

Steering Committee for Studying General Education at CMU

Progress Report to the Academic Senate

28 April 2006

WORK COMPLETED IN SPRING, 2006

The Steering Committee for Studying General Education at CMU met weekly during the spring semester to discuss possible solutions to the problems identified in the Fall 2005 progress report. Most of the work focused on approaching consensus on desired student learning outcomes for general education at CMU, primarily as they apply to competency requirements. The committee kept CMU's mission statements in mind throughout this process.

I. Institutional Comparisons

The committee began by examining general education programs at CMU's benchmark institutions and at several other institutions that have recently addressed general education. All of the programs are similar to CMU in that they have specific competency courses and a course distribution system for their equivalent of CMU's University Program. The distribution requirements are divided into some form of arts & humanities, natural science, and social science, and most have diversity requirements. Some ideas were derived from this process, such as designing a curriculum that purposefully extends from the freshman year through the senior year, and the addition of quantitative literacy. A table summarizing the characteristics of general education programs at the benchmark institutions is included as Appendix A.

II. Competency Requirements

• *Oral communication:* Although several of CMU's benchmark institutions do not explicitly require speech competency, the committee thinks it is important and agreed to recommend retaining such a requirement. The consensus was that students should become effective communicators; specific outcomes should include the following.

Students will be able to:

- speak publicly to large and small groups;
- construct and present a logical oral argument even with little preparation time;
- demonstrate good listening skills including evaluating speeches;
- understand group dynamics sufficiently to work productively in groups;
- use visual aids and technology effectively.

The ongoing assessment of speech competency is expected to provide information about what students are currently learning in the various speech competency courses. More specific recommendations will depend on the results of that assessment. A requirement for further training and practice in oral communication, perhaps in UP courses or major capstone courses, should be considered.

• *Quantitative skills:* The committee deliberated the benefits of a quantitative literacy (QL, also known as quantitative reasoning, QR) requirement. Our current mathematics competency requirement (MTH 105) is not the same as quantitative literacy. Two of our benchmark institutions currently have a QL or QR requirement. The Mathematical Association of America recommends that all undergraduate degree

programs educate students in quantitative literacy. QL is variously defined, but descriptions share the following elements as learning outcomes.

Students will:

- demonstrate confidence with quantitative ideas and in applying quantitative methods;
- demonstrate a solid knowledge about numbers and arithmetic operations;
- understand measurement scales & units, precision & accuracy, correlation & significance;
- be proficient in data-based reasoning and statistics, including interpreting graphs, charts, tables;
- solve problems encountered in every-day life using mathematical tools;
- use and create models of real-world problems, and assess their advantages and limitations;
- evaluate and create analytical arguments, apply deductive reasoning;
- communicate quantitative information effectively.

A committee within the mathematics department has been discussing QL; Tom Miles attended one steering committee meeting to explain QL and describe what his group has been discussing. Visiting expert Corrine Taylor from Wellesley College also met with the committee to discuss Wellesley's QR program and how student learning benefits from a QL or QR requirement in general education.

A QL requirement could take one of several formats; these should be evaluated further to determine what would work best at CMU. One option is referred to as "little q - big Q." Such programs require basic, entry-level quantitative skills (little q); mastery of the basics could be demonstrated by passing a test or by passing a QL course. Basic "little q" competency must be met in a student's first year. "Big Q" competency is met by passing one of several courses in which students learn to apply QL skills within a specific disciplinary context. One of the tenets of QL is that quantitative skills are used in all disciplines today, not just the natural and social sciences as is often thought.

The consensus of the steering committee is to recommend a QL requirement. This should be in addition to a requirement that students demonstrate basic mathematical ability (such as by passing MTH 105). We envision that some students would satisfy the "big Q" requirement by taking a QL course in their major while others would do so by taking a designated QL course in the UP. It is likely that many students will pass the "little q" competency test (especially as mathematics requirements are increased in high schools across the state); thus, for most students, adding a QL requirement will not increase the number of hours of general education.

• *Writing:* The committee discussed the current writing competency requirements and master syllabi for ENG 101 and 201. Melinda Kreth attended one steering committee meeting to explain the new syllabus and outcomes for 201. The committee agreed that ENG 101 and the revised ENG 201 have suitable learning outcomes.

The committee spent considerable time discussing the WAUP requirement. Members agreed that writing in addition to ENG 101 and 201 is essential for all students working toward achieving the overall outcomes of the written competency requirement. The committee agreed that the overall goal of this requirement was to help students become competent writers, and identified the following learning outcomes for the additional writing component.

