STUDENT LEARNING ASSESSMENT REPORT

PROGRAM: Liberal Arts Core/University Fundamental Competencies
SUBMITTED BY: Leigh Johnson
DATE: 9-30-2016
BRIEFLY DESCRIBE WHERE AND HOW ARE DATA AND DOCUMENTS USED TO GENERATE THIS REPORT BEING STORED: Records for annual fundamental competencies assessment are maintained by the Office of Planning and Institutional Effectiveness.

EXECUTIVE SUMMARY

Program description from the Course Catalog: Please copy and paste the current year’s catalog description of this program. This is generally a one-two paragraph description immediately following the name of the program. Please be sure to include the listing of program outcomes as printed.

Students in all undergraduate academic majors and minors at Marymount University complete a common curriculum, known as the University Liberal Arts Core. The Liberal Arts Core is an integrated learning experience that develops intellectual as well as practical skills. Its purpose is to enable Marymount students to become critical thinkers and lifelong learners who value and pursue knowledge for its own sake, as well as apply knowledge within their chosen professions.

List all of the program’s learning outcomes: (regardless of whether or not they are being assessed this year)*

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Year of Last Assessment</th>
<th>Assessed This Year</th>
<th>Year of Next Planned Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will demonstrate effective written communication</td>
<td>2015</td>
<td>yes</td>
<td>2017</td>
</tr>
<tr>
<td>Students will demonstrate critical thinking</td>
<td>2015</td>
<td>yes</td>
<td>2017</td>
</tr>
<tr>
<td>Students will demonstrate information literacy</td>
<td>2015</td>
<td>yes</td>
<td>2017</td>
</tr>
<tr>
<td>Students will demonstrate inquiry based learning</td>
<td>2015</td>
<td>yes</td>
<td>2017</td>
</tr>
</tbody>
</table>

* The assessment rubrics attached as an appendix to this report provide a detailed descriptions of the traits that make up these competencies.

Describe how the program’s outcomes support Marymount’s mission, strategic plan, and relevant school plan:

This assessment report reviews student learning with respect to fundamental competencies specified under the liberal arts core/university curriculum. These competencies reflect Marymount University’s commitment to the liberal arts tradition in Catholic higher education, our mission of educating the whole person, and promoting the intellectual, spiritual, and moral growth of each individual. Written communication, information literacy and critical thinking are the most fundamental
skills expected of a liberally educated person. A Marymount education places special emphasis on inquiry based learning, the increasingly self-guided capacity for investigation of complex problems for which there is no single correct solution. Students develop all four of these fundamental competencies through repeated exposure and practice in courses spread across the core curriculum and the major programs of study.

Marymount University’s undergraduate core curriculum requires that students complete two basic composition courses followed by three additional writing intensive courses at the intermediate to advanced levels. The core curriculum also requires that students complete a first year inquiry seminar, and three additional designated inquiry courses at the intermediate to advanced levels. In May of 2016, 101 designated writing intensive courses and 84 designated inquiry courses were included in the curriculum. Because these courses are required of students in every major and span the introductory, intermediate and advanced levels study, they are used as sources of data for assessment of the written communication, information literacy, critical thinking, and inquiry core competencies.

Provide a brief description of the assessment process used including strengths, challenges and planned improvements and provide evidence of the existence of a culture of continuous improvement based on assessment:

OVERVIEW
The Liberal Arts Core Competency Assessment Workshop occurred on May 12 and 13, 2016, in Rowley Hall. Assessment focused on four competencies: written communication, critical thinking, information literacy, and inquiry. To assess written communication, raters reviewed papers from the lower-level English 102 course and upper-level papers from writing-intensive 300 and 400 level courses in the majors. To assess critical thinking and information literacy, raters reviewed papers from lower-level Discover 101 and 201 and English 102 courses and upper-level papers from writing-intensive or inquiry courses at the 300-400 level from across the curriculum. For the inquiry competency, raters reviewed lower-level papers from Discover 101 and 201 and upper-level papers from 300-400 level inquiry courses.

The Director of Institutional Assessment in the office of Planning and Institutional Effectiveness selected a stratified random sample of 320 papers to be included in the assessment from the total papers submitted. Four papers were discarded during the assessment process, leaving a total number of papers in the sample of 317.

Student work was reviewed by a group of 20 adjunct and full-time faculty members selected by the Liberal Arts Core director. These faculty members were divided into four groups of five members, with each group assigned to a competency and led by a faculty member who had previously participated in this assessment process. On the first day of the workshop, each group conducted a training session in use of the assessment rubrics. On the second day, the groups began with brief review sessions to “recalibrate” their use of the rubrics.

While procedures and methods were comparable to previous years, the following improvements were made. Several actions were taken as a result of last year’s assessment process, including reaching out to chairs and faculty teaching INQ and WI courses to ensure a common understanding of the requirements of these courses and the types of assignments that should be submitted for assessment; a review of syllabi; required mapping of program curricula to core competencies to ensure coverage of the competencies in the majors; and moving the process of faculty raters entering evaluation of student work online. Inquiry and Critical Thinking rubrics were revised and condensed.

This report reviews the following:

- percentage of average scores in each of the four competencies rated above 2.5 for Spring 2015
- measures of consistency across raters
- comparison of scores between lower level and upper level courses and, at the upper level between MU-only students and transfer students
- comparison of this year’s results to those from the previous three years using average ratings and percentages

METHOD
Sample

- **Written Communication**: 40 papers from upper level writing-intensive courses and 40 papers from lower-level English 102 per team member; 1 lower-level paper and 1 upper-level paper were discarded, for a total of 78 papers.
- **Information Literacy**: 40 papers from upper level writing-intensive or inquiry courses from across the curriculum and 40 papers from Discover 101 and 201, other 100- and 200-level inquiry courses, and English 102 courses. One upper-level paper was discarded, for a total of 79 papers.
- **Critical Thinking**: 40 papers from upper level writing-intensive or inquiry courses from across the curriculum and 40 papers from Discover 101 and 201, other 100- and 200-level inquiry courses, and English 102 courses
- **Inquiry**: 40 papers from upper level inquiry courses and 40 papers from lower level Discovery 101/201 and other 100- and 200-level inquiry courses per team member.

