Assessment Overview

Discipline/Program Name: Psychology  Assessment Year: 2010 - 2011

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Outcome Type</th>
<th>Methodology</th>
<th>n</th>
<th>History</th>
<th>Benchmark</th>
<th>Results</th>
<th>Strength of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Research Methodology</td>
<td>Discipline Outcome</td>
<td>Pre-Post Test</td>
<td>115</td>
<td>9 Years</td>
<td>Statistically Significant Improvement</td>
<td>Significant Improvement p &lt; .01</td>
<td>Strong</td>
</tr>
<tr>
<td>2. Problem Solving</td>
<td>Learning Outcome</td>
<td>Pre-Post Test</td>
<td>115</td>
<td>8 Years</td>
<td>Statistically Significant Improvement</td>
<td>Non-Significant Improvement p &gt; .05</td>
<td>Weak</td>
</tr>
<tr>
<td>3. Technology</td>
<td>Learning Outcome</td>
<td>Pre-Post Test</td>
<td>115</td>
<td>3 Years</td>
<td>Statistically Significant Improvement</td>
<td>Significant Improvement p &lt; .01</td>
<td>Strong</td>
</tr>
<tr>
<td>4. Psychological Themes</td>
<td>Discipline Outcome</td>
<td>Pre-Post Test</td>
<td>115</td>
<td>7 Years</td>
<td>Statistically Significant Improvement</td>
<td>Significant Improvement p &lt; .01</td>
<td>Strong</td>
</tr>
<tr>
<td>5. Student Success and Persistence</td>
<td>Other</td>
<td>Analysis of Institutional Data</td>
<td>2848</td>
<td>3 Years</td>
<td>Success: 70% Persistence: 85%</td>
<td>Success and Persistence Surpassed Benchmarks</td>
<td>Strong</td>
</tr>
</tbody>
</table>

Describe the Learning Outcome That You Have Measured

Report the Results of Your Data Analysis

Program / Discipline Assessment Report

Program/Discipline: Psychology
Responsibility: Cheyne L. Bamford, Ph.D.

Psychology Department Mission Statement
In a continually assessed learning-centered environment, it is the psychology department's mission to offer transfer level courses that enable students to improve their learning, master psychological theories and concepts, develop critical thinking abilities and achieve their personal and academic goals.

Program/Discipline's Assessment History:
By using the assessment process as an evaluative technique, how has it previously affected your program's curricula and/or teaching strategies?
The Assessment Project in psychology has increased awareness of the psychology curriculum in general and has emphasized the instruction of scientific methodology, unifying themes in psychology, problem solving and technology. The Psychology discipline
assessment also provides information about psychology students’ success and persistence rates. The feedback from previous years’ assessment data has affected discipline-wide teaching strategies in both online and face-to-face psychology classes. Past assessment analyses have contributed to curriculum decisions, textbook adoptions, adjunct hiring, and the selection of classroom materials and media.

By using the assessment process as an evaluative technique, what changes to student learning have been noted?

Historical Record of Assessments of Intended Learning Outcomes

Table 1 presents the pre- and posttest means from the discipline assessments conducted by the Psychology Department over the last ten years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Methodology</th>
<th>Unifying Themes</th>
<th>Problem Solving</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-'02</td>
<td>Pre-Test</td>
<td>3.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Test</td>
<td>4.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02-'03</td>
<td>Pre-Test</td>
<td>3.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Test</td>
<td>4.29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03-'04</td>
<td>Pre-Test</td>
<td>4.17</td>
<td>3.48</td>
<td>2.32</td>
</tr>
<tr>
<td>Post-Test</td>
<td>4.14</td>
<td>4.06</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td>04-'05</td>
<td>Pre-Test</td>
<td>3.48</td>
<td>3.40</td>
<td>1.97</td>
</tr>
<tr>
<td>Post-Test</td>
<td>4.11</td>
<td>3.81</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td>05-'06</td>
<td>Pre-Test</td>
<td>3.55</td>
<td>3.08</td>
<td>2.12</td>
</tr>
<tr>
<td>Post-Test</td>
<td>3.78</td>
<td>3.87</td>
<td>2.64</td>
<td></td>
</tr>
<tr>
<td>06-'07</td>
<td>Pre-Test</td>
<td>3.93</td>
<td>3.57</td>
<td>2.09</td>
</tr>
<tr>
<td>Post-Test</td>
<td>3.99</td>
<td>3.59</td>
<td>2.61</td>
<td></td>
</tr>
<tr>
<td>07-'08</td>
<td>Pre-Test</td>
<td>3.86</td>
<td>3.86</td>
<td>2.52</td>
</tr>
<tr>
<td>Post-Test</td>
<td>4.00</td>
<td>4.10</td>
<td>3.09</td>
<td></td>
</tr>
<tr>
<td>08-'09</td>
<td>Pre-Test</td>
<td>3.58</td>
<td>2.12</td>
<td>3.78</td>
</tr>
<tr>
<td>Post-Test</td>
<td>4.01</td>
<td>3.12</td>
<td>4.90</td>
<td></td>
</tr>
<tr>
<td>09-'10</td>
<td>Pre-Test</td>
<td>3.99</td>
<td>2.44</td>
<td>4.51</td>
</tr>
<tr>
<td>Post-Test</td>
<td>4.10</td>
<td>2.74</td>
<td>5.04</td>
<td></td>
</tr>
<tr>
<td>10-'11</td>
<td>Pre-Test</td>
<td>3.55</td>
<td>3.21</td>
<td>2.76</td>
</tr>
<tr>
<td>Post-Test</td>
<td>4.06</td>
<td>3.86</td>
<td>2.92</td>
<td>5.46</td>
</tr>
</tbody>
</table>

