

The General Education Assessment Project at Oakton: Seven Years of Assessment



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EXECUTIVE SUMMARY

In the spring semesters of 1999 through 2003 a subcommittee of the Student Academic Assessment Team (SAAT) implemented a locally developed institutional approach for assessing students' achievements of general education objectives. The overall process was essentially the same over the first four years. Results can be found on the Oakton Office of Research website <http://www.oakton.edu/resource/oir/>.

In 2003, the assessment approach was changed significantly to accommodate assessing general education objectives that had not yet been examined. Instead of asking students to complete an exercise that was separate from and not graded as part of their regular classroom assignments, actual classroom work was evaluated in real time. Two Oakton general education objectives were assessed:

- Communicate ... effectively in ... speech
- Work and communicate effectively with people from a variety of backgrounds, individually and in teams

A total of 206 students were evaluated for their demonstrated ability to work in teams. Only 65 student presentations were evaluated, and all but one student received a passing score.

The small number of students assessed for communicating effectively in speech and the extremely high success rate, a rate at odds with anecdotal and frequently expressed concerns that students could not articulate clearly in speech, prompted the subcommittee to assess this objective again in 2004. Thus Oakton's general education assessment in 2004 targeted the general education objective:

- Communicate ... effectively in ... speech

In 2004, a total of 97 student presentations were evaluated by ten different assessors. Seventy percent of the presentations received a high pass, 24 percent received a pass, and only 6 percent did not pass.

In 2005, yet another variation in assessing student achievements of general education objectives was used. The objective selected for assessment was:

- Compare and evaluate alternative solutions to a problem

Students in seven sections of English 090 and 097 completed an in-class assignment during the first half of the semester, and students in seven sections of English 102 completed the same assignment at the end of the semester. This approach provided an approximation of students new to Oakton (the English 090 and 097 group) and students nearing the end of their studies at the College (the English 102 group). Students were given two social problems, and two possible solutions for each. They were asked to select one problem and then to describe the kind of information they would need to evaluate the two possible solutions, and why that information would be important. The problems were A) non-violent offenders are at risk from violent offenders because both groups are jailed together, and B) the high drop-out rate of Hispanic students.

Two lead faculty members developed a scoring rubric and led the scoring session, during which they trained sixteen faculty members to score students' work. Two readers scored each work and, when scores were discrepant, a third reader also scored the work. The work of 206 students was scored, with 22 percent receiving a high pass, 36 percent receiving a pass, and 43 percent not passing.

In considering the findings of this seven-year project, these issues should be kept in mind.

- Data about students have limitations. For example, data about credits earned are incomplete because they do not include credits from other institutions.
- Different students participated in the project in the seven years; therefore student gains measured through a pretest-posttest design cannot be assumed.
- Oakton's general education assessment project relies on faculty according face validity to the prompts, classroom assignments and the scoring rubrics.
- The very high percentage of students who achieved passing scores on the speech assessment appears to contradict other data and anecdotal information about students' competence in giving speeches or presentations.

Oakton uses a number of approaches to assess general education learning outcomes: the project discussed in this paper, departmental assessments of courses and programs, a review of general education course syllabi to determine which objectives are addressed in each course, student and faculty surveys of student engagement, and results of alumni surveys. However, faculty and staff are not uniformly familiar with all these approaches or the findings. In Spring 2004 divisions devoted a meeting to a discussion of the findings of the general education assessment project over the five years. The conversations suggested many faculty members remain unclear about what general education is at Oakton, why the College has a general education requirement for degrees, and how the assessment project itself was organized and implemented over the five year period. To address these issues, the SAAT prepared a paper providing an overview of general education at Oakton for distribution in the Fall 2004 semester. However, other issues arose, and the paper did not receive widespread distribution. The SAAT will reconsider the paper and determine whether and how to distribute it early in the Fall 2005 semester. Given the launch of the College's Higher Learning Commission self-study in Fall 2005, providing an explanation of general education and how students' achievements of general education objectives are assessed seems particularly germane.

INTRODUCTION

This report describes the seventh year of the Oakton Student Academic Assessment Team (SAAT) project to assess general education learning outcomes. Results from the previous six years are available in several reports and articles (Bers, 2000a; Bers, 2000b; Bers, 2001; Bers, Davis and Mittler, 2001; Bers, 2002; Bers, 2003; and Bers, 2004).

