



## SUMMARY OF USE OF RESULTS

DEGREE PROGRAM: GENERAL EDUCATION/CORE CURRICULUM

ASSESSMENT CYCLE: 2017-2018

### QUESTION 1

As a result of data analysis and program evaluation, discuss where students are performing at the highest and what this means for the program.

The best improvement demonstrated for 2017-18 was the critical thinking scores for both lower division and upper division students on the national CAT test. The CAT text shows that our lower division students who are in the core curriculum are scoring above the national average. Our upper division students have improved from last year but still need to do better.

Out of the ten measures used for assessing the General Education (Core Curriculum), four met their targets; two did not meet their targets; and four were discontinued. For many of the assessments this was a break from a multi-year decline. A break-down of these findings are as follows:

Measure	2012-13 Score	2013-14 Score	2014-15 Score	2015-16 Score	2016-17 Score	2017-18 Score	Target:
1. Written Communication (Rubric)	2.8	2.8	2.77	3.09	3.09	3.0	Not Met
2. Oral Communication (Rubric)	2.8	2.6	No Data	3.3	3.14	3.0	Not Met
3. Analytical Critical Thinking (Rubric)	2.6	2.5	2.22	2.34	2.47	2.12	Not Met
4. Quantitative Critical Thinking (Rubric)	3.01	3.1	3.1	2.82	3.39	3.34	Not Met
5. Christian Worldview (Rubric)	New Measure--Not Previously Assessed			2.55	2.57	2.77 On campus 2.95 Online	Met
5. Written Communication (NSSE)	78% 1st yr.; 97% seniors	70% 1st yr.; 77% seniors	68% 1st yr; 74% seniors	80% 1st yr; 74% seniors	Discontinued	Discontinued	Discontinued
6. Oral Communication (NSSE)	82% 1st yr.; 88% seniors	74% 1st yr.; 77% seniors	63% 1st yr; 66% Seniors	79% 1st yr; 76% seniors	Discontinued	Discontinued	Discontinued

<b>7. Analytical Critical Thinking (CAT Test)</b>	Lower Division 14.40 Upper Division 18.15	Lower Division 14.48 Upper Division 17.08	Lower Division 13.85 Upper Division 15.9	Lower Division 13.98 Upper Division 17.63	Lower Division 13.85 Upper Division 17.03	Lower Division 14.34 Upper Division 18.54	Partially Met
<b>8. Analytical Critical Thinking (NSSE)</b>	82% 1st yr.; 100% seniors	78% 1st yr.; 85% seniors	63% 1st yr; 78% Seniors	87% 1st yr; 85% seniors	Discontinued	Discontinued	Discontinued
<b>9. Quantitative Critical Thinking (NSSE)</b>	70% 1st yr.; 87% seniors	43% 1st yr.; 54% seniors	53% 1st :Yr.; 43% Seniors	50% 1st yr; 50% seniors	Discontinued	Discontinued	Discontinued
<b>Student Impressions Survey</b>	Percentage of students who answered either <i>Much</i> or <i>Very Much</i> to statements that TMU's general education program helped them: (The survey was begun in 2016-17.)						
To write clearly and effectively					70%	72.06%	Met
To analyze and critique written and oral communication					71.54%	77.2%	Met
To minimize grammatical, punctuation, and spelling mistakes					73.85%	79.41%	Met
To identify fallacies in oral and written arguments					62.79%	77.94%	Met
To organize ideas in a logical and compelling manner					71.54%	80%	Met
To think critically					79.23%	85.29%	Met

To understand complex ideas					68.46%	74.27%	Met
To analyze and understand the worldview of others					82.17%	83.09%	Met
To understand the biblical basis of the Christian worldview					93.07%	86.7%	Not Met
To understand how worldview influences music, art, and culture					68.21%	71.64%	Met

Each area that did not meet the established goals have been addressed by the respective faculty and action plans have been developed and incorporated into the 2018-2019 assessment cycle so as to address areas of weaknesses. See the Action Plan section of the WEAVE report for more details regarding the specificity of each action plan.

## QUESTION 2

As a result of data analysis and program evaluation, discuss opportunities for improvement and describe the planned changes that will be implemented in an effort to improve the program.

## **Written Communication**

In English 101, the faculty has focused on mechanics of writing. However, there are still areas such as logical thinking and grammar that need to be addressed. Because our online classroom now has a tool (TutorMe) whereby students can upload their writing for spell checking, grammar, and formatting, this is not as big an issue as before. The faculty encourages those who are struggling to access this tool through Bright Space. This tool can be helpful to ESL students, especially, but the faculty needs to make students aware of this resource. One goal is to get upper level bilingual students to tutor the freshmen ESL students. Faculty members also are handing out worksheets and in-class exercises to help correct mechanical issues. In English 102 Composition and Literature, the analytical skills of the students are a focus for the English faculty. Presenting students with prose, poetry, and drama as literature and then assigning techniques of analysis of each genre, seems to help students look past the literature into analysis of character, setting, style and structure. The students, generally, understand the difference between a book report and an analysis. However, more emphasis can be made on interpretative skills in order to measure their skills effectively.

