McClure, Biology Instructor
- Jaclyn Johnson, Nursing Instructor
- Erika Bales, Educational Resource Specialist
- Sue Keefer, Library Director

**Information Literacy Needs of Biology Students**

**Before-Survey Results**

<table>
<thead>
<tr>
<th>What a primary source is</th>
<th>Non-Trad</th>
<th>Trad</th>
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<tbody>
<tr>
<td>How to write a research paper</td>
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<td>How to use a library catalog</td>
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<td>How to find books in a library</td>
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<td>How to cite sources</td>
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<tr>
<td>How to use library databases</td>
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</tbody>
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*I feel comfortable and knowledgeable using the following types of technology:*

<table>
<thead>
<tr>
<th>Other</th>
<th>Digital media</th>
<th>College computers</th>
<th>iPad</th>
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*For me, the most difficult part of a research assignment is:*

<table>
<thead>
<tr>
<th>I don’t understand what some of</th>
<th>Writing the bibliography</th>
<th>Writing the paper</th>
<th>Evaluating information as to</th>
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**ResearchReady™ Results**

**Pre-Assessment Scores**

**Post-Assessment Scores**

**Pre Vs. Post Assessment Scores (Module Completers Only)**

**References**


Perspectives on student research skills in K-12 and academic communities (Rep.). (2014). New York, NY: Imagine Easy Solutions/EasyBib. (Gave me the suggestion to see where our students might score)