PROJECT DESCRIPTION

In the spring semesters of 1999 through 2005 a subcommittee or ad hoc group of the Student Academic Assessment Team (SAAT) implemented a locally developed institutional approach for assessing students' achievements of general education objectives.¹ The overall process was essentially the same over the first four years. The approach used prompts selected to cover a subset of general education objectives. Prompts were narrative or graphic documents such as editorial cartoons, newspaper articles, or graphs that faculty determined addressed the selected general education objective.² In 2002 one prompt was a video clip from the film *Ordinary People*. Each prompt was accompanied by a series of questions students were asked to answer.

Different prompts were used in each year, and different general education objectives were assessed. Classes were chosen purposefully, with the intent of identifying courses enrolling large numbers of students with 30 or more college credits.³ Each participant completed just one prompt in a class. Students themselves were asked to select a different prompt if they had already completed a prompt in a different class.

Trained faculty members using scoring rubrics developed by subcommittee members scored student responses. Faculty readers received training at the beginning of each scoring

¹ Year 2005 subcommittee members were Trudy Bers, Carol Bustamante, Linda Korbel, Rene Kovala, and Lynn Woodbury.

² When the project first began the college had 34 general education objectives. As the project evolved in spring 1999, SAAT members recognized objectives were duplicative, unclear, and too tightly linked with specific disciplines. New general education objectives were adopted for fall of 1999. They are to develop the student as an educated person who can and will

- Engage in the process of inquiry and problem solving through the following:
 - Define problems
 - Construct hypotheses
 - Gather, analyze, and interpret data/information using a variety of resources and methods, including technology
 - Explain how information fits within an historical context
 - Differentiate between fact and opinion
 - Compare and evaluate alternate solutions
 - Communicate findings effectively in writing and in speech
- Work and communicate effectively with people from a variety of backgrounds, individually and in teams
- Apply ethical principles to local, national, and global issues
- Recognize skills necessary to build and maintain effective human relationships

³ We wanted to capture students more likely to have taken general education courses; the operational method for doing so, since we could not feasibly administer the assessment to individually identified students, was to give the assessment in courses drawing primarily students with prior college credits.

session. Initially two readers scored each prompt. Students who received two scores of 3 were awarded a “high pass,” those who received two scores of 2 were awarded a “low pass,” and those with two scores of 1 were awarded a “no pass.” Where readers differed on their scores, a third reader scored the response. In each year one set of students’ work was evaluated with two different rubrics. One rubric dealt with the subject matter of the general education objective; for example, to recognize skills necessary to build and maintain effective human relationships. The second rubric focused on students’ the general education objective of effectively communicating ideas in writing.

Students’ achievements on the prompt were analyzed with a number of demographic and academic variables as controls: age, gender, cumulative grade point average, cumulative college-level credits at the college, English composition proficiency, mathematics proficiency and, in 2002, the number of general education areas in which students reported having taken college courses.

In 2003 and 2004, the assessment approach was changed significantly to accommodate assessing general education objectives that had not yet been examined. Instead of asking students to complete an exercise that was separate from and not graded as part of their regular classroom assignments, actual classroom work was evaluated in real time. Two Oakton general education objectives were assessed in 2003:

- Communicate ... effectively in ... speech
- Work and communicate effectively with people from a variety of backgrounds, individually and in teams

The SAAT general education subcommittee wrote a description of the overall project and criteria to identify classroom assignments that would be appropriate for assessing speeches and working in teams. Because only 65 students’ presentations were evaluated in 2003, the process was repeated in 2004, with the focus only on the speech assessment. The general education evaluations were not part of the students’ grades or used to evaluate faculty. As in previous years, the scoring rubrics were based on a three-part scoring system, with 3 being a “high pass,” a two being a “pass,” and a one being a “low pass.” Only one evaluator scored each student’s work.

