Learning Outcome

Information Management: Students will display an ability to critically evaluate sources of information and identify problems or limitations associated with those information sources.

Measure 1 Type:

Direct

Pre-Post tests

Measure 1 Description:

Information Management. Students will display an ability to critically evaluate sources of information and identify problems or limitations associated with those information sources. This learning outcome is assessed by measuring PSY students’ information management 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. The assessment method for the information management 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). A significant improvement in student performance across the pre and post-tests would confirm that the students’ information management abilities improved after receiving instruction in those concepts.

Measure 1 Sample Size:

100

Measure 1 Benchmark

1) Describe the benchmark for this measure.
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 information management learning outcome was predicted.

2) What is the rationale for choosing this benchmark?

Achieving this benchmark would confirm that the students’ information management abilities improved after receiving instruction in those concepts.

Measure 2 Type:

Please select

Measure 2 Description:

Measure 2 Sample Size:

Measure 2 Benchmark

1) Describe the benchmark for this measure.

2) What is the rationale for choosing this benchmark?

Outcomes Met/not met

Surpassed benchmark

Measure 1 Results:

SPSS for Windows was used to compare information management 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 209 students enrolled in PSY 101, PSY 102 and PSY 235. For the information management data, the mean score of the post-test ($M = 3.08$) was significantly greater than the mean score of the pre-test ($M = 2.22$), $F(1,99) = 29.52$, $p < .01$. See the “Information Management Learning Outcome” graph below. The mean matching score on the pre-test of information management increased by nearly a full point on the post-test that followed course instruction, a significant improvement. In terms of percentage scores, the average information management pretest score was 37%, while the average information management posttest score was 45%. 


Additionally, no main effect was observed for psychology course or delivery mode as a between subjects variable. The lack of a main effect of psychology course or delivery mode indicates that there were no significant differences in student performance on the information management measure across psychology courses (PSY 101, PSY 102 and PSY 235) or across delivery modes (online and face-to-face).

Measure 2 Results:

1) How did unit/department performance compare to the benchmark?

The information management assessment revealed a significant improvement in student learning across the semester, indicating that instruction contributed to improved student learning in information management.

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

In the '03-'04 academic year, psychology students' information management abilities were evaluated, and that information management assessment was replicated in the subsequent nine academic years. Referring to the “Information Management Assessment History” graph, it can be observed that student performance in the development of information management abilities increased significantly across the pre and post tests in '03-'04, '04-'05, '05-'06, '06-'07, '07-'08, '08-'09, '09-'10, '10-'11, '12 and '13, yet failed to achieve significant improvement in '10-'11.
3) If multiple measures were used, how do they compare to each other?
Not Applicable. A single direct measure of information management was employed.

1) Based on the findings, how does the unit/department rate performance in regards to this outcome (strong – exceeds benchmark, neutral – meets benchmark, or weak – misses benchmark)?
Surpassed benchmark

2) How does this assessment affect plans for this coming year in terms of strategic planning, budget planning, administrative and educational
support unit planning, and assessment planning?

The Psychology department rates the '13 student learning in information management as strong (surpassed benchmark). Students achieved the benchmark of significantly improved performance in information management at the end of the semester. The results of the '13 assessment support the hypothesis that students’ information management abilities would improve with instruction. The statistically significant improvement in academic performance that was observed across the semester in the information management data can be attributed to academic experiences stimulated by the psychology curriculum. The significant improvement in students’ information management abilities indicates that student performance improved after receiving instruction in those concepts.

Overall, the pattern of results observed in this year’s assessment of the information management learning outcome suggests that the psychology department excels in the instruction of information management abilities. Because information management is 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.

The results of this year’s assessment will be shared with all psychology faculty (both full-time and adjunct), the Psychology Department chair, the ADSB dean, and the assessment committee. These parties all contribute to the development of the psychology curriculum. 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 Program Review.

