Middle Tennessee State University

Gen Ed Assessment Report 2009

Middle Tennessee State University
10/13/2009

MTSU Critical Thinking Gen Ed Assessment Report

Assessment of Critical Thinking

1. Identify the Performance-Funding test of general education used by your institution.

    California Critical Thinking Skills Test

2. If you used sampling as permitted by THEC, describe the method used.

    Sampling was not used.

3. Present the institutional mean scores or sub-scores on the Performance Funding instrument that your institution reviewed to assess students' comprehension and evaluation of arguments. If comparable scores for a peer group are available, also present them.

    MTSU = 18.0
    National = 16.8

4. Summarize your understanding of the results yielded by the THEC test regarding critical thinking. Based upon your interpretations of the data, what conclusions emerge about student attainment of critical thinking skills?

    Overall, our students' critical thinking skills exceed those of students taking the same test at universities across the country. Our students also scored in the mid-range or above on all sub-score categories: analysis, deduction, evaluation, induction, and inference.

    These test scores, which consistently national averages, indicate that MTSU students are being taught proper, useful critical thinking skills in their classes. Our faculty have been making a focused effort, particularly over the past few years, to include classroom activities that would improve critical thinking skills of our students. Those efforts appear to be effective and are being continued.

5. Although the assessment of general education is in a pilot phase, do you plan any immediate strategies to correct deficiencies or opportunities for improvement   that emerged with respect to critical thinking? If so, describe them below. (In future years, you will be required to submit improvement plans and describe how you implemented them.)

Feedback on TBR Assessment of General Education Process

1. What are your overall impressions of the assessment process?
   The overall impression is that for a university of over 25,000, it is very time consuming and expends roughly $12,000 per year. However, the departments are beginning to see how such assessments can provide data that will improve teaching and learning.

2. Do you have suggestions on how to improve or revise the process?

MTSU Report of Results of Pilot Assessment in COMM 2200 Gen Ed Oral Communication
October 1, 2009

1. Identify the course(s) used in the assessment. Include the prefix, number, and title of each course.

   The course Fundamentals of Communication, COMM 2200, was used in the assessment of Oral Communication. To evaluate student performance in constructing and delivering an oral presentation, Informative Speech Outlines and Persuasive Speech Oral Presentations were assessed.

2. If you used sampling, please describe how students were selected to participate in the sample and indicate the numbers and percentage of students whose work was assessed. Otherwise, please state the total number of students assessed.

   The COMM 2200 procedure consisted of random stratified samples of representative populations of the COMM 2200 sections offered in Spring, 2009.
   > The representative sample was calculated to reflect the current class section population of the day on-ground sections, evening on-ground sections, Raider Learning Community sections, International sections, Honors sections, and Distance Learning sections. These class section populations represent the diversity in instruction for a variety of student populations. The total enrollment in COMM 2200 for Spring 2009 was 1758. Data was collected from 168 students (87 Presentation Outlines and 81 Oral Presentations).

3. How was student work in this subject area assessed and who evaluated it?

   > Two student activities were assessed in order to effectively evaluate each of the learning outcomes.   By including two different, unrelated activities, we were better able to assess a broad sampling of student work as well as all Student Learning Outcomes as prescribed by the Tennessee Board of Regents.

   > From the randomly selected sections of COMM 2200, Informative Speech Presentation Outlines and Oral Persuasive Speech Presentations were randomly selected for evaluation. The outlines consisted of blind copies requested from the instructors and the randomly selected student Oral Presentations were video-taped. No identifying elements were used for individual students or instructors. The outlines, student demographic sheets, evaluators, and videotapes were identified by assigned numbers for the study. Assigned number listings were secured in a locked drawer in the principal investigator's office.

   All random selections were generated using Research Randomizer (Urbaniak and Plous, 2008) from the Social Psychology Network.

Four faculty members in Communication Studies participated in a Pre-Assessment Workshop and developed a speech rubric (for assessment of the Persuasive Speech Presentations) and outline rubric (to evaluate the Informative Speech Outlines). Resources for development of each rubric were collected from a variety of sources, including the National Communication Association and recent NCA sponsored workshops.

Training for faculty members included four hours per evaluator to assess persuasive speeches, and four hours per evaluator to assess outlines. Evaluation of speeches and outlines required three evaluators (as stipulated by the National Communication Association and professionals in the field).