Students will:

- further develop writing skills learned in ENG 101 (these skills include using the full composing process, applying rhetorical knowledge, and demonstrating consistent operational knowledge of conventions of Standard Written English);
- be able to write effectively in a variety of styles for a variety of purposes.

Several options for modifying the WAUP were discussed in detail, along with the advantages and challenges of each option. The consensus of the committee was to eliminate from further consideration two options: (1) keeping the existing WAUP the way it is, and (2) deleting a writing requirement from the UP altogether. The following two options are recommended for consideration.

1. Require some writing-intensive (WI) courses in the UP (see Appendix B for a description of “writing-intensive” that might be applied to such courses). Each student would be required to take three WI courses, which must be selected from three different UP groups. WI courses, entailing as they do some direct writing instruction and practice, might be 4-credit-hour courses in which the fourth hour would be analogous to a laboratory. Other UP courses and sections (those that are not WI) would not be required to include writing.
 - Advantages: Students will receive intensive writing practice as part of their general education. Faculty members are relieved of a sometimes-onerous requirement.
 - Limitations/Challenges: This option would require additional resources—writing-intensive courses would necessarily have limited enrollments (although the additional credit hour of tuition per course would help pay for this adjustment). Faculty members must agree to teach such courses in their departments; some may feel unfairly burdened by the assignment. Some students might stigmatize WI courses (although they cannot avoid them) and seek the easiest ones; others may feel it is unfair to have both majors and non-majors in such courses (both concerns were raised by students about the existing WAUP in a survey administered in Fall, 2005).
2. Reduce the amount of writing that is required in UP courses from the current expectations (about one-half of grade based on written material) to perhaps one-quarter of the grade in all UP courses. In addition, shift the responsibility for intensive writing requirements (beyond ENG 101 and 201) to the departments. Departments would offer at least two “writing-intensive” courses that would be required for all majors (and possibly minors). Another option for partially attending to this requirement would be capstone-type courses that develop oral communication and quantitative skills as well as writing.
 - Advantages: Students will receive consistent and intensive writing education in the academic discourse of their majors. Faculty complaints about workload associated with grading writing in large-enrollment courses might decrease. Students would still be required to do some writing in the University Program (which constitutes approximately one-quarter of the courses on an undergraduate degree).
 - Limitations/Challenges: Outside of ENG 101 and 201, few students would receive writing-intensive academic experiences until they are juniors or seniors. Students would get limited practice writing in styles outside their disciplines. Writing in the major would be almost impossible to monitor. Resources would be needed to create smaller sections in some majors. Faculty members from the departments must agree to teach these courses; some may feel unfairly over-burdened by the assignment. Writing in the UP would suffer from some of the same problems that plague the existing WAUP.

III. University Program

The committee considered whether the existing groups and subgroups are suitably distinguished and defined. The consensus was that the disciplines would need to evaluate that question. Discussion groups (perhaps comprising department chairs or UP faculty chosen by each department) should be convened for the purpose of evaluating the definitions and learning outcomes for each of the four current UP groups.

IV. General Education Coordinator Position

Committee members agreed that finding someone to serve as coordinator (or in some position that administers the general education program) is essential. **A general education administrator must be in place if revision of the program is to proceed.**

Members agree that the position must be reconfigured if it is to support the general education program effectively. Adequate authority and sufficient resources are crucial. The coordinator must be able to support significant work such as implementing revisions, overseeing the curriculum, assessing the program, coordinating faculty development, and promoting general education; he or she must command the resources needed to get the job done right. Such resources should include—at a minimum—clerical support; a budget to conduct assessment, promotional, and faculty development activities; and FTE that could be used to fund release time for faculty members engaged in curricular innovation for general education. Innovations might include developing writing-intensive courses and QL courses (possibly new courses, possibly revisions of existing courses) needed to meet modified competency requirements.

The committee recommends that the general education administrator have sufficient status to be a member of the Council of Deans so that general education is represented at that level. Such representation would elevate the standing of general education on campus and facilitate its effective operation. Details of the position—whether it is a new dean position, a new responsibility for an existing dean, a reconfigured coordinator position, or a rotating faculty assignment—need to be worked out.

FUTURE PLANS

Summer 2006

Several members of the steering committee will attend the AAC&U Institute on General Education in June. The goals of attendance at that workshop are to refine our ideas and plans for improving general education at CMU, and to learn effective strategies for engaging the university community in implementation plans.

