

# PET FORM Planning and Evaluation Tracking (2010-2011 Assessment Period)

Division of: Behavioral Studies

Person Responsible for this Division: Jerry Moller

Department of: Behavioral Sciences

Person Responsible for this Form: Deborah Harding

Secondary People Responsible: Debra Avara and Jeff A. Kee

Purpose Statement: To be able to enrich the lives of our students and community through the development of an understanding and the ability to apply the principles of human behavior and interaction related to individual and group psychology, sociology and social work (11/11/11).

**Goal Statement #1:** In alignment with Goal 1.1 of the Amarillo College Strategic Plan (through 2015), and the COURSE OUTCOME statements for general psychology, sociology and child psychology courses here at Amarillo College, GOAL #1 is to develop the most effective classroom teaching methodology to assist Amarillo College students in understanding, exhibiting knowledge and skill, as well as developing an appreciation for basic scientific research and how it is conducted in the behavioral sciences. This will include assessment of student's comprehension of research methodologies and research designs typically used in psychology and sociology, as well as their ability to design such a study (AC Strategic Plan through 2015: Strategy 1.1).

#### **Outcome/Objective Statement**

#### (Be sure to include audience, behavior, conditions, degree/benchmark, and evaluation method):

- 1. All Amarillo College students taking general psychology, general sociology, and child psychology courses will do significantly better (.01 to .000) on the post-test than the pre-test in answering questions related to the sample experiment and research designs as evaluated by a panel of three student judges.
- 2. All Amarillo College students taking general psychology, general sociology, and child psychology courses will not demonstrate a significant difference (.01 to .000) in pre-test scores regardless of teaching methodology.
- 3. All Amarillo College students taking general psychology, general sociology, and child psychology courses who complete the lecture with the lab will do significantly (.01 to .000) better than the students who receive lecture only in answering questions about the sample experiment on the post test.
- 4. While all psychology and sociology students, regardless of teaching methodology, should show an increase in appreciation for, understanding of, and feelings of competence in their ability to actually design a behavioral studies experiment, students in the lecture combined with lab condition should show a much larger increase.

## Supplemental Information

During the fall of 2010 and spring, 2011 semesters, 154 Amarillo College psychology and sociology students taking general psychology, general sociology and child psychology courses, were instructed using one of two teaching methodologies covering the topic of scientific research in the behavioral sciences. In one group, students received a lecture only, and in the second group, students received the lecture and an in class lab where students met in groups to design a simple psychological or sociological experiment. Prior to the teaching methodology selected and introduction of

the topic, all students took a pre-test with 4 questions covering an example of a psychological experiment (1) what is the hypothesis being made?; 2) label the independent variable(s); 3) label the dependent variable, 4) is there a confound and, if so, what is it, and how could you fix it and design a better experiment?). As well, 3 questions were added from the previous year's assessment, asking students to rate their appreciation for scientific process in behavioral sciences, their sense that they understand the research in the behavioral sciences, and their feeling of competency in being able to design a simple experiment in the behavioral science areas. The first four questions on the pre- and post-assessments were scored by a panel of three student judges as: 0=completely incorrect 1=mostly incorrect 2=mostly correct 3=completely correct. Following either the lecture or the lecture combined with lab, all students took a post-test with the same questions.

Items on the pre- and post- tests will be asking students in a fill in the blank format about a sample experiment, as to the hypothesis, label design, labeling the variables, and asking them to suggesting a better design that would improve the existent experiment, along with the "appreciation, value and competency" questions. There was a space of 4 weeks between the pre- and the post- tests.

(AC Strategic Plan through 2015: Task 1.1.1).

## Results (Provide Numbers and Percentages for Quantitative Data)

- O 2009-2010 Data: This outcome assessment was given to 74 general psychology and sociology students. There were four questions asking student to label the hypothesis, and the variables, and a fifth question asking them to create a more effective design for the experiment. Results showed mixed improvements in knowledge and application of that knowledge. One group receiving the lecture showed significant improvement, while the second {"lecture" group showed little improvement. The same was true for the lecture combined with lab group. Because the results were mixed, it was determined that a larger sample was needed across several different behavioral science courses. As well, questions regarding attitudes related to students' value of scientific method in the behavioral sciences, along with their sense of competency in understanding and working with scientific data should be assessed.
- o 2010-2011 Data: This assessment was given to 154 general psychology and sociology and child psychology students across five class sections, across two semesters. Two of the larger class sections received the lecture only method and the three smaller classes received the lecture combined with lab methodology. Results showed a significant improvement for the lecture/lab group over the lecture only group on all "knowledge" based questions labeling the design, variables and ways to improve the experiment. All findings were significant at the .01 to .001 level. When it came to the last 3 questions related to students attitudes on science, there was, as predicted, equal increase in appreciation for the scientific method for both the lecture and the lecture-lab classes. When it came to the questions, "After completing this part of our course on science, how capable do you feel in working and designing a behavioral science experiment"? The lab with lecture group indicated that they felt significantly more capable than the students receiving the lecture only.

