Summary Report for 2014-2015 Annual Assessment

Research & Learning Services
Outcome 1: Collaborate with Writing faculty to integrate information literacy skills into Writing 10 curriculum in order to develop students who think like researchers.

Introduction:
In spring 2014, the Association of College & Research Libraries (ACRL) accepted the UC Merced Library as a participant into its second Assessment in Action (AiA) cohort. As an AiA participant our intent was to evaluate the impact of a Writing 10 curriculum developed with Writing faculty and a librarian. This curriculum focused on integrating the research process with the writing process and was known as TRAIL (Teaching Research & Information Literacy). In fall 2014 five Writing faculty taught a total of nine TRAIL sections and the AiA local team collected data from these students and from non-TRAIL Writing 10 students for analysis in spring 2015.

Measures
In summer 2014, when the AiA team was in the middle of outlining the assessment of this curriculum, library staff set some initial targets for how students in TRAIL would perform as a result participating in a curriculum which integrated the research process into the writing process. Our targets for TRAIL students included the following:

1. 80% will express the knowledge, skills, and attitudes representative of an advanced or developing student researcher based on their reflective writing evaluated via rubric.
2. 80% will perform at the advanced or developing level on their final papers in WRI 10 (source suitability, multiple viewpoints / evidence) as evaluated by a rubric.
3. 90% will rate the effectiveness of the course in helping them achieve these four skills (#15-17 and 20 on the course evaluation) as very effective or effective.

Findings – Student Reflections
Though we saw evidence of student learning, we did not meet our outlined targets and in retrospect our targets were likely too ambitious. This summary reports outlines the results as they pertain to these measures and includes some additional findings.

Measure 1
80% will express the knowledge, skills, and attitudes representative of an advanced or developing student researcher based on their reflective writing evaluated via rubric.

Librarians assessed TRAIL student reflections (n=157) through the use of a rubric with six sub-scales. Each sub-scale connected to one of the six questions in the final reflection. (See Appendices A & B.) Over 50% of TRAIL students scored at Advanced or Developing on their reflections on all but two sub-scales of the rubric.


The student reflections also revealed rich students comments about progress in their research skills, knowledge, and attitudes. Over 32% of students scored 17 or higher on their reflections (maximum possible score of 24).

The following comments are representative of what students wrote who scored in the Good to Excellent range on their student reflections.

Excerpts from TRAIL Student Reflections

“...I hated doing research because it was a slow, a really long and very involved process. However, by taking this class, I realize that research provides a firsthand opportunity to learn new information and also see and appreciate the diversity of the opinions which exist on my research topic.”

“I feel more confident when doing research now since I am aware of all the resources I have available to me. I also feel more excited when I do research because you never know what you are going to find. ... I used to find research boring and dull. I just googled whatever I needed to find and used whatever popped up first to get the “research” out of the way.”
Findings – Student Papers

Measure 2
80% will perform at the advanced or developing level on their final papers in WRI 10 (source suitability, multiple viewpoints / evidence) as evaluated by a rubric.

Merritt Writing Program (MWP) faculty evaluated a random sample of 120 Writing 10 student papers using a rubric in spring 2015. Out of the 120 papers, 40 were from TRAIL students, 40 from non-TRAIL with library instruction, and 40 from non-TRAIL with no library instruction. The papers were selected from freshmen who had not previously taken Writing 10.

For the two sub-scales of most interest to the AiA project (use of suitable sources & representing multiple viewpoints with evidence), TRAIL students performed well though not at the level we projected in our measures. In the area of Source Suitability, 72.5% of TRAIL students scored at Advanced or Developing while 35% of them scored at Advanced or Developing in the area of Argument & Evidence. Students were close to meeting the target of 80% in the area of source suitability. In contrast to their peers in non-TRAIL sections, TRAIL students did perform at a higher level. An analysis of variance (ANOVA) revealed that these findings were statistically significant.
Findings – Course Evaluation

Measure 3
90% will rate the effectiveness of the course in helping them achieve these four skills (#15-17 and 20 on the course evaluation) as very effective or effective.

As part of the assessment, the AiA team chose to review selected questions from the existing Writing 10 course evaluations. The selected questions were ones that closely related to the research focused content integrated into Writing 10 TRAIL curriculum. The course evaluation asked students to indicate the frequency with which the course taught them to do X rather than how effectively the course taught them to do X. Due to this misunderstanding about the scale used for questions 15-17 and 20 on the course evaluation, the information gleaned from course evaluations was slightly different from that anticipated. However, TRAIL sections in comparison with non-TRAIL sections reported slightly higher means for all four of the course evaluation questions. This may point to some incremental benefits from the TRAIL curriculum. For instance, these findings may indicate that TRAIL students practiced reading analysis, topic development, argument building, evidence evaluation, and research ethics at least as much, if not little more often, than their peers. Note: We did not calculate percentages for each question.

<table>
<thead>
<tr>
<th>Selected Questions from the Writing 10 Course Evaluation (fall 2014 data)</th>
<th>TRAIL sections</th>
<th>non-TRAIL sections</th>
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<tbody>
<tr>
<td>15. This course has taught me how to analyze readings.</td>
<td>4.33</td>
<td>4.16</td>
</tr>
<tr>
<td>16. This course has taught me how to develop a topic.</td>
<td>4.31</td>
<td>4.14</td>
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<tr>
<td>17. This course has taught me how to compose an argument and evaluate evidence.</td>
<td>4.45</td>
<td>4.28</td>
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<tr>
<td>20. This course has taught me how to apply professional and academic ethics.</td>
<td>4.26</td>
<td>4.12</td>
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<td>mean</td>
<td>4.34</td>
<td>4.18</td>
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Findings – TRAIL Faculty Feedback

As part of the assessment, TRAIL Writing faculty were asked to complete a debrief survey at the end of the fall 2014 semester. In one of the question, they were asked to reflect on the work of TRAIL students and to contrast it with the work of students in previous Writing 10 classes. Overall, Writing faculty who participated in the course-integrated model of information literacy observed Writing 10 TRAIL student demonstrating information literacy skills at greater levels than they had observed in students in previous non-TRAIL Writing 10 classes.

Summary
This short report highlights some of the findings of the Assessment in Action (AiA) project especially how they relate to the library measures outlined in summer 2014. Additional assessment information about TRAIL is available on the Think Like a Researcher library guide.  
http://libguides.ucmerced.edu/think_like_a_researcher/assessment
Appendix A – Student Final Reflection Questions

TRAIL Final Research Reflection

*Be sure that your answers are thoughtful and complete.*

Think about the research you’ve done this semester in Writing 10 and answer each of the following questions:

1) How has your process for doing **academic** research changed since the beginning of the semester? Be specific. Give examples.

2) Describe your process for evaluating and selecting sources for your research assignments in Writing 10. How did you decide which sources to use and which not to use? Did you add or change sources for your final assignment after turning in your annotated bibliography? If so, please explain why.

3) What challenges did you encounter when doing research for your assignments in this class? What strategies did you use to overcome them? Be specific. Give examples.

4) Have your attitudes and perceptions (confidence level) about doing research changed over the course of the semester? Be specific. Give examples.

5) Did learning more about the research process in this class help you in other classes this semester? Do you think it will help you in future classes? Be specific. Give examples.

6) Think about the research you’ve done this semester, and describe what you think it means to “Think Like a Researcher?”