Table 1: Historical Comparison of the Mean Performance (Pretest and Posttest) for Each Intended Learning Outcome

Research Methodology has been measured for 9 years, with significant improvement in methodology learning achieved in four of those years, and no significant improvement in learning documented in five of those years. The Unifying Themes learning outcome has been measured for 7 years, and significant improvement in student learning was observed in five of those seven years. The Problem Solving outcome has been measured for the last 8 years, and has demonstrated significant improvement in student learning in every year except the
present year (’10-’11). The Technology learning outcome has been measured for the last three years, and each year has consistently demonstrated a significant improvement in technology learning across the semester. Finally, student success rates and persistence rates in psychology courses across the discipline have been tracked for the last three years. Student success rates have been steadily rising, while student failure rates have been consistently falling in psychology courses.

**What unintended consequences, if any, have occurred because of the assessment process?**
Not applicable.

**Who receives information about your department's assessment and why?**
The results of this year’s assessment will be shared with all psychology faculty (both full-time and adjunct), the ADSB dean, and the assessment committee. These parties all contribute to the development of the psychology curriculum. Hard copies of this report will be distributed to all PSY instructors, and the results will be discussed at PSY departmental meetings. The results will also be discussed at Assessment Workshops, and will be used to stimulate curriculum changes and future assessment. Analysis of these results will be included in any revisions of the Psychology Strategic Plan.

Issues that will be discussed include:
1. Improving the PSY assessment procedure, and maintaining the early delivery of the assessment tool in order to avoid compromising the pre-test data.
2. Implementing instructional methods to continue to improve students' development of critical thinking and problem solving abilities.
3. Altering the psychology curriculum to emphasize the unifying themes in psychology, especially for PSY 235 (Human Growth and Development) students.
4. Investigating differences in instruction and learning across course sections—teaching styles, testing, student motivation, etc.
5. Developing strategies to achieve higher rates of student success and persistence, and the setting of appropriate benchmarks for those outcomes.
6. Extending the assessment to include additional psychology concepts: development, language, intelligence, physiology, learning and memory, motivation and emotion, sensation and perception.
7. Encouraging compliance of instructors in the administration of the assessment tool. An instructors’ failure to administer the assessment or submit the data severely limits the effectiveness of the department’s assessment process.

Following the discussion of these issues, recommended changes in the psychology curriculum will be implemented. Acting on feedback from this assessment data will close the loop, and allow present and future assessments to direct the development of the psychology curriculum.

**Part 1: Previous Academic Year Assessment Summary**

**Previous Academic Year: 2010-11**

<table>
<thead>
<tr>
<th>Outcome #: 1</th>
<th><strong>Outcome Title:</strong> Scientific Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Type:</strong> Discipline</td>
<td><strong>Outcome Description:</strong> This learning outcome is assessed by measuring PSY students’ comprehension of the scientific method. Psychology is a behavioral science and relies upon the principles of the scientific method in research investigations.</td>
</tr>
<tr>
<td><strong>Benchmark for success</strong></td>
<td>1. The present study employed a repeated-measures design, and a statistically significant</td>
</tr>
</tbody>
</table>
1) Please specify what percentage of the sample size is expected to meet or exceed your benchmark.  
2) What is the rationale for choosing this measure?