Fall 2006

The committee will continue working to complete its charge, building on the advice of those members who attended the AAC&U Institute. Tasks include developing recommendations for the UP and for the overall structure of the general education program as well as suggestions for implementing recommended changes. A final report including recommendations will be submitted to the Senate.

Appendix A

General Education at CMU's Benchmark Institutions

Institution	Total gen ed hours	Competencies				Other Requirements
		Writing	Speech	Mathematics	Other	
CMU	42	2 courses composition	1 course (of 6)	1 course \geq HS algebra	-	-
Ball State	41	2 courses plus writing comp exam as Jr.	1 course	1 course	-	Phys Ed/ Wellness (1 course (2 hrs) (of 6)
Bowling Green	30	1 or 2 courses dep. on placement	-	-	-	-
Illinois State	42	1 inner core (composition & critical inquiry)	1 inner core (communication & critical inquiry) Includes publ spk & interpersonal	1 inner core (of 4) + 1 Quant Reasoning (of 10)	-	-
Indiana State	49	2 courses choice of 3 for second course	1 course (of 4)	1 course in quant lit. by 62 hours. Or test. Or major-based substitutions	Info Tech literacy by 32 hours by test or course.	Gen Ed Capstone (in lib. studies of the major) Phys Ed (2 courses)
Indiana-PA	48	2 courses plus WAC - 2 "W" courses	-	1 course (of 12)	-	Senior Synthesis course (students encouraged to take section taught by faculty NOT of major)
Miami-OH	48	2 courses	-	1 course in math, formal reasoning, or technology	-	-
Middle Tenn	41	2 courses	1 course	1 course (of 8)	-	-
Northern AZ	42	1 course (4 cr)	-	1 course (of many)	-	-
UTEP	42	2 courses	1 course (of 2)	1 course (of 2: Math for Soc Sci or Precalc)	-	Students must earn at least a "C" in all core courses, including transfer credits
Central FL	36	2 courses	1 course	1 course (college algebra or finite math) plus 1 CPS or STA	-	-
Northern CO	40	2 courses choice of 6 for second course	-	1 course (of 9) or high ACT/SAT	-	-

General Education at CMU's Benchmark Institutions, *continued*

Institution	UP equivalent						
	Arts & Humanities	Natural Sciences	Social Sciences	Interdisc.	Global Cultures	Diversity in US	Other
CMU	2: 1 Art (of 13) + 1 Hum (of 36)	2: 1 descr (of 16) + 1 quant (of 18)	2: 1 behav (of 12) + 1 struct (of 22)	1 course (of 34)	1 course (of 47)	1 course (of 19)	1 elective (from all choices)
Ball State	2 courses (of 10)	2 courses (of 14)	2 courses (of 11)	-	1 course (of 11)	-	History: 1 course
Bowling Green	2 courses (of 27)	2 courses (of 10)	2 courses (of 19)	-	1 of the Arts-Hum or Soc-Sci courses must have international perspective	1 course (of 13)	1 elective
Illinois State	1 "language in the humanities" (mid core) + 1 fine arts (of 12) + 1 hum. (of 17) in outer core	2 (of 4, w/ other options for majors) inner core. + 1 (of 17) outer core sci-mth-tech	1 "individuals & societies" (of 9, middle core) + 1 (of 15) outer core	-	-	1 course (of 4) in "US traditions" in middle core	-
Indiana State	1 lit & life (single req. course) + 1 elective	1 foundation course w/ lab + 1 elective course	1 foundation course + 1 elective course	-	1 course	1 course	1 Historical studies course
Indiana-PA	1 history (single req. course) + 1 (of 3) literature + 1 (of 5) fine arts	2-3 courses (either 2-course sequence w/ lab (of 12), or 1 lab course (of 16) plus 2 non-lab (of 24)	3 courses (of 15)	-	1 course (of many)	-	1 health & wellness plus electives (0-3 courses) to total 48 cr. hrs.
Miami-OH	1 arts (of 19) 1 humanities (of 69) (plus one additional of arts or humanities or social science)	3 courses (at least 1 bio sci (of 17) + at least 1 physical science (of 19)	1 course (of 47) (plus one additional of arts or humanities or social science)	-	1 course (of 42)	1 course (of 23)	-
Middle Tenn	1 literature (of 3) plus 2 arts/ humanities (of 10)	2 courses w/ labs (of 13)	2 courses (of 10)	-	-	-	6 hours History (US & Tennessee)
Northern AZ	1 or 2 courses * *must take 2 courses in 3 of the 4 "blocks"	1 lab science plus 1 or 2 courses* in science / applied science	1 or 2 courses*	-	1 or 2 courses * in "cultural understanding"		1 elective from all choices
UTEP	1 humanities (of 9) + 1 arts (of 8)	2 courses (choose from 7 2-course sequences)	1 course (of 7) plus 2 required History courses plus 2 required PSC courses	-	-	-	1 course in critical inquiry (or technology & society)
Central FL	1 course (of 8) from history/civilization plus 1 course (of 9) from arts/humanities	1 course (of 4) from physical sci plus 1 course (of 6) from bio- or geo-sci.	1 course (of 3) from ECO or PSC plus 1 course (of 3) from PSY, SOC, or ANT	-	1 course (of 31) in diversity. Some of the choices are US, others global.		-
Northern CO	2 or 3 courses (of 41)	2 courses (of 25)	2 or 3 courses (of 27)	-	1 course (of 28) in international studies	1 course (of 15) in multicultural studies	1 course (of 13) in HST plus elective(s) to equal 31 hours of "basic core courses"

