General Education Competencies Assessment Report

Assessment of 2011-2012 Competencies

Amarillo College
Information Compiled by Assessments Coordinator
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Background:

During the 2006 academic year, Amarillo College adopted and piloted the Institutional Portfolio Model. The Institutional Portfolio Model involves a transparent and dynamic process that utilizes subcommittees in the examination of student work.

Since 2006, Amarillo College has continued to modify and improve assessment methods. In 2010, Amarillo College began the transition toward aligning the existing AC general education competencies with the competencies and curriculum mapping outlined in the Texas Higher Education Coordinating Board's "Revising the State Core Curriculum: A focus on 21st Century Competencies" report.

During the fall 2011-2012 assessment period, 4 of the 6 total THECB core objectives were assessed at Amarillo College.

Assessed Competencies*:

- Communication Skills (COM)
- Critical Thinking Skills (CT)
- Empirical and Quantitative Skills (EQS)
- Teamwork (TW) - Preliminary Assessment Completed

*A preliminary assessment will be completed on Personal Responsibility (PR) and Social Responsibility (SR) in 2012-2013.

Participation:

Fall 2007-2008 marked the first assessment period that general education data was tracked. The artifacts collected in 2010-2011 were assessed in the 2011-2012 year. The following tables show an initial trend line for the first 5 years that data was collected for multiple competencies.

Old Classification - Faculty Member Counts Artifact Data Submitted*					
Division	**Collected for 2007-2008 Assessment**	**Collected for 2008-2009 Assessment**	**Collected for 2009-2010 Assessment**	**Collected for 2010-2011 Assessment**	**Collected for 2011-2012 Assessment**
Allied Health	6	5	11	5	3
Behavioral Studies	13	4	6	10	3
Business	14	3	5	4	5
ITT	9	3	4	1	0
LCFA	19	0	5	11	2
Nursing	18	0	0	11	8
Sciences and Engineering	22	10	14	16	11
Work Force Development	0	1	2	0	0

*These numbers do not reflect duplicate faculty submissions. For instance, some faculty members submitted artifacts for more than one class, but each faculty member is only counted once regardless of the number of classes/sections for which work was submitted. For more information on course selection, view the General Education Assessment Methodology.

Participation Increase Plan:

There was less faculty participation for the 2010-2011 year so the course-selection criterion was expanded in order to give more courses and instructors the opportunity to have their course selected and submit student work. The "Course Selection Process" section of the General Education Competency Methodology explains the new selection criteria that will be implemented in the 2011-2012 academic year.

Overall Findings:

Goal Benchmark: On a scale of 1-5, 70% of students will score a 3 or higher (average) as evaluated by committee members using an institutionally-approved rubric.

Communication Skills Results: Met – 74%

Critical Thinking Skills Results: Met – 95%

Empirical and Quantitative Skills Results: Met – 79%

Teamwork Results: Met – 100% (Based on test of 10 artifacts)

Communication Skills Competency

Goal:

- 70% of students will score a 3 or higher (average) on a scale of 1-5

Results:

- 2007-2008 (N=95)
  - 72% of students scored a 3 or higher
- 2008-2009 (N=98)
  - 67% of students scored a 3 or higher
- 2009-2010 (N=97)
  - 74% of students scored a 3 or higher
- 2010-2011 (N=100)
  - 58% of students scored a 3 or higher
- **2011-2012 (N=100)**
  - **74% of students scored a 3 or higher**

Table A: Communication Skills Competency Committee Artifact Evaluation

Year	Excellent 5	Good 4	Competent 3	Marginal 2	Poor 1	# of Students Assessed
2007-2008 Number and Percentage	7 7%	26 27%	35 37%	26 27%	1 1%	95
2008-2009 Number and Percentage	1 1%	25 26%	40 41%	30 31%	2 2%	98
2009-2010 Number and Percentage	6 6%	19 20%	47 49%	22 23%	3 3%	97
2010-2011 Number and Percentage	2 2%	15 15%	41 41%	33 33%	9 9%	100
2011-2012* Number and Percentage	2 2%	18 18%	54 54%	19 19%	7 7%	100

Communication Skills Competency Analysis:

- Additional Communication Artifact Data/Information:
  - Scoring Method
    The averages included in Table A were not rounded. For instance, if the committee's average for an artifact was a score of 4.64, the score was counted as a "4" and not a "5."
  - Committee Member Artifact Averages (rounded to 1 decimal place):
    - Committee Member A: **3.3**
    - Committee Member B: **3.3**
    - Committee Member C: **2.6**
    - Committee Member D: **2.7**
    - Committee Member E: **3.6**
    - **Committee Artifact Average: 3**