#### Analysis

o Provide Previous Data/Result Analysis

(Include if benchmark was met and how results relate to outcome statement): Because this second assessment was given to "beginning" students in the general psychology and sociology and child psychology courses, results were less mixed than the previous year when the one of the teaching methodologies was given to the beginning students and the second was given to more advanced students in the social psychology class. By administering the two teaching methods to "beginning students" across five class

sections, results appeared to be more valid. All predictions were met, suggesting that the lecture combined with a hands-on lab is a superior teaching methodology in accomplishing the goal.

#### Improvements

- o List any Improvements Made in the **2010-2011** (Last Academic) Year Based on the **2009-2010** PET Results: The two teaching methods were given to more students, across more sections that included students in the beginning survey courses for general psychology and sociology, and child psychology, eliminating the more advanced students from the year before. The assessment was rewritten to include attitude questions related to the students 'appreciation for science, their understanding of science, and their sense of competency to work with and understand scientific data in the behavioral sciences, along with the knowledge based questions. A little more time was given between the pre- and post- tests.
- o Evaluate Why Improvements Were Successful/Were Not Successful: Balancing the classes, increasing sample size, and using beginning students for this assessment led to results that were more reliable and valid. As well, the added questions show that, regardless of the teaching method used, students do gain a greater appreciation for the use of scientific methodology in the behavioral sciences, as stated in the goal.
- o Provide the Budget Information Needed to Make Past Improvements (Cost/Details): Outside of copying charges, no budget was needed to administer this assessment and make these improvements. More advanced AC students were used as judges, and were given credit to rate the knowledge based items, as an added benefit to our students participation in scientific inquiry.

## • Recommendations/Actions for **2011-2012**

- o Person Responsible (Who will complete the action?): Dr. Deborah Harding, Debra Avara
- o Action Plan: Recommendations have been made to the other instructors who are teaching general psychology and sociology courses here at Amarillo College, related to the use of a hands-on lab approach to teaching scientific methodology. For the instructors participating in this study, all agreed that using a lab approach is beneficial to student learning, and will continue to do so. Because benchmarks were met, no further action will be made at this time. This assessment will be closed out at this time.
- o Expected Time Frame Needed to Implement Action Plan (Please provide specific deadline date): N/A
- Budget Information Needed for Future Action (Cost/Details): N/A.

**Goal Statement #2:** In alignment with the Student Performance and Course Objectives for the Human Behavior and Personal Adjustment (Psychology 2315) course, which is a counseling focused psychology class, the goal is to move students from knowledge of terms in various counseling models, to an understanding of how these models work, and then to the actual application of these counseling models in solving real life problems.

#### Outcome:

(Be sure to include audience, behavior, conditions, degree/benchmark, and evaluation method):

Psych 2315 students taking a "group therapy" approach to the topic of REBT will show a statistically significant improvement (.01 to .000) on a questionnaire focused on the students understanding of the REBT model and will significantly improve in their ability to use material to solve applied math problems.

## **Supplemental Information**

The objective of this outcome assessment is to measure the degree of understanding and potential change in Amarillo College students taking the Human Behavior and Personal Adjustment course at Amarillo College with regard to their knowledge of and application of some of the primary principles of Rational Emotive Behavioral Therapy. One of the main pillars of REBT is that irrational and dysfunctional ways and patterns of thinking, feeling and behaving are contributing to much, though hardly all, human disturbance and emotional and behavioral self- and social defeatism.

REBT generally teaches that when people turn flexible preferences, desires and wishes into grandiose, absolutistic and fatalistic dictates, this tends to contribute to disturbance and emotional distress.

It is predicted that, if the format of using a "group therapy" approach to the topic of REBT works, students completing the REBT component of the course would show a statistically significant improvement from the pre to the post test related to their academic understanding of the REBT model, but would significantly improve in their ability use that material to solve applied problems in a more effective manner on the POST- test, following the section of the class on REBT.