**Description of assessment process:**
1) What assessment methods were used to measure this outcome (i.e. pre/post test, portfolio review, etc.)?  
2) How do these methods show students are learning?  
3) What frequency is this outcome being measured (i.e.: each semester, yearly, every other year, etc.) and why?  
4) How many students made up the sample size?

1. The assessment method for this intended learning outcome was the direct measurement of student performance based on paired pre and post tests of student learning. This year, assessment data was collected from students in PSY 101, PSY 102 and PSY 235 (General Psychology I and II and Human Growth and Development). Both face to face and online sections were assessed.  
2. A significant improvement in student performance across the pre and post-tests would confirm that the students’ comprehension of concepts related to the scientific method improved after receiving instruction in those concepts.  
3. The scientific methodology learning outcome is measured yearly. This timetable allows for an efficient research cycle, with data collected in the fall and analyzed in the spring.  
4. 115 students from PSY 101, PSY 102 and PSY 235 who completed both the pre- and post-tests.

**Results**
What were the results of the assessment process? (List results for each method, if more than one were used.)

**Assessment of the Scientific Methodology Learning Outcome**
SPSS for Windows was used to compare methodology pre- and posttest means in a repeated-measures design. Data from both the methodology pre-test and the methodology post-test were collected and entered into SPSS, with data included for analysis only if scores for both tests were available. Students with missing data were disregarded for analysis. Scores for both the pre-test and the post-test were collected for 115 students enrolled in PSY 101, PSY 102 and PSY 235. For the methodology data, the mean score of the post-test ($M = 4.06$) was significantly greater than the mean score of the pre-test ($M = 3.55$), $F(1,114) = 11.474, p < .01$. See the “‘10-’11 Methodology Assessment” graph below. The mean matching score on the pre-test of methodology learning increased by approximately a half-point on the post-test that followed course instruction, a significant improvement. In terms of percentage scores, the average methodology pretest score was 59%, while the average methodology posttest score was 68%.
Additionally, no main effect was observed for psychology course as a between subjects variable. The lack of a main effect of psychology course indicates that there were no significant differences in student performance on the methodology assessment across psychology courses (PSY 101, PSY 102 and PSY 235).

| What did the department learn? | 1. The methodology assessment revealed a significant improvement in student learning across the semester, and suggests that instruction contributed to improved performance in methodology concepts.  
2. In the ‘01-'02 academic year, psychology students' comprehension of methodology concepts was evaluated. In the '03-'04, '04-'05, '05-'06, '06-'07, '07-'08, '08-'09, '09-'10 and '10-'11 academic years, that methodology assessment was replicated. Referring to the “Methodology Assessment History” graph, it can be observed that student performance did not vary significantly across the pre and post tests in '03-'04, '05-'06, '06-'07, '07-'08 and '09-'10, while student performance in scientific methodology increased significantly across the pre and post tests in '01-'02, '04-'05, '08-'09 and '10-'11. |

| |  
| What did the department learn? | 1) How did group performance compare to the benchmark?  
2) How does the data compare to the previous year, if applicable?  
3) If multiple measures were used, how do they compare to each other? |
3. Not Applicable. A single direct measure of methodology learning was employed.

**Student performance summary**
1) Based on the findings, how does the department rate student performance in regards to this outcome (strong, weak, or neutral)?
2) How does this assessment affect plans for this coming year in terms of curricula, teaching strategies, and assessment methods?

1. The Psychology department rates the '10-'11 student learning in methodology as strong. Students achieved the benchmark of significantly improved performance in methodology at the end of the semester. The results of the '10-'11 assessment support the hypothesis that students’ methodology abilities would improve with instruction. The statistically significant improvement in academic performance that was observed across the semester in the methodology data can be attributed to academic experiences stimulated by the psychology curriculum. The significant improvement in students’ methodology abilities indicates that student performance improved after receiving instruction in those concepts.
2. Overall, the pattern of results observed in this year's assessment of methodology suggests that the psychology department excels in the development of methodology abilities. Scientific methodology is a discipline-related learning outcome, and is a fundamental set of concepts for the psychology discipline and all sciences.