- Comparison to Previous Years' Results:
  Since last year, the number of "Competent" and "Good" artifacts has risen back up to the previous levels seen in 2007-2010. However, it remains a challenge to get artifacts that more consistently rate as "Good" or "Excellent"

- Strengths and Areas that Need Improvement:
  Members of this committee made individual comments on each assessed artifact. Based on the individual tabulation of strengths and weaknesses for the first 50 of the 100 evaluated artifacts, the top 3 strengths and weaknesses were identified. An artifact that was just deemed adequate did not typically have a strength or weakness associated with it. For instance, for spelling to be deemed as a strength or weakness, the spelling would need to be exceptionally good or exceptionally bad.
  - **Strengths:**
    - **Introductions and Conclusions:** 9 of the 50 tallied artifacts.
      - Note: 5 of the 50 students were cited as having poor conclusions. Therefore, it seems students may be stronger at writing introductions than conclusions.
    - **Transitions and Flow:** 6 of the 50 tallied artifacts.
    - **Spelling**: 3 of the 50 tallied artifacts.
  - **Needs Improvement**:
    - **Citations and Formatting of MLA or APA Papers**: 17 of the 50 tallied artifacts.
    - **Organization, Focus, and Flow**: 9 of the 50 tallied artifacts.
    - **Spelling, Grammar, and Punctuation:** 6
      - Note: run-on sentences were cited as an issue for 3 of the 6 artifacts
  - **Assessment Coordinator's Plan to Address Improvement Needs:**
    Address the needs for improvement during future discussions with faculty regarding the new THECB mandates.

Critical Thinking Skills Competency

Goal:

- 70% of students will score a 3 or higher (competent) on a scale of 1-5

Results:

- 2007-2008 (N=91)
  - 96% of students scored a 3 or higher*
    (Scoring system was changed mid-year)
- 2008-2009 (N=97)
  - 95% of students scored a 3 or higher
- 2009-2010 (N=108)
  - 96% of students scored a 3 or higher
- 2010-2011 (N = 99)
  - 93% of students scored a 3 or higher
- **2011-2012 (N=100)**
  - **95% of students scored a 3 or higher**

Table B: Critical Thinking Skills Competency Committee Artifact Evaluation

Year	Excellent 5	Good 4	Competent 3	Marginal 2	Poor 1	# of Students Assessed
2007-2008 Number and Percentage	5 5%	57 63%	25 27%	4 4%	0 0%	91
2008-2009 Number and Percentage	18 19%	57 59%	17 18%	4 4%	1 1%	97
2009-2010 Number and Percentage	1 <1%	61 56%	42 39%	4 4%	0 0%	108
2010-2011 Number and Percentage	0 0%	36 36%	56 57%	7 7%	0 0%	99
2011-2012* Number and Percentage	0 0%	53 53%	42 42%	4 4%	1 1%	100

Critical Thinking Skills Competency Analysis:

- Additional Critical Thinking Artifact Data/Information:
  - Revised Rubrics
    The revised critical thinking rubrics were used during the 2011-2012 year. The new rubric meets the criteria proposed by UEAC and outlined by the THECB.
  - Scoring Method
    The averages included in Table B were not rounded. For instance, if the committee's average for an artifact was a score of 4.64, the score was counted as a "4" and not a "5."
  - Committee Member Artifact Averages (rounded to 1 decimal place):
    - Committee Member A: **3.8**
    - Committee Member B: **3.5**
    - Committee Member C: **3.9**
    - Committee Member D: **4.2**
    - **Committee Artifact Average: 3.9**

- Comparison to Previous Years' Results:
  Since last year, the number of "Competent" and "Good" artifacts has risen back up to the previous levels recorded in 2007-2010. Overall, Amarillo College students still show as highly competent and only one artifact was rated as unacceptable. However, for the second year in a row, no artifacts were rated as exemplary by every committee member.

- Strengths and Areas that Need Improvement:
  - **Strength:** Students typically follow the instructor's assignment instructions. This likely stemmed from the following instructor-based improvements:
    - **Instructions:** Better instructions seemed to be provided to students in this year's artifact set.
    - **Rubrics:** Inclusion of a rubric with the assignment seemed to help students stay focused.
  - **Needs Improvement**:
    - **Increase Critical Thinking Requirement**: Some questions clearly have a right or wrong answer. However, although questions with short or simple answers may require a great deal of behind the scenes critical thinking, it is difficult to evaluate these questions when the students aren't required to elaborate on the thought process that goes into formulating their answer.
  - **Assessment's Coordinator Plan to Address Improvement Needs:**
    - Address the needs for improvement during future discussions with faculty regarding the new THECB mandates.