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 quantitative reasoning and information management abilities.
3. Modifying the psychology curriculum to further emphasize the unifying themes in psychology, and encouraging additional emphasis of the unifying themes within PSY 102 and PSY 235 courses.
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.
Further Action:
Further Action Unnecessary

Describe the action plan:
The discovery of a significant improvement in student learning across the pre- and post-tests in the information management assessment provides empirical evidence of student learning that can be attributed to the influence of psychology instruction. It has been demonstrated that students are benefitting from the instruction in information management that is provided by the psychology department. Therefore, no action will be taken to modify the information management component of the psychology curriculum this year.

Person/Group responsible for action

Target Date for implementation of the action

Priority

Describe any additional resources needed (Leave blank if no additional resources are needed.)

Learning Outcome
Research Methodology: Students will demonstrate an ability to differentiate the various steps in the research process and summarize the function of each step.

Measure 1 Type:
Direct

Pre-Post tests

Measure 1 Description:
Research Methodology. Students will demonstrate an ability to differentiate the various steps in the research process and summarize the function of each step. 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. 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. 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.

Measure 1 Sample Size:
100

Measure 1 Benchmark

1) Describe the benchmark for this measure.
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 methodology learning outcome was predicted.

2) What is the rationale for choosing this benchmark?
Achieving this benchmark would confirm that the students’ comprehension of concepts related to the scientific method improved after receiving instruction in those concepts.

Measure 2 Type:
Please select

Measure 2 Description:

Measure 2 Sample Size:

Measure 2 Benchmark

1) Describe the benchmark for this measure.

2) What is the rationale for choosing this benchmark?

Outcomes Met/not met
Surpassed benchmark
Measure 1 Results:
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 100 students enrolled in PSY 101, PSY 102 and PSY 235. For the methodology data, the mean score of the post-test (M = 4.12) was significantly greater than the mean score of the pre-test (M = 3.67), $F(1,99) = 6.848, p < .01$. See the “Research Methodology Learning Outcome” 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 61%, while the average methodology posttest score was 69%.

![Research Methodology Discipline Outcome](image)

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).

Measure 2 Results:

---

1) How did unit/department performance compare to the benchmark?
The methodology assessment revealed a significant improvement in student learning across the semester, indicating that instruction contributed to improved student learning for methodology concepts.

2) How does the data compare to the previous year, if applicable?
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, '10-'11, '12 and '13 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, '10-'11, '12 and '13.

3) If multiple measures were used, how do they compare to each other?
Not Applicable. A single direct measure of methodology learning was employed.
1) Based on the findings, how does the unit/department rate performance in regards to this outcome (strong – exceeds benchmark, neutral – meets benchmark, or weak – misses benchmark)?

Surpassed benchmark

2) How does this assessment affect plans for this coming year in terms of strategic planning, budget planning, administrative and educational support unit planning, and assessment planning?

The Psychology department rates the '13 student learning in research methodology as strong (surpassed benchmark). 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.

The results of this year's assessment will be shared with all psychology faculty (both full-time and adjunct), the Psychology Department chair, the ADSB dean, and the assessment committee. These parties all contribute to the development of the psychology curriculum. 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 Program Review. Issues that will be discussed include:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Improving the PSY assessment procedure, and maintaining the early delivery of the assessment tool in order to avoid compromising the pre-test data.</td>
</tr>
<tr>
<td>2.</td>
<td>Implementing instructional methods to continue to improve students' development of quantitative reasoning and information management abilities.</td>
</tr>
<tr>
<td>3.</td>
<td>Modifying the psychology curriculum to further emphasize the unifying themes in psychology, and encouraging additional emphasis of the unifying themes within PSY 102 and PSY 235 courses.</td>
</tr>
<tr>
<td>4.</td>
<td>Investigating differences in instruction and learning across course sections—teaching styles, testing, student motivation, etc.</td>
</tr>
<tr>
<td>5.</td>
<td>Developing strategies to achieve higher rates of student success and persistence, and the setting of appropriate benchmarks for those outcomes.</td>
</tr>
<tr>
<td>6.</td>
<td>Extending the assessment to include additional psychology concepts: development, language, intelligence, physiology, learning and memory, motivation and emotion, sensation and perception.</td>
</tr>
<tr>
<td>7.</td>
<td>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.</td>
</tr>
</tbody>
</table>