In 2005, a new approach to assessing a general education objective was developed. The objective assessed this year was:

- Compare and evaluate alternative solutions to a problem

Two faculty members, Carol Bustamante and Lynn Woodbury, developed a unique project in which students were presented with two social problems, and two alternative solutions for each. The problems were A) non-violent offenders are at risk from violent offenders because both groups are jailed together, and B) the high drop-out rate of Hispanic students. Students were asked to select one problem, and then to write a paragraph for each solution explaining the kind of information that would be needed to evaluate it and to include the reasoning behind their requests for specific information. The goal was to determine the information needed in order to compare and evaluate each solution, not to select and argue for one solution over the other.

Appendix A provides the brief survey students were asked to complete and the assessment assignment.

To approximate students new to Oakton, students in seven developmental composition courses completed the work during the first half of the Spring 2005 semester. To approximate students nearing the completion of their studies at the College, students in seven English 102 (second semester of college-level composition) completed the work at the end of the Spring 2005 semester.

The faculty members developed a scoring rubric, and provided training for sixteen faculty colleagues who then read students' work. Two readers assessed each work, and where their scores were discrepant, a third reader also assessed the work. The rubric included a number of dimensions, but for the purposes of this project, only the overall score given to each work was used. The rubric used four score levels. The overall score for all readers of a single work was translated into the student's final score, such that when there were two reader scores of 1 the student was given a 1 (no pass), two reader scores of 2 the student was given a 2 (pass), and two reader scores of 3 and/or 4, the student was given a 3 (high pass). Appendix B provides the rubric.

The work of 206 students was assessed in this project.

RESULTS

Table 1 provides data showing the courses and number of students in each who completed the general education assessment. Recall participants were enrolled in courses in which faculty members agreed to have students participate, and that by design, a total of seven remedial composition sections and seven English 102 sections were selected.

Table 1
Courses in Which Students Participated in
Spring 2005 General Education Assessment

Course	Number (N = 206)	Percent
English 090 (English as a second language)	27	13%
English 097 (remedial English)	52	25%
English 102 (second college-level composition course)	127	62%

Table 2 provides data on the characteristics of students participating in this project. Females comprised 46 percent of the students assessed; three-quarters were under the age of 25 while the rest were age 25 or older. Eighteen students had no Oakton credits (only college-level courses are counted in the credit hour and GPA calculations), though 38 percent were enrolled in remedial courses. Thus many students enrolled in remedial courses had already received grades of A, B, C, D or F in at least one college-level course at Oakton. Of the 188 students who had an

Oakton grade point average, 28 percent has less than a 2.0. Finally, nearly all students said they had taken a course in one or more general education areas, and more than half (56%) said they had taken courses in four or five general education areas.

Table 2
Characteristics of Students Participating in
Spring 2005 General Education Assessment Project

Characteristic	Number (N = 206)	Percent
Gender		
Female	95	46%
Male	111	54%
Age		
24 or less	156	76%
25 or older	50	24%
Oakton credits		
None	18	9%
1-29	129	63%
30-44	32	16%
45 and up	27	13%
Oakton GPA		
None	18	9%
0.0-1.9	53	26%
2.0-2.9	80	39%
3.0-4.0	55	27%
Number general education areas in which student had taken one or more courses*		
None	4	2%
One	17	8%
Two	31	15%
Three	40	19%
Four	57	28%
Five	57	28%

* Based on self-reported data; student indicated he or she had taken a general education course in the five general education areas at Oakton or another college or university. General education areas are communications, mathematics, humanities/philosophy, social science, and science.

Table 3 provides overall results. Slightly more than two in five students (43%) failed to provide the minimum information needed to earn a passing score on the assessment. A number of students selected one option to promote; their failure to follow directions may itself be an indicator of limitations in their ability to compare and contrast alternative solutions. There were

no significant differences in performance based on students' time at Oakton (new or not new), as Table 4 shows (chi-square = 1.0; df = 2; prob. = .60).⁴

To push the analyze further, we also looked at whether students' performance on the assessment was related to other characteristics: age, gender, cumulative grade point average, cumulative college credits earned at Oakton, and number of general education areas in which students had taken one or more courses. We found no significant differences between students' performances on the general education assessment and each of the characteristics examined. The small number of students overall made it impossible for us to look at more than one characteristics together; e.g., age and gender.

