

Social Sciences General Education Annual Assessment Report
2007- 08
June 9, 2008

I. Introduction

The Social Sciences General Education program serves all OIT degree students, who are each required to complete twelve credits in this general education area. The program offers courses in anthropology, economics, geography, history, political science, psychology and sociology. The program also offers a number of online courses to serve degree completion students as well as on-campus students.

II. Program Purpose, Objectives and Student Learning Outcomes

The Social Sciences faculty met three times during the Fall 2007 term to review the current program student learning outcomes. After some discussion, we agreed to revise the outcomes. The final version is listed below.

Social Sciences General Education Program Purpose

The Social Science general education program assists students in the acquiring empirical knowledge of those aspects of human experience that are social, political, economic, and psychological.

Program Educational Objectives

- 1) Foster intellectual curiosity, critical thinking, and logical reasoning.
- 2) Develop knowledge of quantitative and qualitative methods for understanding human behavior.
- 3) Provide an introductory understanding of the structures and processes of social institutions and individual behavior within cultures.

Program Learning Outcomes

Graduates from this program will be able to:

1. Structure, analyze, evaluate, and support an argument both orally and in writing in the social sciences.
2. Interpret, compare, and contrast ideas in the social sciences.
3. Demonstrate knowledge of the methods, techniques, concepts, and vocabularies of the social sciences.
4. Demonstrate knowledge of historical and contemporary issues in the social sciences.

III. Two-Year Cycle for Assessment of Student Learning Outcomes

The faculty agreed that we will have four main outcomes and will assess two each year on a two-year cycle, as listed in Table 1 below.

Learning Outcomes	'07-08	'08-09	'09-10	'10-11	'11-12	'12-13
Structure, analyze, evaluate, and support an argument both orally and in writing in the social sciences.	X		X		X	
Interpret, compare, and contrast ideas in the social sciences.	X		X		X	
Demonstrate knowledge of the methods, techniques, concepts, and vocabularies of the social sciences.		X		X		X
Demonstrate knowledge of historical and contemporary issues.		X		X		X

Table 1. Social Sciences General Education Assessment Cycle

IV. Summary of 2007-08 Assessment Activities

Social sciences faculty conducted a formal assessment of two student learning outcomes during fall term 2007.

Student Learning Outcome #1: Structure, analyze, evaluate, and support an argument both orally and in writing in the social sciences.

The Social Science faculty conducted an analysis of where this outcome is reflected in the curriculum. The mapping of this outcome to social science courses can be found in Appendix A, Student Learning Outcome-Course Matrix, table A1.

The faculty assessed student work from HIST 201, U.S. History, HIST 224, Technology and the Ancient World, and HIST 335, The Engineering Profession, to determine student progress. A total of thirty-five students completed a series of essay assignments. One assignment from each class was used to determine student progress for specific learning criteria, including structuring, analyzing, evaluating and supporting an argument both orally and in writing. A rubric with a four-point scale (excellent to poor) was used to determine student progress.

After analyzing the data, the faculty found that student performance in the area of selecting and using evidence to support arguments was generally good, as was their ability to write clearly. However, faculty found that the weakest student performance was in students' ability to analyze and evaluate an argument. Student work indicated that they lacked the ability to generate more sophisticated arguments. This finding was

mirrored by student self-assessment, which reported less progress in critical analysis than in other areas.

The faculty also noticed that using tic marks to indicate performance wasn't an effective method of compiling data. In the future, faculty will track individual student performance and then aggregate the scores.

The next time the course is taught faculty will provide more modeling of analysis and evaluation during class discussion and more thorough feedback in early essay assignments. This should improve students' ability to demonstrate abstract reasoning both orally and in writing.

Written and Oral Expression

To assess learning outcomes related to written and oral expression, the Humanities and Social Sciences department chose to evaluate student performance in Anthropology 335: The Built Environment. This class is overwhelmingly composed of junior-level civil engineering majors. As such, it is not a representative sample of the student body and thus is of somewhat limited utility with regards to the campus-wide achievement in general education learning outcomes.

The assessment of written expression was conducted with a paper assignment on the culture of "place-making" in America. The information for this assignment came from reading assignments and class discussions.

In general, the students of Anthropology 335 proved capable in the area of written expression, with over 50% of students rated as proficient (a score of 4 or 5 on the rubric) in each area. However, only 33% of students scored proficient in all areas of the assessment tool. Not surprisingly, this group of engineering students performed best in the area of accuracy (73%). Their weakest performance was in the areas vocabulary/diction (53%) and grammar/mechanics (53%). This identifies a need for improving basic writing skills. In the future, the students in this course will be required to write short memos on questions leading towards their larger paper assignments. This will give the opportunity for the instructor to provide earlier feedback to students on the expected level of performance in the area of written expression.