Empirical and Quantitative Skills Competency

In 2011-2012, the general education competency committee switched from evaluating the number of achieved outcomes for mathematics problems to using the rubric to evaluate empirical and quantitative skills problems. As a result, previous data is not included in this report because the type of artifacts has been greatly expanded and the evaluation method has been changed.

Goal:

- 70% of students will score a 3 or higher (competent) on a scale of 1-5

Results:

- **2011-2012 (N=105)**
  - **79% of students scored a 3 or higher**

Table C: Empirical and Quantitative Skills (EQS) Competency Committee Artifact Evaluation

Year	Excellent 5	Good 4	Competent 3	Marginal 2	Poor 1	# of Students Assessed
2011-2012* Number and Percentage	19 18%	28 27%	36 34%	7 7%	15 14%	105

Empirical and Quantitative Skills Competency Analysis:

- Additional Critical Thinking Artifact Data/Information:
  - Scoring Method
    The committee met together and unanimously agreed on the score ratings.
  - Value of Artifacts
    Each committee is asked to go through and assure that an assignment has at least the possibility of achieving a score of "3" or higher so that students are not unfairly penalized. The EQS Committee checked the artifacts and assigned a value to each artifact set so that more information could be gained from the data analysis.

Empirical and Quantitative Skills Competency Analysis Continued:

- Findings Breakdown
  - Of the 8 sets submitted for assessment, the values of the artifacts were distributed as follows:
    - 5 artifacts sets were worth 5 points (62.5%)
    - 1 artifact set was worth 4 points (12.5%)
    - 2 artifact sets were worth 3 points (25%)
  - Of the 105 individual items that were assessed, the values of the individual items were distributed as follows:
    - 63 items were worth 5 points (60%)
    - 18 items were worth 4 points (17.1%)
    - 24 items were worth 3 points (22.9%)
  - 5 Point Questions (63 Artifacts)
    - 19 artifacts scored 5 points (30.2%)
    - 21 artifacts scored 4 points (33.3%)
    - 6 artifacts scored 3 points (9.5%)
    - 4 artifacts scored 2 points (6.3%)
    - 13 artifacts scored 1 point (20.6%)
    - **73% scored 3 points or above**
  - 4 Point Questions (18 Artifacts)
    - 7 artifacts scored 4 points (38.9%)
    - 7 artifacts scored 3 points (38.9%)
    - 2 artifacts scored 2 points (11.1%)
    - 2 artifacts scored 1 point (11.1%)
    - **77.8% scored 3 points or above**
  - 3 Point Questions (24 Artifacts)
    - 83 artifacts scored 3 points
    - **79% received a rating of 3**

- Comparison to Previous Years' Results:
  N/A – This is the first year to collect data for this competency.

Empirical and Quantitative Skills Competency Analysis Continued:

- Strengths and Areas that Need Improvement:
  - **Strengths:**
    - **Improved Assignment Selection:** Last year (under mathematics) 42 items worth 5 points were submitted. This year 63 items worth 5 points were submitted—a 33.3% increase. This seems to indicate that faculty members have continued to ask more questions involving critical thinking, analysis, estimating, and drawing qualitative conclusions.
    - **Committee Improvements:** Every member of the sub-committee stated that after serving on this committee they have begun asking more "level 5" questions of their students. As a group we feel all faculty members would benefit by serving on such a committee.
  - **Needs Improvement**:
    - **Applied Problems/Deeper Evaluation:** Sub-committee members noted that many "level 3" questions could have been elevated to "level 5" questions by simply asking students to extend the significance of their results by using the results to solve an applied problem or to determine the truth of a hypothesis.
    - **Faculty Roadblocks**: It is the hope of this committee that faculty members will have access to all assessment results and will use them to incorporate higher level thinking skills into their own assessments.
    - **Assessment Process Inquiry:** As a group, our concern is the benchmark that "70% of all artifacts will score a 3 or above." If we merge level 3, 4, and 5 questions, where is the conversation of encouraging mastery in higher order thinking? Should we not be concerned with more 5's on level 5 problems?

  - **Assessment Coordinator's Plan to Address Improvement Needs:**
    - Address the need for applied problems/deeper evaluation improvements during future discussions with faculty regarding the new THECB mandates.
    - Brainstorm ways to distribute results to faculty without pinpointing an "anonymous" class.
    - Consistently include the Empirical and Quantitative Skills information breakdown (e.g. number of "5" problems to score a "5") with the report so that a true picture of how students are doing can be viewed by an outside entity.