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.
Further Action:
Further Action Unnecessary

Describe the action plan:
The discovery of a significant improvement in student learning across the pre- and post-tests in the research methodology assessment provides empirical evidence of student learning that can be attributed to the influence of psychology instruction. It has been demonstrated that students are benefiting from the instruction in research methodology that is provided by the psychology department. Therefore, no action will be taken to modify the research methodology component of the psychology curriculum this year.

Person/ Group responsible for action

Target Date for implementation of the action

Priority

Describe any additional resources needed (Leave blank if no additional resources are needed.)

Learning Outcome
Psychological Themes: Students will demonstrate an ability to categorize the seven major unifying themes in psychology and discriminate the characteristics of each theme.

Measure 1 Type:
Direct

Pre-Post tests

Measure 1 Description:
Unifying Themes in Psychology. Students will demonstrate an ability to identify the seven major unifying themes in psychology and discriminate the characteristics of each theme. This 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.

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). 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.

Measure 1 Sample Size:
100

Measure 1 Benchmark

1) Describe the benchmark for this measure.

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) What is the rationale for choosing this benchmark?

Achieving this benchmark would confirm that the students’ understanding of unifying themes improved after receiving instruction in those concepts.

Measure 2 Type:

Please select

Measure 2 Description:

Measure 2 Sample Size:

Measure 2 Benchmark

1) Describe the benchmark for this measure.
2) What is the rationale for choosing this benchmark?

Outcomes Met/not met
Missed benchmark

Measure 1 Results:
SPSS for Windows was used to compare themes pre- and posttest 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 100 students enrolled in PSY 101, PSY 102 and PSY 235. For the themes data, the mean score of the post-test (M = 3.96) did not significantly differ from the mean score of the pre-test (M = 4.06), F(1,99) = .197, p > .05. See the “Psychological Themes Learning Outcome” graph below. The mean matching score on the pre-test of unifying themes decreased slightly on the post-test that followed course instruction. In terms of percentage scores, the average themes pretest score was 58%, while the average posttest score was 57%.

![Psychological Themes Discipline Outcome](image.png)

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(1,94) = 5.304, p < .05, between time and course delivery mode was discovered in the themes data. The interaction between time and delivery mode revealed that students receiving face-to-face instruction improved in their understanding of psychology themes across the semester, while online students’ performance decreased across the semester. Both face-to-face and online instruction produced similar themes scores at posttest. See the “Time X Delivery Mode Interaction for Psychological Themes” graph below.
Measure 2 Results:

1) How did unit/department performance compare to the benchmark?

This year, students displayed a small decrease in unifying themes scores across the semester. The assessment of themes revealed no significant improvement in student learning across the semester, and this finding suggests that instruction did not improve performance on the themes assessment at post-test. Although no statistical change was observed across the pre and posttests in '13, students demonstrated a strong understanding of the unifying themes in psychology both early and late in the semester (relative to other years; see the Psychological Themes Assessment History graph below). This finding suggests that students produced a high themes score on the pretest and maintained that level of performance on the posttest this year.

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

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,'10-'11, '12 and '13 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, '10-'11, and '12. Student performance did not vary significantly across the pre and post tests in '06-'07, '07-'08 and '13.
3) If multiple measures were used, how do they compare to each other?

