

## Critical Thinking Competency Assessment: Summary Report for 2009-2014

In the Competency Area of Critical Thinking, Middle Tennessee State University (MTSU) assesses annually the following student learning outcome:

Students are able to think independently and critically; analyze and evaluate beliefs and attitudes, data and ideas, issues and values.

MTSU uses multiple measures to evaluate the extent to which its students have attained the critical thinking competency and to determine if the level of attainment is acceptable.

### Standardized Test Assessment

In compliance with requirements of the Tennessee Board of Regents (TBR) and the Tennessee Higher Education Commission (THEC), Middle Tennessee State University's Critical Thinking Competency is assessed annually by the California Critical Thinking Skills Test (CCTST), a national standardized test. The CCTST is administered to all graduating seniors in their final semester. The table below presents data from 2009-2014 comparing the mean score of MTSU students to the national mean. In four of the five years, the mean score of MTSU students exceeded the national mean.

Academic Year	CCTST MTSU Mean Score	CCTST National Mean
2009-10	17.3	16.8
2010-11	17.0	16.8
2011-12	17.1	16.7
2012-13	17.1	16.7
2013-14	16.9	17.1

### Indirect Assessment of Critical Thinking Competency

Indirect assessment of the Critical Thinking Competency includes survey data from the Alumni Survey, the Graduating Senior Survey, and the National Survey of Student Engagement (NSSE).

**Alumni Survey:** Alumni are asked to rate how much their coursework emphasized certain critical thinking skills, including analyzing, synthesizing, making judgments, and applying theories to problems. They rate each area using the following scale:

1 = Very little, 2 = Some, 3 = Quite a bit, 4 = Very much

Alumni Survey results: Analyzing (3.18 in 2010 and 3.15 in 2012), Synthesizing (2.89 in 2010 and 2.88 in 2012), Making Judgments (2.92 in 2010 and 2.88 in 2012), Applying Theories to

Problems (3.09 in 2010 and 2.97 in 2012). The Alumni Survey was not administered in 2013 or 2014.

**Graduating Senior Survey:** Two questions related to the development of critical thinking ask students to respond to how much their MTSU experience contributed to “enhancing analytical skills” and to their “ability to critically analyze ideas and information.” For “enhancing analytical skills,” the percentage of seniors who responded positively was 85% in both 2011-12 and 2012-13, and 86% in 2013-14. For “ability to critically analyze ideas and information,” the percentage who responded positively was 89% in 2011-12, 88% in 2012-13, and 90% in 2013-14.

**NSSE:** MTSU seniors are asked to rate how much their coursework emphasized certain critical thinking skills. Students rate each area using the following scale:

1 = Very little, 2 = Some, 3 = Quite a bit, 4 = Very much

2014 NSSE Results related to critical thinking:

Applying facts, theories, or methods to practical problems or new situations

MTSU Seniors: 3.11 National Average: 3.15

Analyzing an idea, experience, or line of reasoning in depth by examining its parts

MTSU Seniors: 3.09 National Average: 3.12

Evaluating a point of view, decision, or information source

MTSU Seniors: 2.91 National Average: 2.98

Forming a new idea or understanding from various pieces of information

MTSU Seniors: 2.92 National Average: 3.00

### Evidence of Improvement Based on Analysis of the Results

It is expected that the CCTST mean score for MTSU seniors will exceed the national mean. In four of the five years represented in this report, the average CCTST score of MTSU students exceeded the national average. Indirect measures, particularly the Graduating Senior Survey, indicate that students and alumni feel MTSU has prepared them to think critically.

Critical thinking skills are emphasized in the General Education Program and in each degree program. Some university initiatives that emphasize critical thinking include the following:

1. All General Education courses emphasize the development of critical thinking skills. The three required courses in the Communication category, in particular, provide incoming students with an introduction to the critical and analytical skills necessary for success in college. Small class size in these courses is essential to insure that students receive the individual attention they need to develop these skills. The General Education Committee has recommended to the Provost that class size in the courses in the Communication category not exceed the recommendations of the National Council of Teachers of English and the National Communication Association. In most cases, class sizes are now within the recommended guidelines.

2. Instructors of UNIV 1010 assign textbooks that contain a critical thinking component in each chapter.
3. Tutoring in the University Writing Center emphasizes the development of critical thinking skills in the writing process. Instructors encourage students to work with the Center's trained tutors.
4. The University Library Research Coach service (which offers students in-depth, one-on-one sessions with a librarian) emphasizes critical thinking in finding and selecting the best books, articles, and database resources for projects, papers, and presentations. Instructors advise students to use this service.

### **Summary**

Along with other Tennessee Board of Regents schools, MTSU has identified college-level general education competencies, one of which is critical thinking. Development of the competencies is supported in MTSU's General Education courses. To ensure that MTSU's General Education courses are college-level, the courses are approved at multiple levels and undergo periodic review. National standardized test results and indirect measures indicate that MTSU students are achieving the critical thinking competency at an acceptable level.