Teamwork Competency

Goal:

- Current: Test at least 10 artifacts in order to ensure the Teamwork rubric's reliability and validate the usefulness of the "Team Member Critique Sheet."
- Future: 70% of students will score a 3 or higher (average) on a scale of 1-5

Results:

10 total assorted artifacts were assessed to test the reliability of the rubric and the usefulness of the team member critique sheet.

- 2 Artifacts – Team Member Critique Sheet format
- 3 Artifacts – Team Charter, Individual Activities Log, and Team Member Critique Sheet format
- 4 Artifacts – Member assignment, percent of contribution, letter grade recommendation made by student, and comments format

The Teamwork committee went through each artifact as a group and agreed upon one score based upon the group's perception of how the available work aligned/did not align with the various point values (1-5) on the Teamwork Rubric.

Table D: Teamwork Competency Committee Artifact Evaluation

Old Artifact Number 2011-2012	Old Artifact Rating	New Artifact Number (Note: No one but assessment's coordinator will see this new assignment number)	New Artifact Rating 2012-2013
A1	5	X	X
A5	4	X	X
C7	4	X	X
C8	5	X	X
C9	4	X	X
E13	4	X	X
E14	5	X	X
E15	5	X	X
E16	4	X	X
E17	5	X	X

SUMMATIVE RESULTS:

- The current task of testing the artifacts was accomplished and changes were made to the process (as identified in the analysis section) based on these findings.
- A benchmark of 3 was exceeded.

Teamwork Analysis:

- Additional Critical Thinking Artifact Data/Information:
  - Ease of Assessment
    The team successfully assessed the 3 different artifact formats available.
  - Number of Artifacts Assessed
    Only a small number (10) artifacts were assessed because artifacts are typically collected the year prior to assessment. However, as the Planning & Advancement office seeks to conform to the competencies identified by the THECB, it became evident that the new rubrics would need to be tested in a timely fashion. As a result, 2 volunteers from the Instructional Assessment Committee piloted the team member critique sheet in a few of their classes and some of the resulting artifacts of the pilot along with a few examples provided by selected faculty were used for testing purposes. The 10 artifacts used met the correct selection criteria (i.e. degree-seeking students who have 30 or more non-developmental hours from AC) and the reviewed student samples were randomly selected.
  - Average Rating
    The average score for the 10, randomly selected, sample artifacts was a 4.5.

- Comparison to Previous Years:
  N/A – This is the first year to collect data for this competency.

- Strengths and Areas that Need Improvement:
  - **Strengths:**
    - The Team Member Critique Sheet made evaluation a quick process for the team because it aligns with the rubric. Recommendation: the critique sheet should be widely advertised to those instructors who do not already use their own evaluation tool.
    - Because of the very small sample size, no conclusive findings were made by the group. However, the review of the 10 student artifacts revealed some anecdotal evidence that may be worthy of further review:
      - For the most part, AC students each seemed to play their assigned/self-designated role in the teamwork process .
      - It is possible that students with over 30 hours grasp teamwork concepts slightly better than those students who have under 30 hours.

- ***Teamwork Analysis Continued:***
  - **Needs Improvement**:
    - More qualitative information is needed.
    - The true evaluation of each team member's contribution will always be completely reliant on the information provided by each student because an instructor's evaluation does not accompany the artifacts and the assessment committee members were not themselves present during the teamwork activities. Therefore, it is important that the team member critique sheet encourage accurate, honest evaluations to the highest degree possible.
    - Because of the very small sample size, no conclusive findings were made by the group. However, the review of the 10 students raised the following flag that may be worthy of further review:
      - Do students value the research component as much as other parts of their teamwork assignments (e.g. are students more likely to rank those who write papers or prepare PowerPoints higher than students responsible for research)?
  - **Assessment's Coordinator Plan to Address Improvement Needs:**
    - Change the format of the Team Member Critique Sheet so that a justification must be provided under each team member rating. In order to provide individual response areas, the critique sheet must be modified so that no more than 5 team members can be assessed on each form. However, the committee stated that 5 was about the maximum number of students who are typically in groups and that for groups that have more members, multiple critique sheets could be used.
    - During the faculty artifact solicitation process, the newly modified Team Member Critique Sheet will be distributed to faculty alongside or in the place of the old Team Member Critique Sheet.
    - To ensure rubric reliability the 10 students who were assessed during the 2011-2012 year will have their artifact numbers changed and will be re-evaluated during the 2012-2013 year. At the conclusion of the 2012-2013 year, the students will have their new scores compared to their old scores. If there are glaring inconsistencies between the scores, the rubric will be re-evaluated and modified to make it into a more valid assessment tool. However, if the score sets are consistent, it will be determined that the rubric is reliable.