

## **I. Introduction**

Many higher education institutions within the United States have recently chosen to assess and restructure their general education programs, especially since these often represent the heart of a liberal education and comprise almost a third of the credit hours required for a baccalaureate degree. For example, after a complex self-study, Harvard developed a general education program that envelops eight subject areas which emphasize the importance of internationalization and the communication of science. Other universities have pursued such themes to lend coherence and distinction to their programs without seeking the arguably undue homogeneity of a core. Examples include Maryland's curriculum for using diverse disciplines to solve social problems, the Texas array of honors general education work from great books to historical games, and the differently flavored programs for interdisciplinary studies at research universities around the country.

At The University of Iowa, the General Education Program (GEP) has evolved slowly since its earliest years when students could choose either a departmental plan of instruction, in which requirements were determined by the department, or the class plan, which prescribed a fixed four-year curriculum. By 1905, the class plan was replaced with a curriculum that continued to prescribe two years of underclass work, followed by two years of course work in the major. Over the following decades, this two-year core curriculum continued to focus on essential skills and on breadth requirements necessary for advanced learning and inspired the core structure of the GEP at Iowa.

For variety reasons, including the overlap of major requirements with the GEP, the offering of substantial courses in the GEP by departments, and concerns with diversity and the internationalization of the curriculum, the GEP changed incrementally from a core to a distributed model, an evolution mostly completed by 1979. Since then revisions and refinements have occurred almost every year, but with vestiges of the core model still visible.

All students at Iowa, for example, are still required to take a Rhetoric course (or courses) that focus on both speaking and writing. Almost all students also complete Interpretation of Literature, offered either by English or one of the Foreign Language units, a course that stresses reading, analysis, and writing. The rest of the GEP courses range from introductory to advanced and represent a wide range of disciplines and topics as usually found in a distributed model.

This particular hybrid model of General Education has shown vitality over the last decade, allowing the faculty and the administration to respond to the needs of students by continuing to transform the selection of courses offered within most of the Program while still offering a common experience for many students through the Rhetoric and Interpretation of Literature courses. Over the years, the Program has come to reflect the intellectual pluralism key to science and democracy; it respects academic canons, methods, and authorities while responding to diverse and changing interests from students on the threshold of adulthood.

## **II. Overview of the General Education Program**

### ***Requirements and Relation to Undergraduate Colleges***

There are five undergraduate colleges at The University of Iowa: the College of Liberal Arts and Sciences, the largest college; the College of Education; the Tippie College of Business; the College of Nursing, and the College of Engineering.

All first-year students entering the University enroll in either the College of Liberal Arts and Sciences (CLAS) or the College of Engineering. The Colleges of Business, Education, and Nursing admit qualified applicants most typically at the beginning of the sophomore or junior year with students thus entering those programs after spending at least one or two years within CLAS.

CLAS, as the foundational college for the vast majority of undergraduates, traditionally has designed and overseen the GEP while the other, smaller colleges adapt the CLAS program to fit their missions and their accreditation requirements.

**The College of Liberal Arts and Sciences and the College of Education**

The GEP for CLAS students requires the completion of between 26 and 46 semester hours selected from eight areas and an additional 6 hours in an area referred to as the Distributed area.

The College of Education also requires that all undergraduate students complete these requirements of the CLAS GEP, with the recommendation that students finish the program before entering the education program. The GE requirements for these two colleges are as follows:

Name of GE Area	Minimum Semester Hours Required	Minimum Courses Required
Rhetoric	4-8	1-2
Interpretation of Literature	3	1
Historical Perspectives	3	1
Foreign Language	Must achieve 4 <sup>th</sup> level proficiency	0-4
Humanities	3	1
Social Sciences	3	1
Natural Sciences	7	2, one with a lab
Quantitative and Formal Reasoning	3	1
Distributed	6	2

The distributed area requires that students select at least one course (3 s.h) from two sub-areas, below:

Distributed							
6 s.h. from at least two different sub-areas	Cultural Diversity	Fine Arts	Foreign Civilization and Culture	Health and Physical Activity	Humanities	Historical Perspectives	Social Sciences

**The Tippie College of Business and the College of Nursing**

The Tippie College of Business and the College of Nursing have made adjustments to the CLAS GEP, limiting foreign language requirements to those required for admission to the University (second-semester proficiency).