## **Oral Communication**

In light of the results, the following changes are suggested for implementation. 1. The rubric used over the past several years, to assess oral communication, is still an effective tool to measure outcomes, and should continue to be used. 2. Oral communication may not be the best measurement for the PY 220 courses. A decision must be made regarding the courses continued involvement in this area of assessment. The core committee, along with the Psychology department, must determine if the assessment area is still an acceptable match for the PY 220 course. 3. After two years of implementation suggestions, related to additional sections for the BU105 course, four sections were offered for the 2017/2018 year. These additional sections provide a greater opportunity to more accurately provide oral communication assessment. The university should continue offering at least four sections. As stated earlier, during the 2017/2018 school year, the recommendations for BU 105 were administered and the data indicates some variance from the previous year. The lack of evaluation in the four PY220 courses impacted the data, and this variation impacted the importance of assessing oral

communication. The following recommendations were made to provide a truer picture as it relates to the assessing of oral communication for the 2018/2019 academic year. 1. Instructors will continue to work from the same rubric and introduce these elements to the student prior to evaluation. 2. The PY220 fall courses should evaluate a student's ability to communicate orally. Once a decision is made by the core committee regarding the revaluation of the PY 220 offerings, the spring courses may be assessed differently. 3. Five sections of BU105 will be evaluated so proper oral assessment may be acquired.

### **Analytic Critical Thinking**

While the external assessment (The CAT test) and the student perception survey showed improvement in student learning outcomes. The Critical Thinking Analytic Rubric Report indicated a decline. Examining the individual indicators on the critical thinking analytic rubric report for 2017-18 indicates that every indicator declined from the previous year. Objectivity fell from 2.44 to 2.05. Use of evidence fell from 2.46 to 2.18. Valid Argumentation fell from 2.32 to 2.05. Alternative Positions fell from 2.50 to 1.87. Organization fell from 2.52 to 2.37. Originality fell from 2.59 to 2.34. To work towards improving outcomes in critical thinking. The following steps will be taken by faculty members in the core courses. In PH 210, Logic and Critical thinking, Pelletier will be adding study guides and handouts to the online classroom and doing more in-class practice exercises which will require the students to practice valid argumentation. He will also add material to the class on the need for objectivity and the necessity of understand an opponent's position from their point of view. As a whole, the biology department will be revising the assignment used in BI to better fit the assessment of critical thinking. In BI 101, Hennigan will distribute a model paper demonstrating sound thinking regarding bioethical issues. He also plans on distributing a detailed rubric and using 2-3 days in class time modeling a debate on an ethics topic. He will emphasize that the modeled debate will be similar to how they approach the paper. In BI 101, Fabich was happy with the improvements that he made last year and will continue to implement those improvements. In HI 101, Justus sees that his student can think critically, but will work on improving student learning outcomes in regard to critical thinking by discussion the context of the question that he will use for

assessing his students. He will give particular emphasis to developing and applying the proper standards by which to answer the question.

### **Critical Thinking Quantitative**

In general, quantitative critical thinking remained approximately the same from the 2016/2017 to the 2017/2018 academic year; however, several specific aspects of critical thinking continue to exhibit significant shortcomings within the academic population. Specifically, calculation errors were present in approximately 17% of the sample population. During the 2017/2018 academic year, proper usage of terminology and notation decreased compared to the previous assessment period. Graph and chart analysis remained deficient. Problem analysis and data usage were effectively handled (90% or greater proficiency) within the academic population. The most recent action plan recommended a four-pronged approach to improving quantitative critical thinking at the institution including increased exposure to quantitative critical thinking experiences, implementation of Accuplacer for placement in math courses, increased access to math tutoring, and use of full time advisors. Progress in implementation has been made in each of these areas and, after a single year of data, appear to have had marked effects on student quantitative critical thinking abilities. The most paramount effect, the use of Accuplacer for math placement, has changed the approach many students are required to take in math courses leading to a higher ability to think quantitatively in courses that require such attributes. As each prong of the action plan becomes more fully implemented and addition yearly data is collected, it is apparent that the improvements made in quantitative critical thinking since the 2015/2016 academic year have been consistent and appear to be sustainable. Although not specifically part of the general education core courses, math coursework is included in the majority of all degree programs (BA in Music Education does not require college level math). Inclusion of math courses in most degree programs continues to play an important role in development of higher level critical thinking skills within the university students body that are reflected on this assessment tool. During the 2018/2019 academic year, campus-wide (on campus, dual enrollment, and online) implementation of Accuplacer will continue once again. This placement exam will continue to allow students to be well-served and effectively placed in appropriate

math courses. The goal is to achieve 100% coverage of all students entering TMU regardless of program (on campus, dual enrollment, or online). As an additional component of this year's action plan, the Pilgram Marpeck School of STEM will evaluate the possibility to use Accuplacer testing to re-test senior students to allow comparisons of quantitative critical thinking skills between incoming students and outgoing students.

### **Christian Worldview**

First the faculty have determined that reworking the rubric will allow more effective adjustment to the measures to more accurately measure the necessary elements of a CWV. Second, two specific adjustments have been suggested that will improve the measured categories. (1) The Christian Studies classes (CS101, CS322) have determined that Recognition and Understanding category can be improved by faculty determining specific content topics that more directly impact worldview and indicate in class how those topics impact a worldview. For example, the sufficiency of Scripture is a topic covered in both courses, and greatly impacts the development of a CWV. In reference to the Articulation category, those topics identified by the faculty can then be specifically included in measures. (2) The Music Appreciation class is now implementing an additional element that will improve student performance in both Assessment and Analysis and Application and Demonstration. The course introduces various worldviews throughout the semester. Faculty will include a class discussion that leads students to critique each worldview from a Christian worldview perspective. The skills required to be able to offer that critique would include both the ability to assess the presented worldview, and the application of a CWV for a baseline with which to measure the presented worldview.