**Table 1: Sample Demographics**

<table>
<thead>
<tr>
<th></th>
<th>Written Communication</th>
<th>Critical Thinking</th>
<th>Information Literacy</th>
<th>Inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First College</td>
<td>Transfer</td>
<td>Total</td>
<td>First College</td>
</tr>
<tr>
<td>Lower Level (LL)</td>
<td>31</td>
<td>8</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>Upper Level (UL)</td>
<td>26</td>
<td>13</td>
<td>39</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>21</td>
<td>78</td>
<td>58</td>
</tr>
</tbody>
</table>

**Instruments**
Analytic rubrics used in the LAC assessment were created by faculty on the Liberal Arts Core Committee. Each competency was rated on three to five traits as well as an overall category using a four-point scale: 4 = “Strong”, 3 = “Adequate”, 2 = “Marginal”, and 1 = “Attempt that fails”. “No evidence” was also an option, with a score of 0.

On the back of each scoring rubric, ratings are described in detail so that raters have a description of what each rating means relative to the trait. Average ratings at or above 2.5 are considered to be an acceptable level of performance for work from upper-level courses.

Raters

Each competency was assessed by a team of five faculty members and led by a faculty member who had previously participated in the process. There was a total of 20 raters.

Faculty raters were selected by the Liberal Arts Core director following a call for volunteers from the population of all full-time and adjunct faculty members. Fifty-five percent (55%) of the faculty raters were from the School of Arts and Sciences, 20% from the School of Business, 15% from the School of Education and Human Services, and 10% from Library and Learning Services. There were no raters from the Malek School of Health Professions.

Data Analysis

Each rater assessed each trait on a four-point scale, with the option of selecting “no evidence” if there was no evidence of the trait being assessed. Each rater’s scores on each trait were compared and used to calculate a mean score for each trait. If a rater chose “no evidence”, that score was omitted in the calculation of the mean.

Means were analyzed for both upper level and lower level courses as well as for upper level first-college and transfer students.

The frequency of a rater choosing “no evidence” of a trait was examined by calculating the percentage of ratings that were “no evidence” from the total number of ratings for each trait. The selection of “no evidence” could reflect either that the traits were not in evidence (there was no attempt to demonstrate that trait) or that the assignment given by the instructor did not require the demonstration of the trait.

Inter-rater reliability was estimated by calculating the two-way random intraclass correlation coefficient (ICC), using a consistency definition for average measure. An ICC is measured on a scale of 0 to 1, with 1 representing perfect reliability and 0 representing no reliability. Generally, a coefficient of .700 or higher is considered acceptable. Ratings of “not in evidence” are excluded from this analysis.

In interpreting the results, it is important to note that the university has differing expectations for performance in lower-level courses and performance in upper-level courses, to reflect anticipated gains in learning over time. The rubric used to assess student work describes the level of performance expected of students as they complete their undergraduate education. Therefore, the performance benchmark of at least 2.5 on the four-point scale should be applied against performance in upper-level courses only, as students approach completion of their undergraduate degree. A benchmark for performance in lower-level courses has not yet been developed.

It is also important to use caution in comparing results from previous years. Differences in sample composition (for example, the ratio of first-college to transfer students), inter-rater reliability, type of work submitted for assessment, and other factors will impact results in an individual year.

GENERAL FINDINGS

The results of the assessment showed positive performance gains between lower level and upper level courses in all traits of all outcomes.

**Written Communication:** The overall mean rating for this outcome was 2.52 (UL), meeting the desired minimum performance standard of 2.5 but representing a slight decrease from last year’s results (2.76). For the overall measure of sampled students’ work from upper-level classes, 51% met or exceeded the performance standard. Raters were, in general, consistent in their ratings of student work.

**Critical Thinking:** The overall mean rating for this outcome was 2.17 (UL), below the minimum performance standard of 2.5 and down from last year (2.4). Thirty-three percent (33%) of students’ work from upper-level courses met or exceeded the performance standard. Like last year, the lowest ratings were made
in “questions key assumption” (29% of upper-level student work). Annual comparisons show an increase in performance from students in lower level courses and a decline in performance in upper-level courses. Raters were less consistent in their findings, with reliability near but slightly below the “acceptable” standard of 0.7.

- **Information Literacy:** The overall mean rating was 2.61 (UL), above the minimum performance standard of 2.5 and a significant gain over last year’s performance (1.90). Fifty-nine percent (59%) of students in upper-level courses met the standard, compared to 34% from the previous year. There was a significant increase in performance in year-on-year comparisons in upper-level courses. Rater consistency on all factors was high.

- **Inquiry:** The overall mean rating was 2.69 (UL), exceeding the minimum performance standard of 2.5. Twenty-four percent (62%) of upper-level student work evaluated by the raters met the standard. A majority of upper-level student work met or exceeded the standard on each of the traits assessed. These results should be approached with caution, however. A high percentage of the student work submitted for evaluation received ratings of “no evidence”; this could reflect either that there was no evidence of inquiry or that the assignment did not require demonstration of these traits. In addition, rater consistency failed to meet the “acceptable” standard on any of the traits assessed.
STRENGTHS
The organization and timing of the assessment workshop was similar to that of the previous seven years. The dedicated service of participating faculty continues to be a main strength of the assessment process. The workshop format promotes collegiality and develops commitment to the assessment process. Several volunteers with experience from previous years returned in 2016, some to act as group leaders. The workshop format enables raters to develop consistency in rating and allows time for informal discussion of assessment process and results. The number of faculty participants has increased from 12 in 2013 to 18 in 2014 to 20 in 2015 and 2016. As in previous years, the Director of the Liberal Arts Core debriefed participants in the workshop about the effectiveness of the assessment tools, the appropriateness of the assignments under assessment and the overall quality of student’s work.

CHALLENGES
Faculty raters in all groups were generally satisfied with the training procedure and reported a clear understanding of how to use the rubrics. The increased number of evaluators allowed five evaluators to be assigned to each group, but this did not lead to increased inter-rater consistency over previous years. Few full-time faculty participated, and the lack of participation from SHP was problematic as well. The Inquiry rubric did not allow for assessing student independence in work. With the exception of the written communication group, raters expressed the concern that assignments collected from a number of courses did not provide students with opportunities to demonstrate the fundamental competencies. The additional challenge for the Inquiry rubric was that the rating of 1 or 0 for no evidence could have pointed to a problem with the student product or with the assignment. This issue is discussed in the planned improvements section.