Both colleges require Rhetoric (following the same guidelines for placement as used for all CLAS students).

In Business, students take, as do CLAS students, Interpretation of Literature while in Nursing, students may substitute any GE humanities course for the Interpretation of Literature course. Nursing General Education requires a total of 6 semester hours of GE Humanities/Fine Arts courses or any philosophy courses.

The two colleges also limit the distributed course choices to two areas, foreign civilization and culture and cultural diversity (though Nursing permits students to select from four additional anthropology courses).

Quantitative and Formal Reasoning course work is not required within the Business GEP since mathematics are covered within all requirements for majors in business (which includes a GE mathematics course). In the College of Nursing, all students must complete an introductory GE statistics course or a higher level GE calculus course, thus fulfilling the same GE credit hour requirement in mathematics as CLAS students. The same is true in the social science area for Nursing students, fulfilled by the CLAS GE course in psychology. Business students end up completing more social science courses than CLAS students since they must complete one GE social science in addition to the two GE courses in economics required of all majors. Both Business and Nursing students thus fulfill nearly the same requirements as CLAS students, though some of the course work is drawn from the requirements

for the majors rather than being classified as part of a General Education Program. The substance of the programs thus is very similar though the way the Colleges discuss and label the requirements can differ.

Table 1 illustrates the similarities and differences within the first eight areas of GEP for four undergraduate colleges at The University of Iowa, CLAS, Education, Nursing, and Business.

<b>Table 1 General Education Program Areas and Requirements by College</b>									
Undergraduate Colleges		Rhetoric	Foreign Language	Literature	Historical Perspectives	Humanities	Natural Sciences	Quantitative & Formal Reasoning	Social Science
	College of Liberal Arts and Sciences (CLAS)	4-8 s.h*	Through 4 <sup>th</sup> semester level **	3 s.h.	3 s.h.	3 s.h	7 s.h One lab required	3 s.h	3 s.h.
	College of Education	4-8 s.h*.	Through 4 <sup>th</sup> semester level**	3 s.h.	3 s.h.	3 s.h	7 s.h. One lab required	3 s.h	3 s.h
	College of Nursing	4-8 s.h*	None beyond UI admit req***	Possible choice for 6 s.h of humanities	Possible Choice for 6 s.h of humanities	Possible choice for 6 s.h. of humanities	Fulfilled by Program requirements in natural sciences	Fulfilled by Program requirements	Fulfilled by Program requirements
	Tippie College of Business	4-8 s.h.*	None beyond UI admit req***	3 s.h.	3 s.h	3 s.h	3 s.h. No lab required	Fulfilled by Program requirements	3 s.h

<b>Table 2 Area Choices within the General Education Distributed Category</b>									
Undergraduate Colleges		Hours required	Cultural Diversity	Fine Arts	Foreign Civilization Culture	Health and Physical Activity	HP	Humanities	Social Sciences
	College of Liberal Arts and Sciences (CLAS)	6 s.h. from 2 areas	yes	yes	yes	yes	yes	yes	yes
	College of Education	6 s.h. from 2 areas	yes	yes	yes	yes	yes	yes	yes
	College of Nursing	6 s.h. from 2 areas	yes	Possible choice for humanities requirement.	yes	no	no	no	no
	Tippie College of Business	3 s.h from one area	yes	no	yes	no	no	no	no

\*Hours and course placement for Rhetoric depends on student ACT or SAT score. \*\*The Foreign Language requirement may be satisfied by high school coursework. \*\*\* UI requires 2<sup>nd</sup> level proficiency for admittance to the University. Please note that the UI accepts exam credit for some GE requirements.

**Engineering General Education Component**

The Engineering GE program is referred to as the General Education Component (GEC) and requires a total of 15 semester hours selected from a list of Engineering approved humanities and social sciences courses offered by the College of Liberal Arts and Sciences.

Like Business and Nursing, Engineering requires no foreign language requirement beyond the second-semester competency, the same requirement for admission to The University of Iowa. Likewise, all students must take Rhetoric, following the CLAS placement guidelines, and may take Interpretation of Literature as one of their lower level humanities choices.