3. Not applicable. A single direct measure of unifying themes learning was employed.

1) Based on the findings, how does the unit/department rate performance in regards to this outcome (strong – exceeds benchmark, neutral – meets benchmark, or weak – misses benchmark)?
Missed benchmark

2) How does this assessment affect plans for this coming year in terms of strategic planning, budget planning, administrative and educational support unit planning, and assessment planning?

The Psychology department rates the '13 student learning of unifying themes as weak (missed benchmark). The assessment of the unifying themes outcome revealed that students failed to achieve the benchmark of significantly improved unifying themes scores across the semester. Overall, the pattern of results observed in this year’s themes assessment suggests that the psychology department must emphasize students’ development of unifying themes comprehension. Unifying themes is a discipline-related learning outcome, and is a fundamental set of concepts for the psychology discipline. The data from the themes assessment failed to achieve the stated benchmark of significantly improved performance across the semester, and the unifying themes component of the psychology curriculum will require attention and revision. The Psychology Department will continue to revise the curriculum for themes instruction, as the benchmark for student learning was not achieved in this year’s methodology assessment.

The results of this year’s assessment will be shared with all psychology faculty (both full-time and adjunct), the Psychology Department chair, the ADSB dean, and the assessment committee. These parties all contribute to the development of the psychology curriculum. 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 Program Review. 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 quantitative reasoning and information management abilities.

3. Modifying the psychology curriculum to further emphasize the unifying themes in psychology, and encouraging additional emphasis of the unifying themes within PSY 102 and PSY 235 courses.

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.
Further Action:
Further Action Planned

Describe the action plan:
The Psychology Department must emphasize students' development of unifying themes comprehension. The unifying themes component of the psychology curriculum will require attention and revision. The Psychology Department will continue to revise the curriculum for themes instruction, as the benchmark for student learning was not achieved in this year’s themes assessment. The Psychology Department will modify the psychology curriculum to emphasize the unifying themes in psychology, and will focus on encouraging additional instruction of the unifying themes within PSY 102 and PSY 235 courses, with special emphasis in online classes.

Person/ Group responsible for action
Psychology Department Faculty

Target Date for implementation of the action
10/31/2014

Priority
Medium

Describe any additional resources needed (Leave blank if no additional resources are needed.)

Learning Outcome
Quantitative Reasoning: Students will display quantitative reasoning abilities in the calculation of statistical procedures and the comprehension of quantitative psychological phenomena.

Measure 1 Type:
Direct

Pre-Post tests

Measure 1 Description:
Quantitative Reasoning: Students will display quantitative reasoning abilities in the calculation of statistical procedures and the comprehension of quantitative psychological phenomena. This learning outcome is assessed by measuring PSY students’ ability to display quantitative reasoning abilities in psychology-related examples of data analysis, statistical calculations, and understanding of quantitative psychological phenomena. Many types of psychological research rely upon quantitative reasoning abilities for data analysis and calculation. 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). 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.

Measure 1 Sample Size:
100

Measure 1 Benchmark

1) Describe the benchmark for this measure.
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 quantitative reasoning learning outcome was predicted.

2) What is the rationale for choosing this benchmark?
Achieving this benchmark would confirm that students’ quantitative reasoning abilities improved after receiving instruction in those concepts.

Measure 2 Type:
Please select

Measure 2 Description:

Measure 2 Sample Size:

Measure 2 Benchmark

1) Describe the benchmark for this measure.
2) What is the rationale for choosing this benchmark?

Outcomes Met/not met
Surpassed benchmark

Measure 1 Results:
SPSS for Windows was used to compare technology pre- and posttest means of student performance in a repeated-measures design. Data from both the quantitative reasoning pre-test and the quantitative reasoning 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 100 students enrolled in PSY 101, PSY 102 and PSY 235. For the quantitative reasoning data, the mean score of the post-test (M = 4.29) was significantly greater than the mean score of the pre-test (M = 3.58), F(1,99) = 13.54, p < .01. The mean matching score on the quantitative reasoning pre-test increased by over a half point on the post-test that followed course instruction, a statistically significant improvement. See the “Quantitative Reasoning Learning Outcome” graph below. In terms of percentage scores, the mean quantitative reasoning pretest score was 40%, while the mean posttest score was 48%.