PLANNED IMPROVEMENTS
2016 is a foundational year for fundamental competencies assessment. It is the first year that we can assess much of the liberal arts core committee’s work, which up to this point had consisted of implementing and stabilizing the core curriculum introduced in 2009. Agreement on which fundamental competencies should be regularly assessed was reached by a vote of faculty council. It can be expected that the curriculum will now enter a stable period and that the liberal arts core committee will have both time and support from the faculty to evaluate specific areas of the curriculum and recommend improvements. Some of these improvements can be addressed immediately. Others may require longer-term study and planning.
1. Since this is the second year in which students work from advanced inquiry courses has been used for fundamental competencies assessment, it is important not to make premature conclusions. However, 2016 assessment results suggest that critical thinking, is below expected levels. Similar concerns do not arise for written communication and information literacy. Inquiry, while above the benchmark, had questionable inter-rater reliability and will need to be improved. It will be important to verify in future assessments whether this represents a trend, and if so, to determine the causes and remedies. Informal debriefing of the raters by the Director of the Liberal Arts Core, suggests that some assignments collected from DSC101 and advanced inquiry courses do not offer students adequate opportunities to demonstrate these competencies. Additionally, raters’ concerns about the level of critical thinking skills in evidence in student work are not new, but match concerns expressed in previous years. Therefore, at this point, it appears that beginning with the coming year (and perhaps for a longer term) critical thinking will likely be a focus for work by liberal arts core committee. Assessing inquiry-based learning will likely be a focus of the newly formed Inquiry committee. To this end, the committee(s) will determine what further types of actions are required, such as a review of DSC101 and advanced inquiry based learning courses in the curriculum.
2. During 2016-17, as in 2015-16, faculty who teach designated writing intensive and inquiry courses will be contacted early during each semester with a reminder that student work from these courses is used for assessment purposes. In addition, faculty will be provided with descriptions of the qualities under assessment and prompted to submit work from assignments that give students opportunities to demonstrate the fundamental competencies. We are likely to particularly focus on Critical Thinking as professors are more likely to be familiar with the Written Communication outcomes if they teach writing intensive
classes. Copies of the assessment rubrics and of guidelines for writing and inquiry courses will be sent directly to instructors. This will ensure that efforts have been made to obtain samples of work which give students opportunities to display the competencies under assessment.

3. During 2016-17, the results from the 2016 the Director of the Liberal Arts Core, staff in the Office of Planning and Institutional Effectiveness, and/or the Assistant Vice President for Academic Affairs will meet with school deans and department chairs for discussion of the 2016 assessment results, with a focus on results in critical thinking and inquiry-based learning.

4. The Director of the Liberal Arts Core will request assistance from staff in the Office of Planning and Institutional Effectiveness in identifying places in the core curriculum where the fundamental competencies are in evidence through student work and places where they are not in evidence. Steps may include comparing results from inquiry courses with results from writing intensive courses and comparing results from designated core courses with results from courses in the majors. Department chairs and school deans will be consulted about the desirability of making more fine-grained comparisons of results, for example, across schools or departments.

5. The liberal arts core committee will evaluate the current inquiry guidelines to determine whether they are adequate or if stricter guidelines are needed, for example, requiring designated inquiry courses to include research project assignments with specific features.

6. In consultation with the Writing Committee, the Director of the LAC will likely implement a new rubric for Written Communication, which will be revised in 2016-17 for assessment in 2017. The rubric has not been clarified or condensed since 2008.

7. A larger diversity of full-time faculty raters will likely be a priority in 2017.

**Describe how the program implemented its planned improvements from last year:***

The 2015 assessment report listed five planned improvements for the 2015-16 academic year, most of which were addressed. It can be expected that the curriculum will now enter a stable period and that the liberal arts core committee will have both time and support from the faculty to evaluate specific areas of the curriculum and recommend improvements. Others improvements listed in the 2015 report may require longer-term study and planning.

1. The Liberal Arts Core Committee began work on addressing the critical thinking fundamental competency. The committee decided to study how best to communicate the outcomes to faculty and work on assessment.

2. Faculty received information and rubrics regarding assessment. However, more emphasis needs to be placed on critical thinking rubrics and inquiry assignments.

3. The staff in the Office of Planning and Institutional Effectiveness broke data out by course and instructor on individual metrics for presentation to school deans and department chairs.

4. More study needs to be undertaken about how to share detailed information with department chairs.

5. An Inquiry Committee was formed to examine the inquiry assignments and expectations.

**Provide a response to last year’s University Assessment Committee review of the program’s learning assessment report:**

The 2015 Fundamental Competencies Assessment Report met all requirements and was accepted as submitted. The Office of Planning and Institutional Effectiveness supported the decision to assess all four fundamental competencies regularly. There was also a suggestion that the language of the outcomes be revised or expanded to provide a more detailed description of the fundamental competencies. This was addressed by adding a note referring the reader to the assessment rubrics contained in an appendix to this report. The rubrics analyze each competency into several traits discernable in samples of student work,
providing a detailed operational definition of how the University applies the terms “written communication,” “critical thinking,” “inquiry-based learning,” and “information literacy.”
## Outcomes and Past Assessment

### Learning Outcome 1: Written Communication

**Is this outcome being reexamined?** ☑ Yes ☐ No  
*If yes, give a brief summary of previous results (including trends) and any changes made to the program.*

### Assessment Activity

<table>
<thead>
<tr>
<th>Outcome Measures</th>
<th>Performance Standard</th>
<th>Data Collection</th>
<th>Analysis</th>
</tr>
</thead>
</table>
| Explain how student learning will be measured and indicate whether it is direct or indirect. | Define and explain acceptable level of student performance. | Discuss the data collected and student population | 1) Describe the analysis process.  
2) Present the findings of the analysis including the numbers participating and deemed acceptable. |

**Direct Measure:** Papers from lower and upper-level courses were examined using the rubric for the written communication competency.