4. Per the evaluation rubric approved for your institution, adapt the attached tables to record the results of the assessments of each learning outcome in the three subject areas. A separate table for each subject is presented with examples of evaluative descriptors provided. The number of evaluative descriptors and their labels are arbitrary; you should apply the descriptors appropriate for your institution. If you rephrased a TBR goal statement, insert your institution's version below the corresponding TBR goal and within the same cell. If you addressed additional outcomes not included in the TBR list, create new rows for them at the bottom of the table.

See attached Tables.

5. Summarize your understanding of the results reported in item 4. Based upon your interpretation of the data, what conclusions emerge about student attainment of the learning outcomes?

With regard to the five TBR Learning Outcomes, overall performance was strong (75%+ of students scored at the satisfactory or superior level) for learning outcomes #1, 2, 3, and 4. Performance was weak on learning outcome #5, with fewer than 50% of students performing at the satisfactory or superior level. In fact, a majority of students (65.5%) performed at the unsatisfactory level for outcome #5: "Students are able to manage and coordinate basic information gathered from multiple sources."

Examining Learning Outcomes for Oral Presentations (that is, the Persuasion Speech) revealed a strong performance (75%+ of students scored at the satisfactory or superior level) for #1, 2, 3, 4, 6, 7, 8, 9, and 10, that is, all outcomes for the Oral Persuasion Speech Presentations.

With regard to Informative Speech Outlines, for learning outcomes #11, 13, 14, 15, and 16, performance was strong (75%+ of students scored at the satisfactory or superior level). Performance was moderately strong (50-75% of students scored at the satisfactory or superior level) for learning outcomes #12, 17, 18, and 19. Performance was weak (fewer than 50% of students performed at the satisfactory or superior level) for learning outcomes #5 and #20.

6. Although the assessment of general education is in a pilot phase, do you plan any immediate strategies to correct deficiencies that emerged with this area? If so, describe them below. (In future years, you will be required to submit improvement plans and describe how you implemented them.)

One of our first priorities is to assist students in managing and coordinating information from multiple sources, that is, TBR Learning Outcome #5. Results of our analysis revealed that 65.5% of students performed at the unsatisfactory level. Work on improving this student outcome has already begun. During our Faculty Retreat this fall, instructors of COMM 2200 participated in a two-hour workshop on the research process and research resources in Walker Library.

Another priority is Learning Outcome # 20, "Student outlines contain a closing statement that clearly indicates the end of the speech and effectively uses at least one closing strategy (ends with a quotation, makes a dramatic statement, refers to the introduction)." Results indicated that 52.9% of students performed at the unsatisfactory level.

While all other Learning Outcomes indicated 'strong' or 'moderately strong' performance by COMM 2200 students, several Learning Outcomes also indicated that a significant proportion of students (20 + %) were performing at the unsatisfactory level. These Learning Outcomes (# 8, 12, 13, 14, 15, 17, 18, 19, and 20) are opportunities to raise the performance of students who are performing at an unsatisfactory level.

The faculty realizes that outlines and writing are areas needing remediation. In fact, most of the Learning Outcomes in the previous paragraph are writing-based.One reason for selecting the *Art of Public Speaking, 10*th Edition by Stephen Lucas, as the text for COMM 2200 is the wide range of supportive materials it offers students. The variety of study guides and assistance for students, including help with writing outlines and references will enable the faculty to work with students on these Learning Outcomes.   In addition, the faculty will explore other avenues for improving student performance.

Institutional Methods of General Education Assessment
Proposed Changes: Academic Year 2009-10

Optional: If your institution wishes to change elements of the assessments of general education it conducted during the pilot year (2008-09), please answer the relevant questions below. If you propose changes to assessment of more than one competency—mathematics, writing, and oral communication—please write a separate proposal for each.

1. Do you wish to conduct assessments of general education in different courses than those in which you conducted the pilot assessment? If yes, please explain.

2. Do you propose changes in the student population to be assessed?

3. Do you propose changing your sampling methods? If yes, please explain.

4. Do you propose changes in the rubrics used to evaluate student work? If yes, please explain.

5. Do you propose evaluating different tests or assignments than those used in the pilot phase? If yes, please explain.

6. Do you propose changes in personnel who evaluate student work relative to the assessments? If yes, please explain.

7. Do you propose changes in the methods to collect, tabulate, and interpret results of the assessments? If yes, please explain.