The assessment of oral expression was also conducted in Anthropology 335 using a discussion format. Small groups of students (4 or 5) were taken to a separate classroom and their discussion was evaluated over a span of 15 minutes. The topic of the discussion was the written assignment used in the assessment of outcome 1; a topic that the students were very well prepared to discuss. Students were selected randomly for each group.

Student performance in oral expression, as measured during these discussions, was highly variable. Overall, only 23% of students demonstrated proficiency (a 4 or 5 on the scoring rubric) in all areas. The area of best performance (85%) was "support" – using examples to support their ideas or claims. "Accuracy" was also a leading category at 69%.

Content and logic came in at 62%. The strong scores of support and accuracy are encouraging. However, the students scored very poorly in the areas of vocabulary/diction (23%) and grammar/mechanics (23%). To address the first area, students will be encouraged to demonstrate their mastery of vocabulary and grammar during weekly classroom discussions. One behavior demonstrated by students during the assessment exercise that negatively impacted their performance was interrupting each other. During discussions, it seemed that many students were eagerly awaiting a chance to jump in and make a remark. This negatively impacted the ability of the speakers to develop complex or in-depth ideas. Whether this is typical of daily classroom discussions or just a product of the stressful assessment situation is unknown. However, in the future the professor will emphasize to students the importance of listening and appropriate turn-taking in small group discussions.

The findings described above raise two questions. First, is small group discussion a fair assessment tool for oral expression? Perhaps speeches or senior/junior project presentations are a more appropriate diagnostic of oral expression? The more informal setting of small group discussion encourages the use of a “student vernacular”, which scores poorly in the vocabulary or grammar categories. Second, even though OIT students spend a significant amount of time in small group discussions, there is some question about whether good discussion techniques are being effectively taught and reinforced throughout the curriculum. As a result social science faculty recommend a cross-curriculum training of faculty in how to establish effective small group discussions. This training should be conducted during fall convocation.

Detailed records of this assessment can be found in the department assessment coordinator’s notebook.

Student Learning Outcome #2: Interpret, compare, and contrast ideas in the social sciences.

The Social Science faculty conducted an analysis of where this outcome is reflected in the curriculum. The mapping of this outcome to social science courses can be found in Appendix A, Student Learning Outcome-Course Matrices, table A2.

Student work from HIST 335, The Engineering Profession, was examined to determine student progress during the term. Twelve students, all seniors in the Civil Engineering Program, participated in daily discussions of assigned reading materials. Student discussion during weeks seven and eight of the book, *Revolt of the Engineers*, was used to measure student progress on the specific learning objectives above. A rubric with a four-point scale was used to determine student progress (excellent-poor).

In analyzing the data, the faculty found that student performance was in general satisfactory, with students able to discuss ideas and use evidence from the reading to support their arguments. They were less successful at comparing and contrasting ideas,

though performance in this area was still acceptable. When students were asked to self-reflect on their progress they reported a perception of more progress in the mastery and use of evidence in interpreting ideas and less progress in their ability to compare and contrast ideas.

In future classes faculty will provide more thorough modeling of how to compare and contrast ideas in early class discussion.

Records of this assessment can be found in Table 2 in the department assessment coordinator's notebook.

Indirect Assessment Measures:

Social Sciences Faculty conducted indirect assessment by asking students to complete a self-appraisal of their perception of progress in the learning objectives. Some students appeared to overestimate their ability to use language appropriately. However, uneven results indicate that faculty need to further refine the indirect measurement instruments.

Additional Assessment of Critical Thinking

Student work from ANTH 335: The Built Environment was examined to determine student progress during the term. Fifteen students, fourteen of which were juniors in the Civil Engineering Program, were assigned a paper based on "The Geography of Nowhere" asking them to analyze the history of place-making in America. This paper was used to measure progress on the critical thinking objective. A critical thinking rubric was used to evaluate ability in the areas of 1) identifying the problem or issue, 2) understanding and evaluating contexts, 3) the ability to develop an independent perspective, 4) the ability to identify and examine assumptions, 5) the ability to use evidence accurately and effectively in their analysis, and 6) the ability to recognize and communicate implications.

In analyzing these data, the faculty found that student performance was uneven amongst the six areas and mediocre overall. The students were most successful at understanding contexts and developing a perspective. They were least successful at identifying assumptions and using evidence accurately and effectively. Only one student out of 15 scored proficient in all areas. However, the instructor observed that this particular group of students did not perform as well in all areas of the course as students in previous years. Additionally, this small and biased sample of students *should not* be used to make statements regarding the overall effectiveness of the general education program to develop critical thinking skills in the entire student body of OIT.