Table 3
Results of General Education Assessment

	Objective: Compare and evaluate alternative solutions to a problem	
	N	Pct.
High pass	45	22%
Low pass	73	35%
No pass	88	43%
Total	206	100%

Table 4
Results of General Education Assessment by Proxy for Time at Oakton

	Time at Oakton			
	New (enrolled in ESL or remedial course)		Not New (enrolled in English 102)	
	N	Pct.	N	Pct.
High pass	15	19%	30	24%
Low pass	31	39%	42	33%
No pass	33	42%	55	43%
Total	79	100%	127	100%

⁴ Chi-square is a statistical test that shows whether two or more items are related. In this study, the two items are students' time at Oakton (new or not new), and performance on the assessment (high pass, pass or fail). We hypothesized that new students would be less likely than not-new students to achieve a passing score in this assessment. We did not find this to be the case; the percent of students who earned high pass, pass and failing scores was virtually the same in both groups. Ordinarily a probability of .05 or smaller needs to be found in order to say that the relationship between the variables is due to a "real" relationship and not just due to random chance.

COMPARING THE SEVEN YEARS OF ASSESSING GENERAL EDUCATION

In the first four years (1999-2002), faculty selected prompts, developed scoring rubrics, and scored students' written responses. Students' work on the general education assessment was not part of their coursework and did not count toward their course grades. In 2003, faculty assessed students' speeches and teamwork in real time, as students were engaged in actual classroom assignments. The classroom teacher may have graded the same work as part of the regular course evaluation. In 2004, the same process was used as in 2003, but only students' speeches were assessed. In 2005 yet another change took place. Students enrolled in seven remedial composition (EGL 090 and EGL 097) and seven college-level composition (EGL 102) courses completed a writing assignment in class, though the assignment was not part of their grade. The assignment asked them to describe the information they would need to evaluate alternative solutions to a problem presented to them, and why they would need that information.

In the first four years, the work of many more students was evaluated for the general education assessment than in 2003 or 2004; the work of more than 1000 students was evaluated in each year from 2000-2002. In 2003, 65 student speeches were assessed to judge achievement of the general education objective to communicate effectively in speech, and the work of 206 students participating in group assignments was assessed to judge achievement of the general education objective to work effectively in teams. In 2004, 97 student speeches were assessed. In 2005, the work of 206 students was assessed. Appendix C presents summary findings from the seven years.

Changes in prompts, objectives, scoring rubrics, and faculty roles, and the overall approach make direct comparisons from one year to the next impossible. Despite these reservations, some observations can be made about the general education assessment project findings overall.

Only some independent variables were associated with students' achievements. Meeting objectives is operationally defined as a passing score on the general education assessment. In the first four years, we found that cumulative credits earned at the college, gender and age are not generally associated with students' achievements on the general education assessment. Mathematics competency is more often associated with results. Cumulative grade point average and English writing competency are the two independent variables most often linked with students' achievements in meeting general education objectives. The number of general education areas in which students report taking courses was added as an independent variable in 2002, and showed marginal associations with students' achievements.

In 2003, we examined fewer independent variables (we did not look at mathematics or English writing competency), and we looked only at the association of independent variables and students' work on the teamwork objective. We found that cumulative grade point average continues to be associated with achievement in meeting general education objectives. As expected, a higher proportion of students with high grade point averages achieve standards as compared to students with lower grade point averages.

In both 2003 and 2004, the small number of students whose speeches were assessed (65 in 2003 and 97 in 2004) and the fact that only 7 students out of the 162 assessed in both years failed to earn a passing score made it impossible to correlate independent variables with achievement in meeting the general education objective “to communicate effectively ... in speech.”

In 2005, we found that none of these student characteristics was associated with performance on the general education assessment: age, gender, cumulative grade point average, cumulative credits earned, or number of areas in which general education courses were taken.