Using a rubric created by faculty on the Liberal Arts Core Committee, sample student papers were rated with respect to five traits on a four-point scale, defined as follows:

1 - attempt that fails  
2 - marginal  
3 - adequate  
4 – strong  

Average ratings at or above 2.5 are considered to be an acceptable level of performance. It is expected that 50% or more of students surveyed in upper-level courses.

Copies of papers were gathered: 39 papers from lower-level and 39 papers from upper-level writing intensive courses.  
The sample included papers by 21 transfer students, 8 at the lower-level and 13 at the upper-level.  

Each student paper was rated on each of five traits and given an overall rating by five faculty raters using the rubric previously created by the Liberal Arts Core Committee.  
The frequency of a rater choosing “no evidence” of a trait was examined by calculating the percentage of ratings that were “no evidence” from the total number of ratings for each trait.

The mean rating for each student was then calculated.  
The percentage of student papers that met the acceptable level of performance (mean rating above 2.5) for each trait and the overall evaluation were calculated. Comparisons were made between results from lower-level and upper-level courses and between MU only students and transfer students. Mean “overall” ratings were compared across
courses will perform at this level.

five years in which the competency was assessed (2012-16).

The intra-class consistency coefficient for ratings of each trait was also calculated.

51% of the upper level papers and 33% of lower level papers were rated “overall” at the acceptable level or higher.

Detailed findings are presented in the tables below.

**Indirect Measure:** The following item from the 2015 Alumni Survey:

- Develop a coherent written argument

An average student rating of “adequate” (3.00) is expected to meet the acceptable level of performance. The scale used for the question is:

1 = poor
2 = needs improvement
3 = adequate
4 = good
5 = excellent

154 graduating students completed this question on the survey when collecting their graduation tickets.

The students completed the Graduating Student Survey before receiving tickets to the graduation ceremony. The data were collected and analyzed by the Office of Institutional Effectiveness. The mean rating for each item was then calculated.

**Results:** Mean score = 3.97, with 76% of respondents selecting good or excellent
Table 1: Written Communication: Description, Mean Ratings, and Rater Consistency

<table>
<thead>
<tr>
<th>Trait</th>
<th>Control</th>
<th>Relevant</th>
<th>Organize</th>
<th>Tone</th>
<th>Grammar</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>The paper establishes control of a topic through a focused thesis, hypothesis, or theme that engages complex ideas without oversimplifying or distorting them</td>
<td>Relevant material and only relevant material is included; summary and narrative, if included, are used appropriately and effectively</td>
<td>The paper is effectively and coherently organized, with ideas arranged in a clear sequence; paragraphs are unified and fully developed</td>
<td>The writer adopts a tone and makes word choices appropriate to the topic and the academic context. The sentences are concise and clear and, as appropriate to the discipline, fluent.</td>
<td>The paper is reasonably free of errors in grammar and usage</td>
<td>The paper works as an academic project, in scope, focus, analysis, deliberation, and execution</td>
</tr>
<tr>
<td>Lower Level (LL)</td>
<td>Mean: 2.26, SD: .702</td>
<td>Mean: 2.19, SD: .589</td>
<td>Mean: 2.10, SD: .606</td>
<td>Mean: 2.35, SD: .621</td>
<td>Mean: 2.56, SD: .641</td>
<td>Mean: 2.21, SD: .693</td>
</tr>
<tr>
<td>(n=39)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Level (UL)</td>
<td>Mean: 2.50, SD: .567</td>
<td>Mean: 2.51, SD: .560</td>
<td>Mean: 2.46, SD: .693</td>
<td>Mean: 2.54, SD: .566</td>
<td>Mean: 2.84, SD: .490</td>
<td>Mean: 2.52, SD: .581</td>
</tr>
<tr>
<td>(n=39)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First College (UL)</td>
<td>Mean: 2.34, SD: .677</td>
<td>Mean: 2.35, SD: .631</td>
<td>Mean: 2.30, SD: .705</td>
<td>Mean: 2.47, SD: .622</td>
<td>Mean: 2.74, SD: .620</td>
<td>Mean: 2.36, SD: .700</td>
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<tr>
<td>(n=57)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer (UL)</td>
<td>Mean: 2.48, SD: .553</td>
<td>Mean: 2.37, SD: .487</td>
<td>Mean: 2.21, SD: .578</td>
<td>Mean: 2.38, SD: .536</td>
<td>Mean: 2.61, SD: .471</td>
<td>Mean: 2.39, SD: .527</td>
</tr>
<tr>
<td>(n=21)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (n=78)</td>
<td>Mean: 2.38, SD: .646</td>
<td>Mean: 2.35, SD: .593</td>
<td>Mean: 2.28, SD: .671</td>
<td>Mean: 2.45, SD: .598</td>
<td>Mean: 2.70, SD: .584</td>
<td>Mean: 2.37, SD: .655</td>
</tr>
<tr>
<td>Rater Consistency</td>
<td>0.734</td>
<td>0.676</td>
<td>0.756</td>
<td>0.715</td>
<td>0.735</td>
<td>0.794</td>
</tr>
<tr>
<td>&quot;No Evidence&quot;, as % of Total Ratings</td>
<td>2.3%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

1 Ratings of “no evidence” are excluded from the calculation of the mean rating.
2 Two-way random intraclass correlation coefficient (ICC), using a consistency definition for average measure, as an estimator of interrater reliability. An ICC is measured on a scale of 0 to 1, with 1 representing perfect reliability and 0 representing no reliability. Generally, a coefficient of .700 or higher is considered acceptable. Ratings of “not in evidence” are excluded from this analysis.
Chart 1: Written Communication: Percentage of Papers with Mean Ratings at or Above 2.5, by Course Level

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Relevance</th>
<th>Organization</th>
<th>Tone</th>
<th>Grammar</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Level</td>
<td>41%</td>
<td>33%</td>
<td>23%</td>
<td>41%</td>
<td>49%</td>
<td>33%</td>
</tr>
<tr>
<td>Upper Level</td>
<td>54%</td>
<td>59%</td>
<td>44%</td>
<td>54%</td>
<td>82%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Chart 2: Written Communication: Percentage of Upper Level Papers with Mean Ratings at or Above 2.5, by Admissions Type