<table>
<thead>
<tr>
<th>Outcome #: 2</th>
<th>Outcome Title: Problem Solving</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Type:</strong></td>
<td><strong>Outcome Description:</strong></td>
</tr>
<tr>
<td>Student Learning Outcome: Problem Solving</td>
<td>This learning outcome is assessed by measuring PSY students’ problem solving abilities. Students were asked to critically evaluate a series of items that described sources of information in scientific research. Students read each research report summary and identified problems or limitations associated with that information source.</td>
</tr>
<tr>
<td><strong>Benchmark for success</strong></td>
<td>1. The present study employed a repeated-measures design, and a statistically significant improvement (p &lt; .05) in student performance across the pre and post-tests for the problem solving learning objective was predicted. 2. Achieving this benchmark would confirm that the students’ problem solving abilities improved after receiving instruction in those concepts.</td>
</tr>
</tbody>
</table>

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**Methodology Assessment History**

![Graph showing methodology assessment history from '01-'02 to '10-'11](image)
Description of assessment process:
1) What assessment methods were used to measure this outcome (i.e. pre/post test, portfolio review, etc.)?
2) How do these methods show students are learning?
3) What frequency is this outcome being measured (i.e.: each semester, yearly, every other year, etc.) and why?
4) How many students made up the sample size?

1. The assessment method for the problem solving outcome was the direct measurement of student performance based on paired pre and post tests of student learning. This year, assessment data was collected from students in PSY 101 and PSY 102 (General Psychology I and II) and PSY 235 (Human Growth and Development).
2. A significant improvement in student performance across the pre and post-tests would confirm that the students’ problem solving abilities improved after receiving instruction in those concepts.
3. The problem solving learning outcome is measured yearly. This timetable allows for an efficient research cycle, with data collected in the fall and analyzed in the spring.
4. 115 students from PSY 101, PSY 102 and PSY 235 classes (both face to face and online) completed the problem solving pre- and post-tests.

Assessment of the Problem Solving Learning Outcome
SPSS for Windows was used to compare problem solving pre- and posttest means in a repeated-measures design. Data from both the pre-test and the post-test were collected and entered into SPSS, with data included for analysis only if scores for both tests were available. Students with missing data were disregarded for analysis. Scores for both the pre-test and the post-test were collected for 115 students enrolled in PSY 101, PSY 102 and PSY 235. For the problem solving data, the mean score of the post-test ($M = 2.92$) did not significantly differ from the mean score of the pre-test ($M = 2.76$), $F(1,114) = 1.05$, $p > .05$. See the “'10–'11 Problem Solving Assessment” graph below. The mean matching score on the pre-test of problem solving ability increased by less than a quarter of a point on the post-test that followed course instruction, a non-significant improvement. In terms of percentage scores, the average problem solving pretest score was 46%, while the average problem solving posttest score was 49%.

Additionally, no main effect was observed for psychology course as a between subjects variable. The lack of a main effect of psychology course indicates that there were no significant differences
What did the department learn?
1) How did group performance compare to the benchmark?
2) How does the data compare to the previous year, if applicable?
3) If multiple measures were used, how do they compare to each other?

1. This year, students displayed a small but non-significant increase in problem solving scores across the semester. The assessment of problem solving revealed no significant improvement in student learning across the semester, and this finding suggests that instruction did not improve performance on the problem solving measure at post-test. Although no statistical change was observed across the pre and posttests in '10-'11, students demonstrated a strong understanding of problem solving both early and late in the semester (relative to other years; see the Problem Solving Assessment History graph below). It can be observed that the '10-'11 pretest score is the highest of any of the eight years that problem solving has been measured, suggesting that students produced a high problem solving score on the pretest and maintained that level of performance on the posttest this year.

2. In the '03-'04 academic year, psychology students' problem solving abilities were evaluated, and that problem solving assessment was replicated in the subsequent seven academic years. Referring to the “Problem Solving Assessment History” graph, it can be observed that student performance in the development of problem solving abilities increased significantly across the pre and post tests in '03-'04, '04-'05, '05-'06, '06-'07, '07-'08, '08-'09 and '09-'10, yet failed to achieve significant improvement in '10-'11. The Assessment Project in psychology has increased awareness of the psychology curriculum in general and has emphasized the instruction of methodology, themes, problem solving, and technology.

3. Not Applicable. A single direct measure of problem solving was employed.

Student performance summary
1) Based on the findings, how does the department rate student performance in regards to this outcome (strong, weak, or neutral)?

1. The Psychology department rates the '10-'11 student learning in problem solving as weak. The assessment of the problem solving learning outcome revealed that students did not achieve the benchmark of significantly improved problem solving scores across the semester.