The assessment will be in questionnaire format and will be given in the fall of 2010 and/or the spring of 2011 to students taking the Psych 2315 Personal Adjustment courses. Students will take a PRE- test prior to the introduction of REBT, and then will follow up with a POST- test after the topic has been covered. Five questions will cover information, terms and knowledge base of the model, while five questions will cover application of the information to real problem examples.

The knowledge based questions will be evaluated for correctness, while the application questions will be reviewed for students' ability to apply REBT to solving an actual problem.

### • Results (Provide Numbers and Percentages for Quantitative Data)

- o **2009-2010 Data:** There was no data from the previous year.
- o **2010-2011 Data:** Four out of five items in the "knowledge" based portion of the outcome assessment showed significant improvement on the post-test over the pre-test at the .000 level. However, item #2 which was a question related to the "purpose of REBT" did not show significant improvement in the post-assessment score (t=-1.28, p = .212).
  - Related to the 3 5 application questions, items 6 through 9 showed significant improvement from the pre- to the post- test (at the .000 level). For item #10, no improvement was shown, however, most students showed appropriate agreement on the pre- test as well as the post-test.

#### Analysis

O Provide Previous Data/Result Analysis
(Include if benchmark was met and how results relate to outcome statement): While four out of five of the informational questions showed significant improvement from the pre- to the post- test, item # 2 did not. This question was related to the "purpose" of REBT. Several possibilities may explain this finding. The question may have been poorly worded, or lecture material may not have sufficiently covered the stated purpose of the REBT model and therapy. On the application items, students showed significant improvement in their post- assessment over the pre-test on all questions EXCEPT the last question. This question asked for their agreement or disagreement on a 5 pt likert scale related to the statement "It's nonsense to believe that my thinking can change my feelings in a situation as difficult as this one". Students overwhelmingly disagreed with this statement on both the pre- and post-tests, showing no significant change.

#### Improvements

- List any Improvements Made in the 2010-2011 (Last Academic) Year Based on the 2009-2010 PET Results:
   Not applicable at this time
- o Evaluate Why Improvements Were Successful/Were Not Successful: Not applicable at this time
- o Provide the Budget Information Needed to Make Past Improvements (Cost/Details): Outside of printing costs, no budget is necessary.

### Recommendations/Actions for 2011-2012

o Person Responsible (Who will complete the action?): Dr. Alan Kee

#### o Action Plan:

- For Spring of 2012, that lecture will be rewritten to include several concrete example of the purpose related to REBT, followed by a discussion that checks for students understanding. The pre and post-outcome assessment will be readminstered in the Spring of 2012 to reassess improvements on this item.
- On the application items, students showed significant improvement in their post- assessment over the pre-test on all questions EXCEPT the last question. This question asked for their agreement or disagreement on a 5 pt likert scale related to the statement "It is nonsense to believe that my thinking can change my feelings in a situation as difficult as this one". Students overwhelmingly disagreed with this statement on both the pre- and post-tests, showing no significant change. While this shows the students understanding of the link between thinking and feeling prior to this course, the wording on this question will be changed slightly on the spring, 2012 re-take. The words, "It's nonsense to believe...", which may have generated bias towards the correct answer, will be changed to "I believe my thinking could change my feelings in a situation as difficult as this one."
- Expected Time Frame Needed to Implement Action Plan (Please provide specific deadline date): Spring of
   2012
- o Budget Information Needed for Future Action (Cost/Details): Printing cost for the assessment.

#### Goal Statement #3:

In alignment with Student Performance and Course Objectives for the General Psychology courses at Amarillo College related to the understanding of behavioral and mental disorders, as well as Goal 1.1 of the Amarillo College Strategic Plan (through 2015) to expand student success by adjusting instruction based on assessment data, Goal #3 is to increase students understanding of and empathy for people suffering with behavioral and mental disorders. This goal is particularly important for students who will be going into the applied behavioral and social sciences (AC Strategic Plan through 2015: Strategy 1.1).

## **Outcome/Objective Statement**

### (Be sure to include audience, behavior, conditions, degree/benchmark, and evaluation method):

Upon completing a class section on mental illness and addictions, General Psychology students will demonstrate a significantly (.01 to .000) more favorable attitude toward people with mental illness and behavioral disorders on a post test than was demonstrated on the pre-test the students took prior to the section.

#### Supplemental Information

A minimum of 150 to 250 Amarillo College students taking General Psychology courses will be assessed prior to the section of the class on mental illness and addictions, related to their attitudes towards people with mental illness and behavioral disorders. Students will be asked to use a -5 to +5 favorability rating related to their attitudes toward people suffering with drug addictions, bipolar and depressive mood disorders, schizophrenia, and alcoholism.