Nevertheless, the above analysis identifies the need to not only improve the students understanding and execution of critical thinking skills, but to engage in early intervention in this area during classroom activities. In future classes, questions posed in homework

assignments will more specifically address the areas of critical thinking in which the students have shown the greatest weakness, particularly in identifying assumptions. This is already done to some extent, but it is clear that a greater emphasis on critical analysis of the material is needed in addition to the requirement to control content.

The assessment activity identified a particularly interesting dynamic between the critical thinking objective and existing classroom activities. The current homework/discussion preparation assignments emphasize “evidence,” an area in which students scored poorly in the assessment. From these assignments it is clear that the students control the information they need to employ in their papers. However, they appear weak in their ability to actually use it to effectively support their critical analysis. By the time they reach this upper-division course, the students should be demonstrating a higher level of ability in this area. This suggests that changes be made in preparatory courses as well, including, but not limited to, the general education course WRI 122.

Records of this assessment can be found in the department assessment coordinator’s notebook, Table 4.

V. Student Learning Improvement Plan (from Spring Summit on Student Learning)

Student Learning Outcome #1: Structure, analyze, evaluate, and support an argument both orally and in writing in the social sciences.

Strengths in written expression: Students demonstrated proficiency in written expression related to the social sciences, in particular with accuracy.

Areas needing improvement: The faculty identified a need for improvement in vocabulary, diction, grammar and mechanics.

Action plans: The faculty will provide earlier feedback through short papers in social science courses in order to model and demonstrate a higher level of written expression.

Strengths in oral expression: Students demonstrated strengths with accuracy, support arguments with examples, content, and logic.

Areas needing improvement: Vocabulary, diction, use of student vernacular, grammar, mechanics, and interrupting behavior.

Action plans: Social Science faculty have notified the department chair of Communications about students’ overall weakness in the areas of oral and written communication, which is primarily taught in WRI 122 and COMM classes. Social science professors will emphasize to students the importance of listening and appropriate turn-taking in small group discussions.

Student Learning Outcome #2: Interpret, compare, and contrast ideas in the social sciences.

Strengths: Student performance was in general satisfactory, with students able to discuss ideas and use evidence from the reading to support their arguments. They were less successful at comparing and contrasting ideas, though performance in this area was still acceptable.

Action plans: Although student performance was satisfactory, faculty will provide more thorough modeling of how to compare and contrast ideas in early class discussion.

Additional assessment on critical thinking

Strengths: The students were most successful at understanding contexts and developing a perspective.

Areas needing improvement: They were least successful at identifying assumptions and using evidence accurately and effectively.

Action plans: The above analysis identifies the need to not only improve the students understanding and execution of critical thinking skills, but to engage in early intervention in this area during classroom activities. In future classes, questions posed in homework assignments will more specifically address the areas of critical thinking in which the students have shown the greatest weakness, particularly in identifying assumptions. This is already done to some extent, but it is clear that a greater emphasis on critical analysis of the material is needed in addition to the requirement to control content.

Appendix A
Student Learning Outcome-Course Matrices

Student Learning Outcome #1: Structure, analyze, evaluate, and support an argument both orally and in writing in the social sciences. Table A1 demonstrates the mapping of this outcome to social science courses. The highlighted courses are those which have been assessed fall 2007.

Social Science Course	Fall	Winter	Spring
ANTH 335		X	
ANTH 452			X
GEOG 106	X		
GEOG 107		X	
HIST 101	X		
HIST 102		X	
HIST 103			X
HIST 201	X		
HIST 202		X	
HIST 203			X
HIST 224	X		
HIST 225		X	
HIST 226			X
HIST 335	X		
HIST 392	X		
PSCI 201			
PSY 311	X	X	X
PSY 312		X	X
PSY 347	X	X	X
PSY 410	X	X	X

Table A1. Student Learning Outcome #1-Course Matrix

Student Learning Outcome #2: Interpret, compare, and contrast ideas in the social sciences. Table A2 demonstrates the mapping of this outcome to social science courses. The highlighted course was assessed fall 2007.

Social Science Course	Fall	Winter	Spring
ANTH 335		X	
ANTH 452			X
ECO 201N	X	X	X
ECO 202N	X	X	X
GEOG 106	X		
GEOG 107		X	
GEOG 108			X
HIST 335	X		
HIST 392		X	
PSCI 201			
PSY 311	X	X	X
PSY 312		X	X
PSY 347	X	X	X
PSY 410	X	X	X

Table A2. Student Learning Outcome #2-Course Matrix