2. Overall, the pattern of results observed in this year's problem solving assessment suggests that
2) How does this assessment affect plans for this coming year in terms of curricula, teaching strategies, and assessment methods?

The psychology department must emphasize students’ development of problem solving abilities. Problem Solving is a Student Learning Outcome, and the psychology discipline must be a contributor to the skills that are integral to transfer students’ upper division success and coursework completion. The data from the problem solving assessment failed to achieve the stated benchmark of significantly improved performance across the semester, and the problem solving component of the psychology curriculum will require attention and revision. The Psychology Department will continue to revise the curriculum for problem solving instruction, as the benchmark for student learning was not achieved in this year’s assessment. Strategies for improving psychology students’ problem solving abilities will be discussed during upcoming psychology department meetings.

<table>
<thead>
<tr>
<th>Outcome #: 3</th>
<th>Outcome Title: Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Type:</strong></td>
<td><strong>Student Learning Outcome: Technology</strong></td>
</tr>
<tr>
<td><strong>Outcome Description:</strong></td>
<td>This learning outcome is assessed by measuring PSY students’ recognition of technological terms that are commonly found in the psychological literature. Many types of psychological research rely upon these technologies, and many forms of therapy incorporate these technologies.</td>
</tr>
</tbody>
</table>

**Benchmark for success**
1) Please specify what percentage of the sample size is expected to meet or exceed your benchmark.
2) What is the rationale for choosing this measure?

1. The present study employed a repeated-measures design, and a statistically significant improvement (p < .05) in student performance across the pre and post-tests for the technology learning outcome was predicted.
2. Achieving this benchmark would confirm that the students’ recognition of technological concepts improved after receiving instruction in those concepts.

**Description of assessment process:**
1) What assessment methods were used to measure this outcome (i.e. pre/post test, portfolio review, etc.)?
2) How do these methods show students are learning?
3) What frequency is this outcome being measured (i.e.: each semester, yearly, every other year, etc.) and why?
4) How many students made up the sample size?

1. The assessment method for this intended learning outcome was the direct measurement of student performance based on paired pre and post tests of student learning. This year, assessment data was collected from students in PSY 101 and PSY 102 (General Psychology I and II) and PSY 235 (Human Growth and Development).
2. A significant improvement in student performance across the pre and post-tests would confirm that the students’ recognition of technological concepts improved after receiving instruction in those concepts.
3. The technology learning outcome has been measured yearly, but will no longer be measured because it is no longer a learning outcome embraced by the college. This timetable allows for an efficient research cycle, with data collected in the fall and analyzed in the spring.
4. 115 students from PSY 101, PSY 102 and PSY 235 (both online and face to face classes) completed the technology pre- and post-tests.

**Results**
What were the results of the assessment process? (List results for each method, if more than one were used.)

**Assessment of the Technology Learning Outcome**
SPSS for Windows was used to compare technology pre- and posttest means of student performance in a repeated-measures design. Data from both the technology pre-test and the technology post-test were collected and entered into SPSS, with data included for analysis only if scores for both tests were available. Students with missing data were disregarded for analysis. Scores for both the pre-test and the post-test were collected for 115 students enrolled in PSY 101, PSY 102 and PSY 235. For the technology data, the mean score of the post-test (M = 5.46) was significantly greater than the mean score of the pre-test (M = 3.95), F(1,114) = 36.93, p < .01. The
mean matching score on the technology pre-test increased by approximately a point and a half on the post-test that followed course instruction, a statistically significant improvement. See the “’10 – ’11 Technology Assessment” graph below. In terms of percentage scores, the mean technology pretest score was 40%, while the mean posttest score was 55%.

Additionally, no main effect was observed for psychology course as a between subjects variable. The lack of a main effect of psychology course indicates that there were no significant differences in student performance in the technology measure across psychology courses (PSY 101, PSY 102 and PSY 235).