Appendix B: Explanation of “Writing-Intensive” as it might apply to U.P. Courses

What follows is a characterization and explanation of the term “writing-intensive” as it might apply to Writing-Intensive University Program [WIUP] courses. The student engages in course/discipline-appropriate writing projects throughout the semester, some shorter, some longer. The subject-matter (or “coverage component”) is reduced commensurately; WIUP courses are designed to use writing so that students come to know subject-matter more deeply rather than more broadly. The instructor does not “teach writing,” exactly, but does do certain things that characterize the effective implementation of a writing component in any course, namely:

1. Provides, in writing, detailed assignment information
 - a. Explanation: WIUC course students need to begin a writing project with a sufficient degree of three of the four kinds of knowledge all novice writers need to have early in a project if they are likely to (a) engage with it sufficiently and (b) have a reasonable chance of being successful with it. A clear, detailed, and jargon-free writing assignment can help achieve this goal. The three kinds of “writer’s knowledge” enhanced by good assignment descriptions are as follows:
 - (1) **rhetorical knowledge** (knowledge of audience and purpose)
 - (2) **genre knowledge** (familiarity with the “look and feel” of the expected written product),
 - (3) **procedural knowledge** (knowing *how to go about it*; that is, knowing what steps are appropriate – a sequence of research activities, for example – for such a writing project).
2. Provides both guidelines and time for students to engage in requisite “pre-drafting” activities pertaining to their assigned writing projects.
 - a. Explanation: The *fourth* prerequisite “writer’s knowledge” (see above) is “**topic knowledge**” (knowing enough about the subject matter at the outset so that learning much more – and more deeply – about it are possible). Effective writing procedures entail the pre-drafting accumulation and organizing of materials as well as planning for their presentation.
3. Provides exemplars—both professional and student-written—of the writing products that are expected.
 - a. Explanation: This common technique, which can be accompanied by the instructor taking a few minutes of class time to point out selected features of these samples/models, addresses the “genre knowledge” prerequisite noted above.
4. Provides occasions for mid-process review of the progress being made on project drafts, including, perhaps, peer review/collaboration.
 - a. Explanation: Writing projects that are worked on consistently over a period of time are generally more successful than those done at the last possible moment. By incorporating an occasional “writing workshop” period (part or all of a class session, for example), as well as his/her own quick review of partial drafts (helpful in preempting plagiarism), a WIUP course instructor can encourage a non-procrastinating writing process that will benefit both students and teacher.
5. Provides both oral and (especially) written editorial (not to be confused with evaluative) responses to student drafts.
 - a. Explanation: This is the sticking point. All of the teaching strategies so far are fairly simple to do, often requiring mainly a one-time investment of time/effort. Editing student writing with the goal of enabling a significantly improved to-be-graded revision is work. It is work that takes time and concentration. Herein resides the main rationale for capping WIUP courses at 25 students, fewer if possible. Herein also lies a major rationale for including writing-intensive content-area courses in a U.P. program, namely, the benefits of not only having students write more frequently about subject matter, but do so under the tutelage of an instructor who is both an expert in the field and a mature practitioner of the specific required written discourse. This is an immensely powerful learning situation/environment.