We will increase the number of items to be assessed from 100 outlines and 100 speeches to 120 outlines and 120 speeches in order to offset any mistakes made in collecting and recording the results. This action should better ensure that we have at least 100 outlines and 100 speeches on which to base the final results.

MTSU COMM 2200 Gen Ed Oral Communication Assessment Table

Oral Communication Outcome to be Assessed	Superior Number and Percent	Satisfactory Number and Percent	Unsatisfactory Number and Percent
1. Students are able to distill a primary purpose into a single, compelling statement. *Students are able to communicate the thesis/specific purpose in a manner appropriate for a persuasive presentation, the audience & occasion---students communicate within the opening few sentences of the speech a thesis/specific purpose that is clear, concise, is appropriate and one that the audience members should clearly understand.*	34; 42.0%	44; 54.3%	3; 3.7%
2. Students are able to order major points in a reasonable and convincing manner based on that purpose. *Students use an organizational pattern appropriate to the persuasive presentation---students present an introduction that clearly engages the audience in an appropriate and creative manner; the body of the speech reflects clarity in organization, and the conclusion reflects clearly and accurately the content of the speech and leaves the audience with a compelling message or call to action.*	14; 17.3%	50; 61.7%	17; 21.0%
3. Students are able to develop their ideas using appropriate rhetorical patterns (e.g., narration, example, comparison/contrast, classification, cause/effect, definition). *Students use persuasive appeals (ethos, logos pathos) appropriate to the purpose, topic, audience, & occasion-*	17; 21.0%	45; 55.5%	19; 23.5%

--the speaker displays an ability to appropriately and effectively utilize all three types of persuasive appeals in the presentation and the speech is clearly persuasive throughout.			
4. Students are able to employ correct diction, syntax, usage, grammar, and mechanics. *Students use pronunciation, grammar & articulation appropriate for the audience & occasion---the speaker's articulation, pronunciation and grammar are correct and the speaker exhibits an appropriate level of fluency that helps to keep the audience engaged throughout the presentation.*	2; 2.5%	76; 93.8%	3; 3.7%
5. Students are able to manage and coordinate basic information gathered from multiple sources. *A bibliography or works cited page is present and contains a minimum of 6 sources; sources are cited using an accepted citation style with no major errors or omissions.*	7; 8.0%	23; 26.5%	57; 65.5%
6. *Students use language appropriate to the audience & occasion---the speaker uses language that is reasonably clear, vivid and appropriate and is free of inappropriate jargon, slang, and is nonsexist, nonracist, etc.*	2; 2.5%	78; 96.3%	1; 1.2%
7. *Students choose and narrow persuasive topic appropriate for the audience & occasion---the speaker's choice of topic is consistent with the purpose of the speech, is totally amenable to the time limits of the speech and reflects a clear understanding of the audience.*	19; 23.4%	46; 56.8%	16; 19.8%
8. *Students provide supporting material appropriate for the persuasive presentation and use supporting material (testimony, statistics and examples) that is clearly linked to the thesis/purpose of the speech, and whose quality*	13; 16.1%	44; 54.3%	24; 29.6%

enhances the credibility of the speaker.			
9. Students use physical behaviors that support the verbal message, and demonstrate appropriate posture, appropriate gestures, bodily movement, facial expressions, eye contact, and dress appropriately for the topic, the audience, and the occasion, and these physical behaviors enhance rather than distract from the presentation.	*0; 0%*	*65; 80.2%*	*16; 19.8%*
10. Students use vocal variety in rate, pitch & intensity to heighten and maintain interest appropriate to the audience and occasion---speech is well paced; the speaker is easily heard by members of the audience; and nonfluencies and disfluences are absent or are not distracting.	*3; 3.7%*	*73; 88.9%*	*6; 7.4%*
11. Student outlines contain no major errors in spelling, syntax and/or grammar	*22; 25.3%*	*60; 69.0%*	*5; 5.7%*
12. Student outlines contain a summary statement that clearly and consistently restates all the main points developed in the body of the speech	*29; 33.4%*	*34; 39.1%*	*24; 27.6%*
13. Student outlines contain an attention statement that is compelling; effectively accomplished two or more objectives of an attention segment in an introduction (i.e. would most likely gain the audience's attention; relates topic to the specific audience; states importance of the topic, etc.)	*17; 19.5%*	*53; 60.9%*	*17; 19.5%*
14. Student outlines contain 2 to 5 main points; each point is clear and concise and consistently follows an organizational pattern (topical, chronological, etc.) that is appropriate for the topic and audience; all main points are fully developed	*9; 10.3%*	*62; 71.3%*	*16; 18.4%*
15. Student outlines contain a preview statement that	*19; 21.8%*	*47; 54.0%*	*21; 24.2%*