<table>
<thead>
<tr>
<th>What did the department learn?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) How did group performance compare to the benchmark?</td>
</tr>
<tr>
<td>2) How does the data compare to the previous year, if applicable?</td>
</tr>
<tr>
<td>3) If multiple measures were used, how do they compare to each other?</td>
</tr>
<tr>
<td>1. The technology assessment revealed a significant improvement in student learning across the semester, and suggests that instruction contributed to improved performance in technology concept recognition.</td>
</tr>
<tr>
<td>2. This is the third year of measuring the technology learning outcome, and each of those three years has documented a significant improvement in students’ technology learning across the semester. As can be observed in the “Technology Assessment History” graph below, the ’10-’11 technology results were very similar to the ’08-’09 and ’09-’10 results.</td>
</tr>
</tbody>
</table>
1. The Psychology department rates the '10-'11 student learning in technology as **strong**. The assessment of the technology learning outcome revealed that students achieved the benchmark of significantly improved technology scores across the semester. The results of the '10-'11 assessment support the hypothesis that students’ technology recognition would improve with instruction. The statistically significant improvement in academic performance that was observed across the semester in the technology data can be attributed to academic experiences stimulated by the psychology curriculum. The observed significant improvement in technology recognition confirms that student learning occurred as a result of receiving instruction in technology concepts.

2. Overall, the pattern of results observed in this year's assessment of the technology learning outcome suggests that the psychology department excels in the instruction of technology concepts. Because technology is also a Student Learning Outcome, the psychology discipline is a contributor to the skills that are integral to transfer students’ upper division success and coursework completion.

### Student performance summary

1) Based on the findings, how does the department rate student performance in regards to this outcome (**strong**, weak, or neutral)?

2) How does this assessment affect plans for this coming year in terms of curricula, teaching strategies, and assessment methods?

1. Not applicable. A single direct measure of technology learning was employed.

### Outcome #: 4

**Outcome Title**: Unifying Themes in Psychology

**Outcome Type**: Discipline

**Outcome Description**:

A fourth learning outcome measured students’ knowledge of seven major unifying themes in the field of psychology. These unifying themes might be described as “enduring issues in psychology.” The seven unifying themes are:

1. Psychology is empirical.
2. Psychology is theoretically diverse.
3. Psychology evolves in sociohistorical context.
4. Behavior is determined by multiple causes.
5. Our behavior is shaped by our cultural heritage.
6. Heredity and environment jointly influence behavior.
7. Our experience of the world is highly subjective.

| Benchmark for success | 1. The present study employed a repeated-measures design, and a statistically significant improvement (p < .05) in student performance across the pre and post-tests for the unifying themes learning outcome was predicted.
2. Achieving this benchmark would confirm that the students’ understanding of unifying themes improved after receiving instruction in those concepts. |
| Description of assessment process: | 1. The assessment method for this intended learning outcome was the direct measurement of student performance based on paired pre and post tests of student learning. This year, assessment data was collected from students in PSY 101 and PSY 102 (General Psychology I and II) and PSY 235 (Human Growth and Development).
2. A significant improvement in student performance across the pre and post-tests would confirm that the students’ understanding of concepts related to the unifying themes in psychology improved after receiving instruction in those concepts.
3. The unifying themes learning outcome is measured yearly. This timetable allows for an efficient research cycle, with data collected in the fall and analyzed in the spring.
4. 115 students from PSY 101, PSY 102 and PSY 235 (both online and face to face classes) completed the unifying themes pre- and post-tests. |
| Results | Assessment of the Unifying Themes Learning Outcome
SPSS for Windows was used to compare themes pre- and post-test means of student performance in a repeated-measures design. Data from both the themes pre-test and the themes post-test were collected and entered into SPSS, with data included for analysis only if scores for both tests were available. Students with missing data were disregarded for analysis. Scores for both the pre-test and the post-test were collected for 115 students enrolled in PSY 101, PSY 102 and PSY 235. For the themes data, the mean score of the post-test (M = 3.86) was significantly greater than the mean score of the pre-test (M = 3.21), \( F(1,114) = 8.03, p < .01 \). See the "’10 – ’11 Unifying Themes Assessment" graph below. In terms of percentage scores, the average themes pretest score was 46%, while the average posttest score was 55%. |

**Benchmark for success**
1) Please specify what percentage of the sample size is expected to meet or exceed your benchmark.
2) What is the rationale for choosing this measure?

**Description of assessment process:**
1) What assessment methods were used to measure this outcome (i.e. pre/post test, portfolio review, etc.)?
2) How do these methods show students are learning?
3) What frequency is this outcome being measured (i.e.: each semester, yearly, every other year, etc.) and why?
4) How many students made up the sample size?

**Results**
What were the results of the assessment process? (List results for each method, if more than one were used.)
No main effect was observed for psychology course as a between subjects variable. The lack of a main effect of psychology course indicates that there were no significant differences in student performance on the themes assessment across psychology courses (PSY 101, PSY 102 and PSY 235).