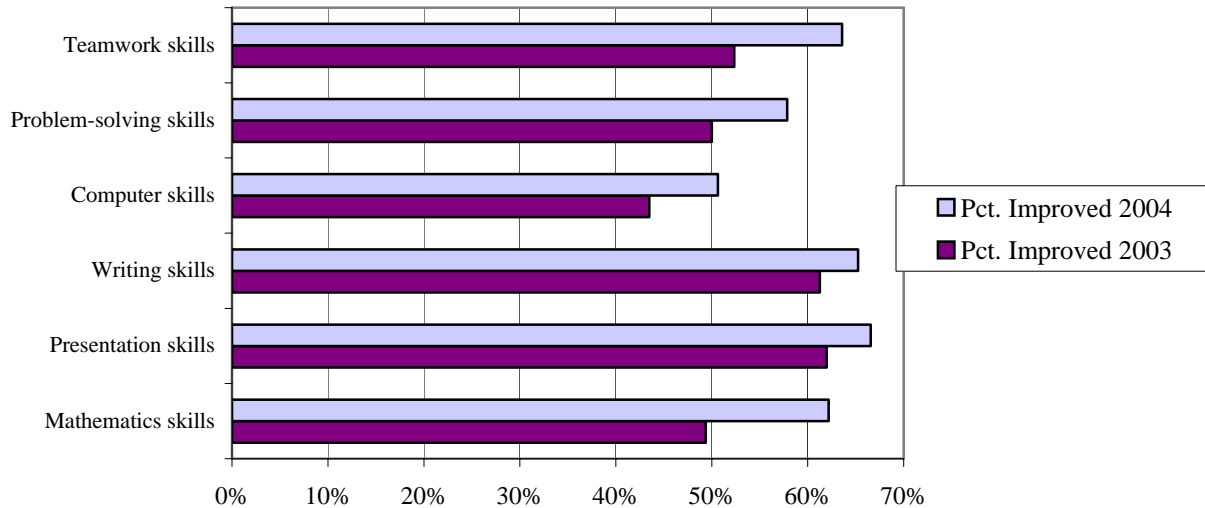
MULTIPLE APPROACHES TO ASSESSING GENERAL EDUCATION AT OAKTON

Oakton uses a number of approaches to assessing students’ general education learning outcomes. These include:

- **General education assessment project.** The project reported is the subject of this report.
- **Course and program level assessments take place at the departmental level.** As part of Oakton’s assessment approach, each department is expected to conduct assessments of student learning outcomes in selected courses and its programs. Departments teaching general education courses may include some or all of their general education courses in these assessments.
- **Departmental review of competencies addressed by general education courses in each discipline.** Each department that offers general education courses completes a grid indicating which competencies are explicitly addressed in each course. The Student Academic Assessment Team (SAAT) reviews the grids and generic syllabi for each course, and informs the department about which general education objectives the courses address. Departments may revise syllabi to clarify or address additional objectives.
- **Faculty and student surveys of student engagement.** In spring 2003, Oakton participated in the Community College Survey of Student Engagement (CCSSE). More than 700 students responded. In fall 2003, Oakton conducted a faculty survey to elicit perceptions about students’ engagement and academic experiences at Oakton. Many items on both surveys touched on perceptions about the extent to which students were meeting Oakton’s general education objectives.
- **Baccalaureate alumni survey responses.** Each year Oakton surveys former students who were in transfer programs who had earned 30 or more credits or an Associate degree at Oakton and who had been away for one or three years. In 2003 and 2004, alumni were asked to what degree they thought they learned or improved at Oakton in a number of general education skill areas: teamwork, problem-solving, using computers, writing, giving presentations and mathematics. Figure 1 presents findings from the surveys. At least two points stand out. First, in most areas, more than half the respondents said they improved skills at Oakton. Second, the percent of respondents who said they improved their skills at Oakton was higher among the

2004 group than among the 2003 group. While data from only two years do not indicate a trend, it will be interesting to see whether over time the percent of respondents who say their skills at Oakton improved continues to increase.

Figure 1
Percent of Alumni Survey Respondents Who Say They Improved Skills at Oakton



Considerations about the general education assessment project itself should be made in context of the multiple assessments now being implemented at the College.

DISCUSSION ABOUT THE GENERAL EDUCATION ASSESSMENT PROJECT

The project described above is a unique approach to assessing general education. The 2003 and 2004 projects were in many respects more difficult to manage than previous ones, because they relied on faculty self-reports about the conformity of their course assignments with the criteria for appropriate assignments developed by the general education subcommittee, assessors to connect with classroom instructors to arrange visits, and a smaller-than-expected pool of faculty volunteering their courses for participation or coming forward to be trained and serve as evaluators.