clearly and accurately identifies the main points in the body of the speech			
16. Student outlines contain clear language that is concise and appropriate to the audience, the topic and the occasion; may contain elements of style (the use of metaphors, parallelisms, etc.), and is void of language that is sexist, racist, etc.	*0; 0%*	*75; 86.2%*	*12; 13.8%*
17. Student outlines are formatted correctly and follow an appropriate pattern of subordinations and division; may contain a few minor errors in notation.	*9; 10.3%*	*52; 59.7%*	*26; 30.9%*
18. Student outlines contain a credibility statement that clearly establishes the credibility of the speaker to speak on the specific topic (i.e. indicates some level of experience and/or research on topic).	*23; 26.4%*	*31; 35.6%*	*33; 37.9%*
19. Student outlines contain a purpose statement that is appropriate for an informative speech, is clear and concise, and contains no deficiencies in expression.	*6; 6.9%*	*45; 51.7%*	*36; 41.4%*
20. Student outlines contain a closing statement that clearly indicates the end of the speech and effectively uses at least one closing strategy (ends with a quotation, makes a dramatic statement, refers to the introduction).	*3; 3.4%*	*38; 43.7%*	*46; 52.9%*

3. Identify the course(s) used in the assessment. Include the prefix, number, and title of each course.

English 1020: Research and Argumentative Writing

4. If you used sampling, please describe how students were selected to participate in the sample and indicate the numbers and percentage of students whose work was assessed. Otherwise, please state the total number of students assessed.

All 1020 instructors submitted one copy of the most researched essay (an essay that followed the research process and provided references) each student turned in for grading, resulting in 2,311 essays collected for spring 2009. A computer-generated randomizer (www.random.org/lists) was used to give a pool of 250 essays. These essays were double blinded by clerical staff, using cover-up tape, and the assessment organizer checked that the papers met the assessment criteria (i.e., not missing pages or not being a response to a research assignment)—58 essays were discarded. The computer-generated randomizer was used on the 192 essays left in the pool, and the first 100 essays from this final randomized pool were chosen as the final sample. Thus, out of the original 2,311 essays, 4.33% of the essays were chosen for the final sample.

5. How was the students' work in this subject area assessed? Who evaluated the students' work?

From volunteers, two evaluators from each rank in the department were chosen, including the ranks of Graduate Teaching Assistant, Adjunct, Full-Time Temporary Instructor, Assistant Professor, Associate Professor, and Full Professor. The student essays were assessed using the approved evaluation rubric. On assessment day, a training and grade-norming session was held, using four essays not chosen to be in the target 100. The grade-norming and training session began with a discussion of the assessment rubric to make certain all criteria were understood. In the next hour, participants evaluated the four sample essays, after which the assessment organizer led a discussion that focused on general similarities and differences in rubric scores, a review of the English 1020 guidelines, and questions about the rubric, essays, or process. By the end of the grade-norming and training session, all participants came to an agreement about the correlation of the grading rubric and sample essays. Participants then evaluated 16 or 17 essays each, leading to the full essay sampling of 100 essays being read two times. A clerical copying error that was unfixable at the time led to 99 out of the 100 planned essays being fully evaluated. Final essay readings total 198.

6. Per the evaluation rubric approved for your institution, adapt the attached tables to record the results of the assessments of each learning outcome in the three subject areas. A separate table for each subject is presented with examples of evaluative descriptors provided. <u>The number of</u> <u>evaluative descriptors and their labels are arbitrary; you should</u>

apply the descriptors appropriate for your institution. If you rephrased a TBR goal statement, type your institution's version below the corresponding TBR goal and within the same cell. If you addressed additional outcomes not included in the TBR list, create new rows for them at the bottom of the table.