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Relevance</th>
<th>Organization</th>
<th>Tone</th>
<th>Grammar</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>First College (UL)</td>
<td>58%</td>
<td>62%</td>
<td>42%</td>
<td>62%</td>
<td>85%</td>
<td>58%</td>
</tr>
<tr>
<td>Transfer (UL)</td>
<td>46%</td>
<td>54%</td>
<td>46%</td>
<td>39%</td>
<td>77%</td>
<td>39%</td>
</tr>
</tbody>
</table>
Chart 3: Written Communication: Percentage of Lower Level Papers with Mean Ratings at or Above 2.5

Chart 4: Written Communication: Percentage of Upper Level Papers with Mean Ratings at or Above 2.5
Interpretation of Results

Extent this learning outcome has been achieved by students (Use both direct and indirect measure results):
The indirect measure data, gathered from numerous students, indicate that by graduation Marymount is effectively helping the students develop coherent written arguments. The direct measure data indicate improvement by students during their Marymount education. At the upper level, performance is well above the expected level in all traits. In annual comparisons, students’ work showed gains over 2014 results at the lower level in overall traits, while results at the upper-level have dipped slightly, but remained comparable. There is a consistent trend of quality of writing meeting the “overall” benchmark from 2012 to 2016. First college students begin to outperform transfer students.

Program strengths and opportunities for improvement relative to assessment of outcome:
During the past five years, Marymount faculty have put a concerted effort into increasing the number of writing intensive courses in the curriculum and the University has invested in training of writing instructors. These efforts appear to be fruitful. Of the four fundamental competencies, written communication is the one for which there is clearest evidence that students make significant gains during the four years of their education. This indicates that major changes to the writing component of the curriculum are not required, but a change to the assessment rubric may clarify the expectations, and make it easier for raters to move through their work.

Discuss planned curricular or program improvements for this year based on assessment of outcome:
Assessment results will be shared with the writing subcommittee of the Undergraduate Curriculum and Instruction Committee. A new rubric will likely be piloted in 2017.
Learning Outcome 2: Critical Thinking

Is this outcome being reexamined?  ☑ Yes ☐ No

If yes, give a brief summary of previous results (including trends) and any changes made to the program.

**Assessment Activity**

<table>
<thead>
<tr>
<th>Outcome Measures</th>
<th>Performance Standard</th>
<th>Data Collection</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Measure:</strong> Papers from lower and upper-level courses were examined using the rubric for the critical thinking competency.</td>
<td>Using a rubric created by faculty on the Liberal Arts Core Committee, sample student papers were rated with respect to five traits on a four-point scale, defined as follows: 1 - attempt that fails 2 - marginal 3 - adequate 4 – strong  Average ratings at or above 2.5 are considered to be an acceptable level of performance. It is expected that 50% or more of students surveyed in upper-level courses will perform at this level.</td>
<td>Copies of papers were gathered: 40 papers from lower-level and 40 papers from upper-level writing intensive or inquiry courses. The sample included papers by 22 transfer students, 7 at the lower-level and 15 at the upper-level.</td>
<td>Each student paper was rated on each of five traits and given an overall rating by five faculty raters using the rubric previously created the Liberal Arts Core Committee. The frequency of a rater choosing “no evidence” of a trait was examined by calculating the percentage of ratings that were “no evidence” from the total number of ratings for each trait. The mean rating for each student was then calculated. The percentage of student papers that met the acceptable level of performance (mean rating above 2.5) for each trait and the overall evaluation were calculated. Comparisons were made between results from lower-level and upper-level courses and between MU only students and transfer students. Mean “overall” ratings were compared across five years in which the competency was assessed (2012-16). The intra-class consistency coefficient for ratings of each trait was also calculated. 33% of the upper level papers and 30% of the lower level papers were rated “overall” at the acceptable level or higher. Detailed findings are presented in the tables below.</td>
</tr>
</tbody>
</table>

Copies of papers were gathered: 40 papers from lower-level and 40 papers from upper-level writing intensive or inquiry courses. The sample included papers by 22 transfer students, 7 at the lower-level and 15 at the upper-level.
**Indirect Measure:**
The following item from the 2015 Alumni Survey:

Solve problems in your field using your knowledge and skills.

An average student rating of “adequate” (3.00) is expected to meet the acceptable level of performance. The scale used for the question is:

1 = poor
2 = needs improvement
3 = adequate
4 = good
5 = excellent

153 one-year alumni completed this question on the survey.

The data were collected and analyzed by the Office of Institutional Effectiveness. The mean rating for each item was then calculated.

**Results:** Mean score = 4.05, with 78.4% of respondents selecting good or excellent

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### Critical Thinking

Table 2: Critical Thinking: Description, Mean Ratings, and Rater Consistency

<table>
<thead>
<tr>
<th>Trait</th>
<th>Analyzes</th>
<th>Questions</th>
<th>Adopt Evidence</th>
<th>Synthesizes</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analyzes and evaluates relevant position</td>
<td>Questions key assumptions</td>
<td>Adopts only claims supported with evidence</td>
<td>Accurately analyzes appropriate evidence</td>
<td>Synthesizes evidence in order to articulate logical and compelling conclusion</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>SD</strong></td>
<td><strong>Mean</strong></td>
<td><strong>SD</strong></td>
<td><strong>Mean</strong></td>
<td><strong>SD</strong></td>
</tr>
<tr>
<td><strong>Lower Level (LL)</strong></td>
<td>2.22</td>
<td>.552</td>
<td>1.97</td>
<td>.513</td>
<td>2.06</td>
</tr>
<tr>
<td><strong>Upper Level (UL)</strong></td>
<td>2.27</td>
<td>.841</td>
<td>2.09</td>
<td>.755</td>
<td>2.18</td>
</tr>
<tr>
<td><strong>First College (UL)</strong></td>
<td>2.30</td>
<td>.719</td>
<td>2.10</td>
<td>.661</td>
<td>2.18</td>
</tr>
<tr>
<td><strong>Transfer (UL)</strong></td>
<td>2.08</td>
<td>.656</td>
<td>1.82</td>
<td>.520</td>
<td>1.96</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2.24</strong></td>
<td><strong>.705</strong></td>
<td><strong>2.03</strong></td>
<td><strong>.636</strong></td>
<td><strong>2.12</strong></td>
</tr>
</tbody>
</table>