In considering the findings of this seven-year project, these issues should be kept in mind.

- Data about students have limitations. Many students who have attended other colleges and universities do not transfer their credits to Oakton, especially those who have already earned a bachelor’s degree. Consequently, data about credits earned are incomplete because they do not include credits from other institutions.

- Different students participated in the project in the six years; therefore student gains measured through a pretest-posttest design cannot be assumed.
- Oakton's general education assessment project has not been subjected to rigorous scrutiny with respect to validity and reliability. We accord face validity to the prompts, the classroom assignments and the scoring rubrics.
- The approach to assessing the achievement of general education objectives has varied over the seven years.
- The very high percentage of students who achieved passing scores on the speech assessment in both 2003 and 2004 appears to contradict other data and anecdotal information about students' competence in giving speeches or presentations. For years, conversations among faculty, staff and administrators have suggested that a substantial number of students express great fear of giving speeches; avoid taking Speech 103, which is required for transfer associate and many career associate degrees; and do not do a good job of giving presentations.
- The 2005 approach asked students to describe information they would need to compare and evaluate alternative solutions to a problem. A number of students selected one solution despite being directed not to. This suggests students had a difficult time understanding the directions, itself an indicator of limitations in critical thinking.
- The general education assessment project has been implemented for seven years. The same basic process was used in the first four years, with students responding to prompts during regular class time and trained faculty evaluators actually scoring the students' work after the end of the semester. In 2003 and 2004, faculty evaluators assessed students' work during class time. Finally, in 2005 students completed an assignment in class that was scored by trained evaluators at a later time. All ten Oakton general education objectives have now been assessed, although most were assessed only once during the seven year period. As noted in the section above, Oakton uses multiple approaches to assessing general education. It is now time to reconsider the specific assessment project and determine whether to continue it and, if so, how. It is also time to consider whether to substitute a standardized assessment tool rather than the college-developed assessment approach, or to use both a standardized instrument and a college-developed approach.

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Appendix A
General Education Assessment
Student Information Survey and Assignment
Spring 2005

Name: _____

Oakton Identification Number : _____

Have you taken any college-level courses in these areas at Oakton or another college or university?

Course area	Taken one or more courses at Oakton		Taken one or more courses at another college or university?	
Mathematics (not remedial)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
English composition	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Humanities / Fine Arts (literature, foreign language, humanities, philosophy, music, art, theater)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Speech	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Social Science (anthropology, economics, history, geography, political science, psychology, sociology, social science)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Science (biology, chemistry, earth science, natural science, physics)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

◇



Directions:

Below are two social problems. Each problem has two possible solutions. Choose **one** of the social problems (A or B) and study the two solutions given for it. Which solution would most effectively lessen the problem? In order to decide you would need specific kinds of information. Let's assume that you could ask for and receive the information you believe would be necessary in order to compare and evaluate the possible solutions.

What kind of information would you need for the first solution? Write your ideas down in paragraph form and include the reasoning behind your requests for specific information.

What kind of information would you need for the second solution? Write your ideas down in paragraph form and include the reasoning behind your requests for specific information.

Your goal is to determine what information you would need in order to compare and evaluate each solution.

Social Problem (A)	Social Problem (B)
Non-violent offenders are at risk from violent offenders because both groups are jailed together.	High drop-out rate of Hispanic students.
Two Possible Solutions:	Two Possible Solutions:
<ol style="list-style-type: none">1. separate violent and non-violent offenders2. do not imprison non-violent offenders	<ol style="list-style-type: none">1. teach the family what is necessary for the student to succeed in school2. offer supplementary resources at school for the students to improve

Appendix B
General Education Scoring Rubric – Spring 2005
“compare and evaluate alternate solutions”