See attached table.

7. Summarize your impressions of the results reported in item 4. Based upon your interpretation of the data, what conclusions emerge about student attainment of the learning outcomes?

   a. Sixty to seventy percent of student writers in the pool achieve adequate or more than adequate levels for all criteria.
   b. Based on adequate or more than adequate achievement by student writers in the pool, two criteria are notably higher than others:
      i. Student writers are able to develop their ideas using appropriate rhetorical patterns (e.g., narration, example, comparison/contrast, classification, cause/effect, definition).
      ii. Student writers have written a minimum of 1,000 words or four typed pages at 250 words per page.
   c. Based on less than adequate achievement by student writers in the pool, two criteria need more attention than others:
      i. Student writers are able to order major points in a reasonable and convincing manner based on primary argument.
      ii. Student writers are able to manage and coordinate basic information gathered from multiple secondary sources.

8. Although the assessment of general education is in a pilot phase, do you plan any immediate strategies to correct deficiencies that emerged with this area? If so, describe them below. (In future years, you will be required to submit improvement plans and describe how you implemented them.)

- Make all faculty aware of assessment study results by:
  o discussing results at GTA orientation, adjunct/FTT orientation, and general faculty meeting at the beginning of the academic year,
  o attaching assessment study results to email/memo from Department Chair and Lower Division Director.
- Focus on student management and coordination of basic information by inviting Mr. Jason Vance from James E. Walker Library to GTA and adjunct/FTT orientations to discuss available library assistance with this focus, including Research Coach, SearchPath, and Embed a Librarian options.
- Investigate the role departmental grade inflation may play in less than adequate scores during program assessment peer evaluations

MTSU ENGL 1020 Gen Ed Writing Assessment Table

Writing Outcome to be Assessed	More than Adequate Number and Percent	Adequate Number and Percent	Less than Adequate Number and Percent
Students are able to distill a primary purpose into a single, compelling statement. (revised outcome) Students are able to distill a primary argument into a single, compelling statement.	11/198 (5.6%)	120/198 (60.6%)	67/198 (33.8%)
Students are able to order major points in a reasonable and convincing manner based on that purpose. (revised outcome) Students are able to order major points in a reasonable and convincing manner based on primary argument.	9/198 (4.5%)	106/198 (53.5%)	83/198 (41.9%)
Students are able to develop their ideas using appropriate rhetorical patterns (e.g., narration, example, comparison/contrast, classification, cause/effect, definition).	16/198 (8.1%)	128/198 (64.6%)	54/198 (27.3%)
Students are able to employ correct diction, syntax, usage, grammar, and mechanics.	10/198 (5.0%)	117/198 (59.1%)	71/198 (35.9%)
Students are able to manage and coordinate basic information gathered from multiple sources. (revised outcome) Students are able to manage and coordinate basic information gathered from multiple secondary sources.	9/18 (4.5%)	108/198 (54.5%)	81/198 (40.9%)
(added outcome) Students give a clear purpose and audience.	8/198 (4.0%)	125/198 (63.1%)	65/198 (32.8%)
(added outcome) Students have written a minimum of 1,000 words or four typed pages at 250 words per page.	1/198 (0.5%)	151/198 (76.3%)	46/198 (23.2%)

III. Pilot Proposal for TBR General Education
Assessment of Mathematics

The following learning outcomes in mathematics must be assessed:

- Students are able to use mathematics to solve problems and determine if solutions are reasonable.
- Students are able to use mathematics to model real-world behaviors and apply mathematical concepts to the solution of real-life problems.
- Students are able to make meaningful connections between mathematics and other disciplines.
- Students are able to use technology for mathematical reasoning and problem solving.
- Students are able to apply mathematical and/or basic statistical reasoning to analyze data and graphs.

Elements to Include in the Pilot Proposal

1. Identify the TBR general education approved mathematics course(s) in which the assessment will be conducted. List the prefix, number, and title of each course.

   MATH 1710 College Algebra

2. If sampling is to be used, describe and justify the method.

   Full report on all students in all sections will be used. This is more accurate than sampling and will involve no additional effort.