*Ratings of “no evidence” are excluded from the calculation of the mean rating.*
<table>
<thead>
<tr>
<th>Trait</th>
<th>Analyzes Description</th>
<th>Questions Description</th>
<th>Adopts Description</th>
<th>Evidence Description</th>
<th>Synthesizes Description</th>
<th>Overall Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analyzes and evaluates relevant position</td>
<td>Questions key assumptions</td>
<td>Adopts only claims supported with evidence</td>
<td>Accurately analyzes appropriate evidence</td>
<td>Synthesizes evidence in order to articulate logical and compelling conclusion</td>
<td>Considers perspectives and positions, assesses the data or evidence and reaches appropriate conclusions</td>
</tr>
<tr>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Rater Consistency&lt;sup&gt;4&lt;/sup&gt;</td>
<td>.663</td>
<td>.649</td>
<td>.674</td>
<td>.655</td>
<td>.680</td>
<td>.687</td>
</tr>
<tr>
<td>&quot;No Evidence&quot;, as % of Total Ratings</td>
<td>15.1%</td>
<td>19.8%</td>
<td>16.1%</td>
<td>18.6%</td>
<td>17.8%</td>
<td>17.8%</td>
</tr>
</tbody>
</table>

Chart 5: Critical Thinking: Percentage of Papers with Mean Ratings at or Above 2.5, by Course Level

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<sup>4</sup>Two-way random intraclass correlation coefficient (ICC), using a consistency definition for average measure, as an estimator of interrater reliability. An ICC is measured on a scale of 0 to 1, with 1 representing perfect reliability and 0 representing no reliability. Generally, a coefficient of .700 or higher is considered acceptable. Ratings of “not in evidence” are excluded from this analysis.
Chart 6: Critical Thinking: Percentage of Upper Level Papers with Mean Ratings at or Above 2.5, by Admissions Type

Chart 7: Critical Thinking: Percentage of Lower Level Papers with Mean Ratings at or Above 2.5
Interpretation of Results

Extent this learning outcome has been achieved by students (Use both direct and indirect measure results):
The indirect measure data, gathered from numerous students, indicate that by graduation Marymount is effectively helping the students solve problems in their fields. The direct measure data are less favorable. The data indicate improvement by students during their Marymount education. Yet, the overall mean rating for this outcome was 2.06 (UL), below the minimum performance standard of 2.5. Forty-three percent (33%) of students’ work from upper-level courses met or exceeded the performance standard. The strongest ratings are in “adopts only claims supported with evidence” (41% of upper level work) while the lowest ratings were made in “questions key assumption” (36% of upper-level student work) and “synthesizes evidence in order to articulate logical and compelling conclusion” (29% of upper-level students). Transfer students are about even with first college students (those who began their education as freshmen at Marymount). Additionally, 17.8% of the work collected was found to have no evidence of critical thinking. The data represents a decline from 2015. During the past five years, “overall” performance has fluctuated, meeting expectations twice and failing to meet them on three occasions. Overall results on balance are lower than expected. This confirms raters reports during debriefing by the Director of the Liberal Arts Core that student work is often inadequate in evaluating evidence, searching out evidence against a position, and in recognizing logical connections between ideas. Raters commonly expressed the opinion that assignments described as “reflection papers” provided little evidence of critical thinking.
Program strengths and opportunities for improvement relative to assessment of outcome:
The main opportunities for improving the assessment procedure are (1) communicating earlier and more effectively with faculty about the aims of assessment and the types of assignments that most appropriate for submission to the assessment workshop, and (2) making more fine-grained comparisons of the data in order to localize areas for improvement, such as comparing results between inquiry and writing intensive courses, between courses in the liberal arts core and in the major disciplines, and perhaps across schools and departments.

Discuss planned curricular or program improvements for this year based on assessment of outcome:
Assessment results will be shared widely with school deans, department chairs and the faculty. During the 2016-17 academic year, the liberal arts core committee will continue evaluation of the critical thinking competency in the core curriculum. One question to address is whether new guidelines standards or requirements for teaching critical thinking in inquiry course should be introduced.

Learning Outcome 2: Information Literacy

Is this outcome being reexamined?  ☑ Yes ☐ No

If yes, give a brief summary of previous results (including trends) and any changes made to the program.

Assessment Activity

<table>
<thead>
<tr>
<th>Outcome Measures</th>
<th>Performance Standard</th>
<th>Data Collection</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain how student learning will be measured and indicate whether it is direct or indirect.</td>
<td>Define and explain acceptable level of student performance.</td>
<td>Discuss the data collected and student population</td>
<td>1) Describe the analysis process. 2) Present the findings of the analysis including the numbers participating and deemed acceptable.</td>
</tr>
<tr>
<td>Direct Measure: Papers from lower and upper-level courses were examined using the rubric for the information literacy competency.</td>
<td>Using a rubric created by faculty on the Liberal Arts Core Committee, sample student papers were rated with respect to three traits on a four-point scale, defined as follows: 1 - attempt that fails 2 - marginal 3 - adequate 4 – strong Average ratings at or above 2.5 are considered to be an</td>
<td>Copies of papers were gathered: 40 papers from lower-level and 39 papers from upper-level writing intensive or inquiry courses. The sample included papers by 31 transfer students, 13 at the lower-level and 18 at the upper-level.</td>
<td>Each student paper was rated on each of three traits and given an overall rating by five faculty raters using the rubric previously created the Liberal Arts Core Committee. The frequency of a rater choosing “no evidence” of a trait was examined by calculating the percentage of ratings that were “no evidence” from the total number of ratings for each trait. The mean rating for each student was then calculated. The percentage of student papers that met the acceptable level of performance (mean rating above 2.5) for each trait and the overall evaluation were calculated. Comparisons</td>
</tr>
</tbody>
</table>
acceptable level of performance. It is expected that 50% or more of students surveyed in upper-level courses will perform at this level.

Indirect Measure:
The following item from the 2015 Alumni Survey:
Evaluate the quality of information (e.g., scholarly articles, newspapers.)