Engineering students, like Business and Nursing students, fulfill what might be construed as GE requirements through course work for their major and thus are not required to take additional foundational GE courses in natural sciences or mathematics.

Instead, the Program consists of 15 semester hours of humanities and social sciences courses as selected by the College of Engineering to give the degree more breadth as outlined below:

Humanities	Social Sciences	Combination of Humanities and Social Sciences
3 s.h. lower level	3 s.h. lower level	3 s.h. of either humanities or social sciences at the upper level from the same department as one of the previously selected lower-level courses

3 s.h. of any additional lower or upper humanities or social science
3 s.h. of any additional upper level humanities or social science

**Organization and Format of Courses**

As of Spring 2006, there were over 250 courses in the GEP, with all but three offered by the following departments or programs within CLAS\*. In the 2006-2007 academic year, over 19 courses were added to the Program, suggesting that faculty respond quickly to interests of students and of their own research.

- |                                   |                                 |                               |
|-----------------------------------|---------------------------------|-------------------------------|
| African American Studies          | Computer Science                | Mathematics                   |
| American Indian Native Studies    | Dance                           | Music                         |
| American Studies                  | English                         | Philosophy                    |
| Anthropology                      | Environmental Science           | Physics and Astronomy         |
| Art and Art History               | French and Italian              | Political Science             |
| Arabic                            | Geography                       | Psychology                    |
| Asian Languages/ Literature       | Geoscience                      | Religious Studies             |
| Biology                           | German                          | Rhetoric                      |
| Chemistry                         | Health and Sport Studies        | Russian                       |
| Classics                          | History                         | Spanish and Portuguese        |
| Communication Studies             | Honors**                        | Statistics/ Actuarial Science |
| Cinema and Comparative Literature | Journalism & Mass Communication |                               |
|                                   | Linguistics                     |                               |

\*For lists of course titles, see Appendix A. The three courses not offered by CLAS included one offered by the College of Education and two administered by the Tippie College of Business within the Department of Economics. \*\*The administrative home of the Honors Program is in the Office of the Provost.

All GEP courses are offered within four general formats:

- **Small courses** (10-25 students) taught by a faculty member, an instructor, or teaching assistant in a single classroom without discussion sections. Includes Honors Seminars, see below.
- **Mid-size lecture courses** (26-75 students) taught by a faculty member or an instructor, usually with discussion or lab sections led by teaching assistants. Includes Honors sections, see below.
- **Large-lecture courses** (76-150 students) taught by a faculty member or an instructor with discussion and/ or lab components led by teaching assistants. Includes Honors sections, see below.
- **Extra large-lecture courses** (151-456 students) taught by a faculty member or an instructor with discussions and/ or lab components led by teaching assistants. Includes Honors sections, see below.

### **Honor Offerings**

Within each of these formats, the Honors Program offers between 15-20 honor designated courses or sections of courses each semester, usually taught by tenured faculty. In designated Honors sections, students attend the same lectures and take the same exams as all other students in the courses, but the section size is smaller, more student-centered, and generally presents a greater intellectual challenge.

The Honors Program also offers small General Education Honors Seminars, three-credit general education courses specifically designed by faculty and the Honors Program for honors students. The courses are interdisciplinary and tend to focus on themes and subjects generally not offered in the non-honors curriculum. The courses are discussion based and limited to 20 students, with different topics offered each semester. The courses are taught by faculty, generally tenured, on subjects related to their current research.

### ***Comprehensive Criteria of the Program***

The comprehensive criteria of the GEP was extensively developed and revised by the CLAS Educational Policy Committee (EPC) before and after the last reaccreditation study of The University of Iowa in 1997. For the last twelve years, the comprehensive criteria have been central to the inclusion or exclusion of courses from the Program and to the review of the program, guiding EPC and General Education Curriculum Committee (GECC) in their oversight.

The comprehensive criteria of the GEP has two central components.

First, the Program intends to facilitate the acquisition of **essential proficiencies and skills**:

- used by languages (both English and a second language);
- in the manipulation and analysis of symbols (both mathematical and verbal);
- in critical reasoning;
- in modes of thinking and with basic information across the liberal arts and sciences disciplines;
- in research and inquiry appropriate to the discipline(s) of the course.