3. Describe the method of assessing student work. The method must incorporate one of the following strategies:

   - Performance on selected test items on a standard final examination used in all sections of a course(s). **X** This one. Students in every section will be assessed every Fall and Spring semester, not Summer. The Spring semester assessment data will be reported to the TBR.
   - Performance on standard test items embedded in each instructor's unique final examination.

4. Under either of the two strategies for assessment, identify the test item numbers* used to assess each of the required mathematics learning outcomes in the table below. At least two items should be used to assess each learning outcome.

Mathematics Learning Outcome to be Assessed	Test To Be Used (Final, etc.)	Test Item Numbers*
Students are able to use mathematics to solve problems and determine if solutions are reasonable.	Math 1710 Common Final	24, 34
Students are able to use mathematics to model real-world behaviors and apply mathematical concepts to the solution of real-life problems.	Math 1710 Common Final	9, 28
Students are able to make meaningful connections between mathematics and other disciplines.	Math 1710 Common Final	30, 40
Students are able to use technology for mathematical reasoning and problem solving.	Math 1710 Common Final	22, 19
Students are able to apply mathematical and/or basic	Math 1710	2, 38

statistical reasoning to analyze data and graphs.	Common Final	

*To avoid the possibility that test items might be compromised, do not submit the items themselves but have them available on campus for review, if needed.

5. Describe the method to collect, tabulate, and interpret results of the assessment per test items, assuring anonymity of both students and instructors.

The Scantron system will be used to record performance on the embedded questions from the Common Final Examination. No names will be used; and the results will be anonymous. There will be 10 embedded questions, two questions for each of the five learning outcomes described above.

Students will respond to all questions on Scantron forms, and they will not know which questions are the "embedded" questions.   A Scantron program will then pull out their responses on the embedded questions.

Specifically, it is planned to use Scantron forms to obtain the following:

(i)   Names will be removed from scores.

(ii)   **For each section**: For each embedded question obtain the number of responses for each choice (a), (b), etc.; as well as percentages of same.

(iii)   **For each section**: For each embedded question, obtain average score on a scale of 0 to 1.

(iv)   **For aggregate of all sections**: For each embedded question obtain average score on a scale of 0 to 1.

(v)   **For each section**: Obtain average score on all embedded questions, on a scale of 0 to 10.

(vi)   **For aggregate of all sections**: Obtain average score of all embedded questions, on a scale of 0 to 10.

(vii)   Section numbers will be identified to assist the Chair in discerning possible differences. The index will be kept in the office of the Chair.

(viii)   Numerical results (i) – (vi) above will be shared with the department Service Course Committee for review and possible recommendations.

MTSU MATH 1710 Gen Ed Assessment Report

Template to Report Results of Pilot Assessments in General Education

Please write separate reports for mathematics, writing, and oral communication that address questions 1-6. In your reports, do not include any information that identifies individual students or faculty.

1. Identify the course(s) used in the assessment. Include the prefix, number, and title of each course.

    MATH 1710—College Algebra

2. If you used sampling, please describe how students were selected to participate in the sample and indicate the numbers and percentage of students whose work was assessed. Otherwise, please state the total number of students assessed.

    Report base on 799 students out of 1121

    N = 799

    Only 799 students were included in this report. The remaining 322 students were inadvertently given a different version of the final examination.

3. How was student work in this subject area assessed and who evaluated it?

    Performance on selected test items on a standard final examination used in all sections of a course measured by the average rate of correct response on selected questions

    Evaluated by Interim Chair of Department

4. Per the evaluation rubric approved for your institution, adapt the attached tables to record the results of the assessments of each learning outcome in the three subject areas. A separate table for each subject is presented with examples of evaluative descriptors provided. The number of evaluative descriptors and their labels are arbitrary; you should apply the descriptors appropriate for your institution. If you rephrased a TBR goal statement, insert your institution's version below the corresponding TBR goal and within the same cell. If you addressed additional outcomes not included in the TBR list, create new rows for them at the bottom of the table.
    Attached

5. Summarize your understanding of the results reported in item 4. Based upon your interpretation of the data, what conclusions emerge about student attainment of the learning outcomes?