An average student rating of “adequate” (3.00) is expected to meet the acceptable level of performance. The scale used for the question is: 1 = poor 2 = needs improvement 3 = adequate 4 = good 5 = excellent

154 one year alumni completed this survey question.

The data were collected and analyzed by the Office of Institutional Effectiveness. The mean rating for each item was then calculated.

Results: Mean score = 4.04, with 76.7% of respondents selecting good or excellent

### Table 3: Information Literacy: Description, Mean Ratings, and Rater Consistency

<table>
<thead>
<tr>
<th>Trait</th>
<th>Cites Description</th>
<th>Evaluates Source Material</th>
<th>Incorporates Source Material</th>
<th>Overall The paper indicates that information was used effectively to accomplish a specific purpose.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Demonstrates knowledge of citation usage and methods</td>
<td>Evaluates</td>
<td>Incorporates</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>source material</td>
<td>source material</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Lower Level (LL)</td>
<td>1.78</td>
<td>.570</td>
<td>2.13</td>
<td>.630</td>
</tr>
<tr>
<td>Upper Level (UL)</td>
<td>2.31</td>
<td>.642</td>
<td>2.70</td>
<td>.653</td>
</tr>
</tbody>
</table>

*Ratings of “no evidence” are excluded from the calculation of the mean rating.*
Chart 9: Information Literacy: Percentage of Papers with Mean Ratings at or Above 2.5, by Course Level

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Two-way random intraclass correlation coefficient (ICC), using a consistency definition for average measure, as an estimator of interrater reliability. An ICC is measured on a scale of 0 to 1, with 1 representing perfect reliability and 0 representing no reliability. Generally, a coefficient of .700 or higher is considered acceptable. Ratings of “not in evidence” are excluded from this analysis.
The previous rubric used to assess information literacy prior to 2015 examined four traits and an overall trait: 1) Verbatim material appears to be appropriately quoted; 2) Through the use of proper citation the student appears to demonstrate an understanding of what constitutes plagiarism; 3) An appropriate documentation style selected and used consistently throughout the paper to cite source; 4) Information selected provides evidence for the thesis statement; and 5) The paper indicates that information was used effectively to accomplish a specific purpose. This rubric was modified in 2015 to the current version.
Interpretation of Results

**Extent this learning outcome has been achieved by students** *(Use both direct and indirect measure results):*

The indirect measure data indicate that by graduation Marymount is effectively helping the students evaluate the quality of information. The direct measure data are similarly encouraging. The overall mean rating was 2.61 (UL), above the minimum performance standard of 2.5. Fifty-nine percent (59%) of upper-level students’ work met the standard. 9.6% of the work collected was deemed to show no evidence of information literacy. As in previous years, first-college students’ work on average was rated higher than transfer students’ work. A new rubric was used in 2015, so a direct comparison of 2016 with earlier years than 2015 is not possible. However, there was an overall decline in performance between 2011 and 2103 in upper-level courses, and the present data appear to have reached higher benchmarks. Of all four competencies, information literacy scores are the strongest this year.

**Program strengths and opportunities for improvement relative to assessment of outcome:**

Raters were generally satisfied with the new assessment rubric, indicating that it is easy use and that they could agree on upon a consistent interpretation. The main opportunities for improving the assessment procedure are (1) communicating earlier and more effectively with faculty about the aims of assessment and the types of assignments that most appropriate for submission to the assessment workshop, and (2) making more fine-grained comparisons of the data in order to localize areas for improvement, such as comparing results between inquiry and writing intensive courses, between courses in the liberal arts core and in the major disciplines, and perhaps across schools and departments.

**Discuss planned curricular or program improvements for this year based on assessment of outcome:**

Because opportunities to demonstrate information literacy come from assignments that require research, it is appropriate to address information literacy learning by focusing on the inquiry component of the core curriculum. During the 2016-17 academic year, the Inquiry committee will begin evaluation of the
inquiry requirement in the core curriculum. One question to address is whether new guidelines, standards or requirements for teaching information literacy in inquiry course should be introduced.

**Learning Outcome 4: Inquiry-based learning**

Is this outcome being reexamined? ☑ Yes ☐ No

If yes, give a brief summary of previous results (including trends) and any changes made to the program.

### Assessment Activity

<table>
<thead>
<tr>
<th>Outcome Measures</th>
<th>Performance Standard</th>
<th>Data Collection</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain how student learning will be measured and indicate whether it is direct or indirect.</td>
<td>Define and explain acceptable level of student performance.</td>
<td>Discuss the data collected and student population</td>
<td>1) Describe the analysis process.</td>
</tr>
<tr>
<td>2) Present the findings of the analysis including the numbers participating and deemed acceptable.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Direct Measure:** Papers from lower and upper-level courses were examined using the rubric for the inquiry competency.

Using a rubric created by faculty on the Liberal Arts Core Committee, sample student papers were rated with respect to five traits on a four-point scale, defined as follows:

1 - attempt that fails
2 - marginal
3 - adequate
4 – strong

Average ratings at or above 2.5 are considered to be an acceptable level of performance. It is expected that 50% or more of students surveyed in upper-level courses will perform at this level.

Copies of papers were gathered: 40 papers from lower-level and 40 papers from upper-level inquiry courses.

The sample included papers by 33 transfer students, 11 at the lower-level and 22 at the upper-level.

Each student paper was rated on each of five traits and given an overall rating by five faculty raters using the rubric previously created by the Liberal Arts Core Committee.

The frequency of a rater choosing “no evidence” of a trait was examined by calculating the percentage of ratings that were “no evidence” from the total number of ratings for each trait.

The mean rating for each student was then calculated. The percentage of student papers that met the acceptable level of performance (mean rating above 2.5) for each trait and the overall evaluation were calculated. Comparisons were made between results from lower-level and upper-level courses and between MU only students and transfer students. Comparisons were made between the last two years (2015-2016).

The intra-class consistency coefficient for ratings of each trait was also calculated.
### Outcome Measures

Explain how student learning will be measured and indicate whether it is direct or indirect.

### Performance Standard

Define and explain acceptable level of student performance.

### Data Collection

Discuss the data collected and student population

### Analysis

1) Describe the analysis process.
2) Present the findings of the analysis including the numbers participating and deemed acceptable.