Predictions are that following the section of General Psychology covering addictions and mental illness, students will express more favorable scores related to their attitude being based on a more informed understanding of and, hence a greater compassion for people with various disabling mental and behavioral disorders. The benchmark will be met when students' post-test scores are shown to be significantly more favorable than the pre-test scores (at a statistically significant rate of .01 to .000).

(AC Strategic Plan through 2015: Task 1.1.1).

- Results (Provide Numbers and Percentages for Quantitative Data)
  - o 2009-2010 Data: N/A.
  - o **2010-2011 Data:** No data as of yet.
- Analysis
  - Provide Previous Data/Result Analysis: NO ANALYSIS YET
     (Include if benchmark was met and how results relate to outcome statement):
- Improvements
  - o List any Improvements Made in the 2010-2011 (Last Academic) Year Based on the 2009-2010 PET Results:
  - o Evaluate Why Improvements Were Successful/Were Not Successful:
  - o Provide the Budget Information Needed to Make Past Improvements (Cost/Details):
- Recommendations/Actions for **2011-2012** 
  - o Person Responsible (Who will complete the action?):
  - Action Plan
  - o Expected Time Frame Needed to Implement Action Plan (Please provide specific deadline date):
  - Budget Information Needed for Future Action (Cost/Details):

**Goal Statement #4:** In alignment with the Amarillo College Strategic Plan (through 2015) Goal 1.1, to expand student success by adjusting instruction and services based on assessment data, and the Student Performance and Course Objectives 7 and 8 for General Sociology 1301 and Minority Studies 2319, Goal #4 is to help students utilize a comparative and cross-cultural approach to understanding their own and others racial/ethnic group or groups, as well as to assist students in gaining a greater appreciation for diversity within societies, cultures, social classes, racial, ethnic, and religious groups (AC Strategic Plan through 2015: Strategy 1.1).

#### **Outcome/Objective Statement**

## (Be sure to include audience, behavior, conditions, degree/benchmark, and evaluation method):

Upon the completion of General Sociology and Minority Studies courses, students will demonstrate a statistically significant change (.01 to .000) in the ability to recognize ethnocentric behaviors and comments or attitudes related to cultural, racial, gender and religious diversity as demonstrated by a pre-post test.

#### Supplemental Information

Amarillo College students in General Sociology and Minority Studies courses will demonstrate a statistically significant change in their ability to recognize ethnocentric behaviors and comments related to cultures, races and religions outside their own, as well to show significantly more favorable attitudes related to their attitudes related to appreciation and a positive recognition of cultural, racial, gender and religious diversity.

A minimum of 150 Amarillo College students will be given a pre-test early in the semester (within the first two weeks of classes) asking them to identify ethnocentric attitudes, along with rating their attitudes related to their appreciation and tolerance for people of different ethnic, racial, sexual and religious orientations. Students will be given the same questions at the end of the course, 13 to 14 weeks later.

It is predicted that students will show a significant improvement in being able to identity ethnocentric views and comments, as well as show a statistically significant increase (at the .001 level) in their appreciation for and tolerance towards people of different races, ethnic, religious and sexual orientations.

(AC Strategic Plan through 2015: Task 1.1.1).

- Results (Provide Numbers and Percentages for Quantitative Data)
   2009-2010 Data: Numbers = \_\_\_\_ out of \_\_\_\_ and Percentage =s \_\_\_\_%: NO DATA
   2010-2011 Data: Numbers = \_\_\_\_ out of \_\_\_\_ and Percentage =s \_\_\_\_%: NO DATA
- Analysis
  - Provide Previous Data/Result Analysis: NO ANALYSIS at this time
     (Include if benchmark was met and how results relate to outcome statement):
- <u>Improvements</u>
  - o List any Improvements Made in the 2010-2011 (Last Academic) Year Based on the 2009-2010 PET Results:
  - o Evaluate Why Improvements Were Successful/Were Not Successful:
  - o Provide the Budget Information Needed to Make Past Improvements (Cost/Details):
- Recommendations/Actions for **2011-2012** 
  - o Person Responsible (Who will complete the action?): Dr. Deborah Harding and Debra Avara
  - o Action Plan:
  - o Expected Time Frame Needed to Implement Action Plan (Please provide specific deadline date):
  - o Budget Information Needed for Future Action (Cost/Details):