A significant interaction, $F(2,112) = 3.22, p < .05$, between Time and Course was discovered in the unifying themes data. The interaction between Time and Course revealed that PSY 101 students improved in their understanding of psychological themes across the semester, while PSY 102 and PSY 235 students’ performance did not change across the semester. Surprisingly, PSY 235 students performed much worse than PSY 101 and PSY 102 students at the themes posttest, despite PSY 235 being a higher level psychology course. See the “Themes: Time X Course Interaction” graph below.
What did the department learn?
1) How did group performance compare to the benchmark?
2) How does the data compare to the previous year, if applicable?
3) If multiple measures were used, how do they compare to each other?

1. The unifying themes assessment revealed a significant improvement in student learning across the semester, and suggests that instruction contributed to improved performance in students’ understanding of unifying themes in psychology.
2. In the '02-'03 academic year, students' comprehension of unifying themes in psychology was evaluated. The themes assessment was replicated in the '03-'04, '04-'05, '05-'06, '06-'07, '07-'08 and '10-'11 academic years. Referring to the “Themes Assessment History” graph, it can be observed that student performance in the comprehension of psychology themes increased significantly across the pre and post tests in '02-'03, '03-'04, '04-'05, '05-'06 and '10-'11. Student performance did not vary significantly across the pre and post tests in '06-'07 or '07-'08.
### Student performance summary

1) Based on the findings, how does the department rate student performance in regards to this outcome (**strong**, weak, or neutral)?
2) How does this assessment affect plans for this coming year in terms of curricula, teaching strategies, and assessment methods?

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1. The Psychology department rates the '10-'11 student learning of unifying themes as **strong**. The assessment of the unifying themes outcome revealed that students achieved the benchmark of significantly improved unifying themes scores across the semester. The results of the '10-'11 assessment support the hypothesis that students’ understanding of unifying themes in psychology would improve with instruction. The statistically significant improvement in academic performance that was observed across the semester in the unifying themes data can be attributed to academic experiences stimulated by the psychology curriculum. The observed significant improvement in students’ performance in unifying themes confirms that student learning occurred as a result of receiving instruction in those concepts.

2. Overall, the pattern of results observed in this year's assessment of the unifying themes learning outcome suggests that the psychology department excels in the instruction of those concepts. The mastery of unifying themes is a discipline-related learning outcome, and the unifying themes are fundamental concepts in the psychology discipline. However, the poor performance of PSY 235 Human Growth and Development students on the unifying themes measure requires investigation, and the PSY 235 curriculum will be modified to emphasize the unifying themes in psychology.

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### Outcome #: 5

<table>
<thead>
<tr>
<th>Outcome Type: Other Analysis of Institutional Data</th>
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</thead>
<tbody>
<tr>
<td><strong>Outcome Title</strong>: Student Success and Persistence in Psychology</td>
</tr>
<tr>
<td><strong>Outcome Description</strong>: This learning outcome is assessed by analyzing institutional data to determine PSY students’ success rates and persistence rates. The psychology department seeks to maintain a high level of student success and a high level of student persistence in psychology classes.</td>
</tr>
</tbody>
</table>

#### Benchmark for success

1) Please specify what percentage of the sample size is expected to meet or exceed your benchmark.
2) What is the rationale for choosing this measure?

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1. Student success is defined by a grade of “C” or better in any psychology course. The benchmark for student success in psychology is 70% of students achieving a “C” or better. Student persistence is defined as the completion of any psychology class with any grade. The benchmark for any given semester for student persistence in psychology is 85% or better. This benchmark can also be described as a withdrawal rate of less than 15%.

2. The institution measures year-to-year persistence and defines it as the proportion of full-time students who enrolled for the first time at the beginning of one academic year and who (1) were still enrolled for at least one credit at the beginning of the next academic year (fall-to-fall) and who (2) had not yet completed a degree or certificate. At ACC, the 2006 cohort persistence rate was 45%, indicating that 45% of the students who had previously enrolled at the college continued to be enrolled one year later. The Psychology department encourages student success and persistence, with the belief that students that persist through a single semester of study are likely to continue to enroll at the college and continue to persist in their academic pursuits. Note that an 85% semester persistence rate in psychology classes compares very favorably to a 45% year-to-year persistence rate at the institution.

#### Description of assessment process:

1) What assessment methods were used to measure this outcome (i.e. pre/post test, portfolio review, etc.)?