![Quantitative Reasoning Learning Outcome](image)

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 quantitative reasoning measure across psychology courses (PSY 101, PSY 102 and PSY 235).

However, a significant main effect of delivery mode, F(1,94) = 8.219, p < .01, was discovered in the data. The main effect revealed that students receiving online instruction performed at a higher level on the quantitative reasoning assessment at both the pre-test and the post-test. See the “A Main Effect of Delivery Mode for Quantitative Reasoning” graph below.
Measure 2 Results:

1) How did unit/department performance compare to the benchmark?

The quantitative reasoning assessment revealed a significant improvement in student learning across the semester, and suggests that instruction contributed to improved performance in students’ quantitative reasoning abilities.

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

Referring to the “Quantitative Reasoning Assessment History” graph, it can be observed that student performance in the development of quantitative reasoning abilities increased significantly across the pre- and post-tests in both ’12 and ’13.
3) If multiple measures were used, how do they compare to each other?
Not applicable. A single direct measure of quantitative reasoning was employed.

1) Based on the findings, how does the unit/department rate performance in regards to this outcome (strong – exceeds benchmark, neutral – meets benchmark, or weak – misses benchmark)?
Surpassed benchmark

2) How does this assessment affect plans for this coming year in terms of strategic planning, budget planning, administrative and educational support unit planning, and assessment planning?
The Psychology department rates the '13 student learning in quantitative reasoning as strong (surpassed benchmark). The assessment of the quantitative reasoning learning outcome revealed that students achieved the benchmark of significantly improved quantitative reasoning scores across the semester. The results of the '13 assessment support the hypothesis that students’ quantitative reasoning would improve with instruction. The statistically significant improvement in academic performance that was observed across the semester in the quantitative reasoning data can be attributed to academic experiences stimulated by the psychology curriculum. The observed significant improvement in quantitative reasoning confirms that student learning occurred as a result of receiving instruction in quantitative reasoning.

Overall, the pattern of results observed in this year’s assessment of the quantitative reasoning learning outcome suggests that the psychology department excels in the instruction of quantitative reasoning skills. Because quantitative reasoning 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.

The results of this year’s assessment will be shared with all psychology faculty (both full-time and adjunct), the Psychology Department chair, the ADSB dean, and the assessment committee. These parties all contribute to the development of the psychology curriculum. 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 Program Review. 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 quantitative reasoning and information management abilities.
3. Modifying the psychology curriculum to further emphasize the unifying themes in psychology, and encouraging additional emphasis of the unifying themes within PSY 102 and PSY 235 courses.
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.
Further Action:
Further Action Unnecessary

Describe the action plan:
The discovery of a significant improvement in student learning across the pre- and post-tests in the quantitative reasoning assessment provides empirical evidence of student learning that can be attributed to the influence of psychology instruction. It has been demonstrated that students are benefitting from the instruction in quantitative reasoning that is provided by the psychology department. Therefore, no action will be taken to modify the quantitative reasoning component of the psychology curriculum this year.

Person/ Group responsible for action

Target Date for implementation of the action

Priority

Describe any additional resources needed (Leave blank if no additional resources are needed.)

Learning Outcome
Student success and Persistence: Students will be encouraged to pursue success in psychology department offerings and to persist to completion in the PSY classes in which they enroll.

Measure 1 Type:
Indirect

Institutional data

Measure 1 Description:
Student Success and Persistence in Psychology. Students will be encouraged to pursue success in psychology department offerings and to persist to completion in the PSY classes in which they enroll. 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. 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 (Stress Management), PSY 205 (Psychology of Gender), PSY 217 (Human Sexuality), PSY 226 (Social Psychology), PSY 235 (Human Growth and Development), PSY 238 (Child Development), and PSY 249 (Abnormal Psychology). 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.