CATEGORY	4	3	2	1
Organization	Information is very organized with well-constructed paragraphs.	Information is organized with well-constructed paragraphs.	Information is organized, but paragraphs are not well-constructed.	The information appears to be disorganized.
Amount of Information	Both solutions are addressed with at least 7 distinct pieces of information requested for each.	Both solutions are addressed with at least 4-7 distinct pieces of information requested for each.	Both solutions are addressed with less than 4 distinct pieces of information requested for each.	Only one solution is addressed.
Quality of Information	Information requested includes a variety of sources (examples, data, stories, supplemental material, and other research). Clear reasons are given for each request.	Information requested includes a fair variety of sources. Clear reasons are given for some requests.	Information requested lacks variety of sources. Vague reasons or few reasons given.	Information requested lacks variety and no reasons are given.
Breadth of Information	Information requested covers a wide spectrum of the problem.	Information requested covers a fair spectrum of the problem.	Information requested covers some of the spectrum but has gaps.	Information requested is too narrow.
Depth of Information	Information requested moves through multiple levels of thought and shows a strong pattern of relationship.	Information requested moves through several levels of thought and shows a pattern of relationship.	Information requested moves past one level of thought and shows the beginning of a pattern.	Information requested only skims the surface of various aspects of the problem and is unrelated to other requested information.
Overall Score	Response will have clearly constructed paragraphs. Both solutions will be addressed, in two distinct parts. At least 7 bits of information are requested for each solution. The information requested covers a variety of sources and moves through levels of the problem, such that one request will trigger and be related to another. Clear reasons will be given for most of the information requested	Response will have a clearly constructed paragraph. Both solutions will be addressed, usually in two distinct paragraphs. Questions raised will be somewhat different for the two solutions. Requests for information number 4 to 7, include a variety of sources, and sometimes build on each other. Clear reasons will be given for some of the requests if not all.	Response will usually have a recognizable paragraph, but some elements may be out of place or off the topic. Both solutions will be addressed, sometimes in a single paragraph. Normally around 4 requests for information will be made. The questions raised tend to the more obvious ones. Vague or few reasons are given for requesting the information.	Response may be hard to read or not clearly addressed to the topic at hand. The requests for information may be none or few, often mixed with elements that don't meet the assignment. The questions posed will show a lack of understanding of the topic. Often no reasons will be given.

Appendix C
Summary Results: Seven Years of General Education Assessment

General Education Objective	Year of Assessment	Total Students Evaluated	High Pass		Low Pass		No Pass	
			n	%	n	%	n	%
Compare / evaluate alternative solutions to a problem	2005	206	45	22%	73	35%	88	43%
Communicate effectively in...speech ¹	2004	97	68	70%	23	24%	6	6%
Communicate...effectively in...speech ¹	2003	65	42	65%	22	34%	1	2%
Work and communicate effectively with people...in teams ¹	2003	205	119	58%	60	29%	26	13%
Construct hypotheses (prompt A)	2002	294	41	14%	130	44%	123	42%
Construct hypotheses (prompt B)	2002	261	53	20%	116	44%	92	35%
Analyze and interpret data / information	2002	386	126	33%	168	44%	92	24%
Recognize skills necessary to build and maintain effective human relations	2002	356	38	11%	182	51%	136	38%
Effectively communicate ideas in writing	2002	367	87	24%	171	47%	109	30%
Effectively communicate ideas in writing	2001	437	34	8%	280	64%	123	28%
Explain how information fits within an historical context	2001	467	48	10%	241	52%	178	38%
Compare / evaluate alternative solutions to a problem	2001	422	106	25%	142	34%	174	41%
Identify problems	2001	437	44	10%	241	55%	152	35%
Apply ethical principles	2000	206	22	11%	135	66%	49	24%
Analyze and interpret data / information	2000	206	8	4%	151	73%	47	23%
Differentiate between fact and opinion ²	2000	237	198	84%	28	12%	11	5%
Effectively communicate ideas in writing	2000	208	15	7%	99	48%	94	45%
Humanities ³	1999	202	48	24%	84	42%	70	35%
Social Sciences ³	1999	234	33	14%	117	50%	84	36%
Mathematics ³	1999	197	29	15%	99	50%	69	35%
Communications ³	1999	232	14	6%	87	38%	131	56%

¹. The assessment of this objective was performed in the classroom in real time and based on regular classroom assignments

². The prompt used to assess this objective was in a multiple-choice format.

³. Prior to the adoption of the current general education objectives.