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1. An analysis of institutional data was used to determine PSY students’ success rates and persistence rates across all psychology classes. This year, institutional data was collected from face to face and online sections of PSY 101 and PSY 102 (General Psychology I and II), PSY 116
2) How do these methods show students are learning?

3) What frequency is this outcome being measured (i.e.: each semester, yearly, every other year, etc.) and why?

4) How many students made up the sample size?

2. Persistence to completion in a psychology class affords the student exposure to the entire class curriculum. Success in the class implies that the student has mastered the course competencies and has received a passing grade of “C” or better.

3. The student success and persistence data is analyzed in both the fall and spring semesters.

4. Success and persistence data was analyzed for 861 students in fall ’10, 982 students in spring ’11, and 1005 students in fall ‘11. Data was analyzed for both face to face and online classes.

Results

What were the results of the assessment process? (List results for each method, if more than one were used.)

Assessment of the Student Success and Persistence Learning Outcome

Student success and persistence is an assessment outcome that relies upon institutional data. Data were analyzed for all sections of all psychology courses.

<table>
<thead>
<tr>
<th>PSY Student Success and Persistence Fall ’10, Spring ’11 and Fall ‘11</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Fall 2010</td>
</tr>
<tr>
<td>Spring 2011</td>
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<tr>
<td>Fall 2011</td>
</tr>
</tbody>
</table>

What did the department learn?

1) How did group performance compare to the benchmark?

2) How does the data compare to the previous year, if applicable?

3) If multiple measures were used, how do they compare to each other?

1. In fall ’10, spring ’11 and fall ‘11, the student success rate surpassed the 70% benchmark (fall ’10: 72%, spring ’11: 75% and fall ’11: 75%). In fall ’10, spring ’11 and fall ‘11, the student persistence rate surpassed the 85% benchmark (fall ’10: 88%, spring ’11: 87%, and fall ’11: 88%).

2. This is the third year of measuring the student success and persistence outcome. As can be observed in the “Assessment History: Student Success and Persistence” graph below, the student success and persistence results have been very consistent over the past 3½ years.
Student performance summary
1) Based on the findings, how does the department rate student performance in regards to this outcome (strong, weak, or neutral)?
2) How does this assessment affect plans for this coming year in terms of curricula, teaching strategies, and assessment methods?

1. The Psychology department rates the '10-'11 student success and persistence as **strong**.
2. Overall, the pattern of results observed in this year's student success and persistence assessment suggests that the psychology department produces a high rate of student success and encourages student persistence. At present, the success rate has surpassed the 70% benchmark, and has been stable at 75% for the last two years. The student persistence rate is currently exceeding the 85% benchmark, and a 90% benchmark is within reach and could be achieved with a dedicated departmental effort. Strategies to achieve these new benchmarks will be discussed within the psychology department.

3. Not applicable. A single measure of student success and persistence was employed.
Part 2: Current Academic Year Assessment Plan

Current Academic Year: 2012

Intended Learning Outcomes (only include if they differ from those noted in Part 1)

Intended Learning Outcomes:
1. Scientific Methodology – Discipline Outcome
2. Information Management – Learning Outcome
3. Responsibility and Accountability – Learning Outcome
4. Unifying Themes – Discipline Outcome
5. Student Success and Persistence – Other Outcome

Assessment Method(s) (only include if they differ from those noted in Part 1)
1. Scientific Methodology: Pre–Post Tests
2. Information Management: Pre-Post Tests
3. Responsibility and Accountability: Correlation of student attendance to student academic performance
4. Unifying Themes: Pre-Post Tests
5. Student Success: Analysis of PSY student success rates and student persistence rates

Benchmarks (only include if they differ from those noted in Part 1)
1. Scientific Methodology: Statistically significant improvement across the pre-post tests
2. Information Management: Statistically significant improvement across the pre-post tests
3. Responsibility and Accountability: First year of measurement will establish the benchmark
4. Unifying Themes: Statistically significant improvement across the pre-post tests
5. Student Success: Surpassing a 70% student success rate department-wide with success defined as a passing grade (C or better)

Have you submitted a separate budget worksheet? (Choose by bolding; for information about this worksheet, please refer to the specific budgeting e-mail sent by the committee chairperson.)
Yes  No

Please submit this report (including both last year's summary and this year's plan) in a Word document to the Program Assessment committee chairperson (Cheyne Bamford: cheyne.bamford@arapahoe.edu). If you have any questions about the process, please contact the chairperson.