Measure 1 Sample Size:
2118

Measure 1 Benchmark

1) Describe the benchmark for this measure.

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) What is the rationale for choosing this benchmark?

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 a 90% semester persistence rate in psychology classes compares very favorably to a 45% year-to-year persistence rate at the institution.

Measure 2 Type:

Please select

Measure 2 Description:

Measure 2 Sample Size:

Measure 2 Benchmark
1) Describe the benchmark for this measure.

2) What is the rationale for choosing this benchmark?

Outcomes Met/not met
Surpassed benchmark

Measure 1 Results:
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 Spring '13 and Fall '13</th>
<th>Success</th>
<th>Failure</th>
<th>Persistence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2013</td>
<td>78%</td>
<td>12%</td>
<td>90%</td>
</tr>
<tr>
<td>Fall 2013</td>
<td>76%</td>
<td>14%</td>
<td>90%</td>
</tr>
</tbody>
</table>

The student success rate surpassed the 70% benchmark in both spring ‘13 (78%) and fall ‘13 (76%). The persistence rate surpassed the 85% benchmark in both spring ‘13 (90%) and fall ‘13 (90%).

Measure 2 Results:

1) How did unit/department performance compare to the benchmark?
In spring '13 and fall '13, the student success rate surpassed the 70% benchmark (spring ‘13: 78% and fall ‘13: 76%) In spring ‘13 and fall ‘13, the persistence rate surpassed the 85% benchmark (spring ‘13: 90% and fall ‘13: 90%).

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

This is the fifth year of measuring the student success and persistence outcome. Both student success and persistence benchmarks have been consistently surpassed in the Psychology discipline.

<table>
<thead>
<tr>
<th></th>
<th>Success</th>
<th>Failure</th>
<th>Persistence</th>
</tr>
</thead>
<tbody>
<tr>
<td>fall 08</td>
<td>71</td>
<td>17</td>
<td>88</td>
</tr>
<tr>
<td>spring 09</td>
<td>72</td>
<td>17</td>
<td>89</td>
</tr>
<tr>
<td>fall 09</td>
<td>71</td>
<td>17</td>
<td>88</td>
</tr>
<tr>
<td>spring 10</td>
<td>72</td>
<td>16</td>
<td>88</td>
</tr>
<tr>
<td>fall 10</td>
<td>72</td>
<td>16</td>
<td>88</td>
</tr>
<tr>
<td>spring 11</td>
<td>75</td>
<td>12</td>
<td>87</td>
</tr>
<tr>
<td>fall 11</td>
<td>74</td>
<td>13</td>
<td>90</td>
</tr>
<tr>
<td>spring 12</td>
<td>75</td>
<td>16</td>
<td>92</td>
</tr>
<tr>
<td>fall 12</td>
<td>78</td>
<td>12</td>
<td>90</td>
</tr>
<tr>
<td>spring 13</td>
<td>76</td>
<td>14</td>
<td>90</td>
</tr>
</tbody>
</table>

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

Not applicable. A single measure of student success and persistence was employed.
1) Based on the findings, how does the unit/department rate performance in regards to this outcome (strong – exceeds benchmark, neutral – meets benchmark, or weak – misses benchmark)?

Surpassed benchmark

2) How does this assessment affect plans for this coming year in terms of strategic planning, budget planning, administrative and educational support unit planning, and assessment planning?

The Psychology department rates the '10-'11 student success and persistence as strong (exceeds benchmark). 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 several years. The student persistence rate is currently exceeding the 85% benchmark, and a 90% persistence rate has been achieved for the last two years.

Further Action:

Further Action Unnecessary

Describe the action plan:

Person/ Group responsible for action

Target Date for implementation of the action

Priority

Describe any additional resources needed (Leave blank if no additional resources are needed.)