    Students struggle with quantitative, critical thinking. Learning to use mathematics as a tool to model and solve real-world problems and to better understand a rapidly

changing, technological world is a challenge to many of our students. Producing an informed, educated work force in Tennessee is not a short-term project.

6. Although the assessment of general education is in a pilot phase, do you plan any immediate strategies to correct deficiencies that emerged with this area? If so, describe them below. (In future years, you will be required to submit improvement plans and describe how you implemented them.)

   The data will be analyzed to discern strengths and weaknesses of course content and assessment tools.

   Instructors will be advised to give more attention to the desired learning outcomes.

   The selected test items used in the assessment will be modified to more precisely reflect the learning outcomes.

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**Institutional Methods of General Education Assessment
Proposed Changes: Academic Year 2009-10**

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Optional: If your institution wishes to change elements of the assessments of general education it conducted during the pilot year (2008-09), please answer the relevant questions below. If you propose changes to assessment of more than one competency—mathematics, writing, and oral communication—please write a separate proposal for each.

1. Do you wish to conduct assessments of general education in different courses than those in which you conducted the pilot assessment? If yes, please explain.

2. Do you propose changes in the student population to be assessed?

3. Do you propose changing your sampling methods? If yes, please explain.

4. Do you propose changes in the rubrics used to evaluate student work? If yes, please explain.

5. Do you propose evaluating different tests or assignments than those used in the pilot phase? If yes, please explain.

6. Do you propose changes in personnel who evaluate student work relative to the assessments? If yes, please explain.

7. Do you propose changes in the methods to collect, tabulate, and interpret results of the assessments? If yes, please explain.

   Assessment results could be made both more meaningful and more useful simply by identifying more than a single pair of questions on the final examination with each of the learning outcomes.

MTSU MATH 1710 Gen Ed Assessment Table

Mathematics Outcome to be Assessed	Superior Number and Percent	Satisfactory Number and Percent	Unsatisfactory Number and Percent
Students are able to use mathematics to solve problems and determine if results are reasonable		**N = 799** **73% = average correct response rate on selected questions**	
Students are able to use mathematics to model real-world behaviors and apply mathematical concepts to the solution of real life problems.			**N = 799** **61% = average correct response rate on selected questions**
Students are able to make meaningful connections between mathematics and other disciplines.			**N = 799** **46% average correct response rate on selected questions**
Students are able to use technology for mathematical reasoning and problem solving			**N = 799** **67% = average correct response rate on selected questions**
Students are able to apply mathematical and/or basic statistical reasoning to analyze data and graphs.		**N = 799** **71% = average correct response rate on selected questions**	

Middle Tennessee State University
Feedback on TBR Assessment of General Education Process

1. What are your overall impressions of the assessment process?

   The overall impression after two years of assessing General Education primary skills—a pre-pilot and a pilot year—it appears that there is a convergence of weaknesses in more than one area. This means that we can design multiple methods to address weaknesses in a cross-discipline context.

2. Do you have suggestions on how to improve or revise the process?

   Meaningful assessment is both time consuming and expensive; thus, after collecting three years of baseline data, the TBR should consider a three-year assessment cycle instead of requiring annual assessments of general education.

Institutional Methods of General Education Assessment
Proposed Changes: Academic Year 2009-10

Optional: If your institution wishes to change elements of the assessments of general education it conducted during the pilot year (2008-09), please answer the relevant questions below. If you propose changes to assessment of more than one competency—mathematics, writing, and oral communication—please write a separate proposal for each.

3. Do you wish to conduct assessments of general education in different courses than those in which you conducted the pilot assessment? If yes, please explain.
   No

4. Do you propose changes in the student population to be assessed?
   No
5. Do you propose changing your sampling methods? If yes, please explain.
   No

6. Do you propose changes in personnel who evaluate student work relative to the assessments? If yes, please explain.
   The Mathematics assessment was largely done by the chair because of change in personnel this past summer. In the future, the Mathematics assessment may be first review by a departmental committee.

7. Do you propose changes in the methods to collect, tabulate, and interpret results of the assessments? If yes, please explain. No

Critical Thinking

Almost all elements in the critical thinking component are interrelated with Performance Funding and established through the current cycle. The only changes that may be recommended relate to Item 4, methods of interpreting results. If you have any changes to recommend concerning interpretive methods, please describe.