62% of the upper level papers and 46% of the lower level papers were rated “overall” at the acceptable level or higher.

Detailed findings are presented in the tables below.

Indirect Measure:
The following item from the 2015 Alumni Survey:

Apply knowledge and skills to new situations

An average student rating of “adequate” (3.00) is expected to meet the acceptable level of performance. The scale used for the question is:

1 = poor
2 = needs improvement
3 = adequate
4 = good
5 = excellent

154 one year alumni completed this survey question.

The data were collected and analyzed by the Office of Institutional Effectiveness. The mean rating for each item was then calculated.

Results: Mean score = 4.07, with 78% of respondents selecting good or excellent

### Table 4: Inquiry: Description, Mean Ratings, and Rater Consistency

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Understanding</th>
<th>Methodology</th>
<th>Connections</th>
<th>Conclusions</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Provide appropriate, focused inquiry question or project</td>
<td>Provides appropriate, focused inquiry question or project</td>
<td>Designs or uses methodology or theoretical framework appropriate to inquiry question or project</td>
<td>Makes connections between and among ideas</td>
<td>States solid and insightful conclusions</td>
<td>Has a defined focus that uses appropriate methodology or a theoretical framework and provides a solid conclusion</td>
</tr>
<tr>
<td>Lower Level (LL)</td>
<td>2.58 .758</td>
<td>2.71 .761</td>
<td>2.45 .747</td>
<td>2.36 .724</td>
<td>2.22 .704</td>
<td>2.39 .736</td>
</tr>
<tr>
<td>Upper Level (UL)</td>
<td>2.90 .699</td>
<td>2.93 .712</td>
<td>2.66 .810</td>
<td>2.56 .831</td>
<td>2.56 .864</td>
<td>2.69 .782</td>
</tr>
<tr>
<td>First College (UL)</td>
<td>2.57 .795</td>
<td>2.63 .748</td>
<td>2.33 .746</td>
<td>2.30 .718</td>
<td>2.23 .776</td>
<td>2.37 .749</td>
</tr>
<tr>
<td>Transfer (UL)</td>
<td>2.95 .610</td>
<td>3.11 .636</td>
<td>2.86 .721</td>
<td>2.69 .814</td>
<td>2.59 .785</td>
<td>2.77 .748</td>
</tr>
</tbody>
</table>

*Ratings of “no evidence” are excluded from the calculation of the mean rating.*
<table>
<thead>
<tr>
<th>Total</th>
<th>2.73</th>
<th>.744</th>
<th>2.83</th>
<th>.740</th>
<th>2.54</th>
<th>.777</th>
<th>2.46</th>
<th>.780</th>
<th>2.38</th>
<th>.795</th>
<th>2.54</th>
<th>.768</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rater Consistency(\textsuperscript{9})</td>
<td>0.512</td>
<td>0.548</td>
<td>0.614</td>
<td>0.579</td>
<td>0.566</td>
<td>0.590</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“No Evidence”, as % of Total Ratings</td>
<td>31.6%</td>
<td>21.3%</td>
<td>27.6%</td>
<td>24.6%</td>
<td>30.3%</td>
<td>24.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{9}Two-way random intraclass correlation coefficient (ICC), using a consistency definition for average measure, as an estimator of interrater reliability. An ICC is measured on a scale of 0 to 1, with 1 representing perfect reliability and 0 representing no reliability. Generally, a coefficient of .700 or higher is considered acceptable. Ratings of “not in evidence” are excluded from this analysis.

**Chart 13: Inquiry: Percentage of Papers with Mean Ratings at or Above 2.5, by Course Level**

- **Lower Level**
- **Upper Level**

- **QUESTION**: 67%, 73%
- **UNDERSTANDING**: 64%, 70%
- **METHODOLOGY**: 51%, 63%
- **CONNECTIONS**: 44%, 54%
- **CONCLUSIONS**: 43%, 53%
- **OVERALL**: 46%, 62%
The previous rubric used to assess inquiry prior to 2015 was the Discover Assessment Tool (DAT), which examined ten traits on a five-point scale (1=Below first year, 5=Exceeds capstone): 1) Focus; 2) Context; 3) Gather the needed information and knowledge; 4) Evaluate information and knowledge; 5) Use of information and knowledge; 6) Design process; 7) Connections among ideas; 8) Conclusions; 9) Mechanics; and 10) Content.
Interpretation of Results

Extent this learning outcome has been achieved by students (Use both direct and indirect measure results):
Indirect measure data indicate that students have a high level of confidence in their ability to solve novel problems. The direct measure data, however, show that inquiry-based learning skills are above the expected level of performance. (2.54 overall). While sixty-two (62%) of upper-level student work met the standard, the inter-rater reliability was below the 0.7 acceptable threshold (0.590). A new assessment rubric was developed and used 2015, based on the formerly used Discover Assessment Tool (DAT). The new rubric did not differ substantially from the old one. It rather simplified the process by eliminating overlap with other assessment rubrics such as the critical thinking and information literacy rubrics. 24.8% of products were rated “No Evidence.”

Program strengths and opportunities for improvement relative to assessment of outcome:
The main opportunities for improving the assessment procedure are (1) communicating earlier and more effectively with faculty about the aims of assessment and the types of assignments that most appropriate for submission to the assessment workshop, and (2) more fine-grained comparisons of the data in order to localize areas for improvement, such as comparing results between inquiry and writing intensive courses, between courses in the liberal arts core and in the major disciplines, and perhaps across schools and departments. Faculty raters indicated that, unlike the other competencies, there was some lack of clarity about the definition of inquiry. While most raters felt that they shared a common understanding of the specific traits under evaluation, and agreed that the rubric could be consistently used, at least one rater claimed to have a different understanding of inquiry from the others. Some raters requested that a definition of inquiry-based learning be provided to the faculty.

Discuss planned curricular or program improvements for this year based on assessment of outcome:
Assessment results will be shared widely with school deans, department chairs and the faculty. During the 2016-17 academic year, the liberal arts core committee and the Inquiry committee will begin evaluation of the inquiry requirement in the core curriculum. One question to address is whether new guidelines standards or requirements for teaching inquiry-based learning should be introduced. Another is what must be done to develop a shared understanding of inquiry-based learning across the faculty.