Second, the GEP aims to develop in every student **enduring qualities** that mark a liberally educated person:

- a lifetime pursuit of personal intellectual growth and social responsibility;
- a tolerance and open-mindedness, facilitating the ability to question and evaluate one's own attitudes and beliefs;
- a sufficient general knowledge and proficiencies to adapt to new vocations and opportunities;
- an ability to understand and to cope with the complexity and diversity of contemporary life.

Though unstated, the two components are clearly integrated. Acquisition of skills are essential to the successful development of qualities of the mind; likewise, these qualities facilitate the acquisition of skills.

### ***Intended Outcomes of Specific GE Areas***

From 2003 through 2006 and since the last reaccreditation visit, the CLAS Educational Policy Committee reviewed the intended outcomes of each required area of the GEP. The changes and additions to the criteria were reviewed and approved by the faculty through the central faculty governance body of CLAS, the Faculty Assembly. This vigilant and constant review of the criteria and outcomes of the Program by the faculty has helped to maintain the Program's relevancy, allowing its content and policies to shift as needed without destabilizing the Program's structure. At the same time, the nature and number of the intended outcomes reveal a GEP that is ambitious but diffused, perhaps attempting to satisfy many varying audiences.

#### ***Foreign Language***

Courses in this area provide students with speaking, listening, reading, and writing skills in a second language. These courses also provide some knowledge of the culture(s) in which the language is spoken.

##### ***Intended Outcomes***

- Students will be able to read, speak, and understand the language as described in the course descriptions, and will develop enhanced understanding of the culture(s) in which the language is(was) used.

#### ***Historical Perspectives***

Courses in this area help students understand a period of the past in its own terms, comprehend the historical processes of change and continuity, sharpen their analytical skills in the evaluation of evidence and develop their ability to generalize, explain, and interpret historical change.

##### ***Intended Outcomes***

- Students will understand one or more periods of the past in its/their own terms.
- Students will comprehend change and continuity in history.
- Students will improve their ability to evaluate evidence using the tools of historical investigation.
- Students will gain experience and improve their skills in generalizing, explaining, and interpreting historical change.

(Revised March, 2004)

#### ***Humanities***

Courses in this area focus on the ways individuals and cultures have interpreted and understood themselves, others, and the world. Courses exploring the nature and meaning of artistic forms (across the spectrum of the fine arts and literature of the past and present), human values and value systems (including current and historical ideas in philosophy and religion), and other expressions of human aspiration, belief, and creation may be approved in this area. Interdisciplinary courses that explore these topics may also be approved. Courses approved in this area teach verbal, analytic, perceptual, and imaginative skills needed to interpret and examine culture, community, identity formation, and the human experience.

##### ***Intended Outcomes***

- Students will learn about one or more specific cultural topics, problems, artistic forms, value systems, philosophical concepts, or religious ideas in relation to the larger human context in which they become meaningful.
- Students will become familiar with one or more methods of humanistic research, critical inquiry, and analysis and have an opportunity to practice these methods.

(Revised March, 2004)

#### ***Interpretation of Literature***

Building on previously acquired skills of reading and writing, courses approved for the Interpretation of Literature area seek to reinforce in every student a lifetime habit of frequent, intelligent, and satisfying reading. These courses, taught in English in small sections, focus primarily on "ways of reading," asking students to become aware of themselves as readers, to learn how to deal with different kinds of texts, and to understand how texts exist within larger historical, social, political, and/or cultural contexts. These "ways of reading," while growing out of various critical approaches to literature, are also transferable to other fields of study.

##### ***Intended Outcomes***

- Students use and refine their skills of reading, speaking, and writing to respond critically and sensitively to literary texts.
- Students learn to see themselves as readers, recognizing the influence of individual differences (such as gender, ethnicity, and geography) and past experiences on interpretation.
- Students consider the connections between individual texts and broader cultural contexts.

(Revised March, 2005 and April, 2006)

### ***Natural Sciences***

Courses in this area explore the scope and major concepts of a scientific discipline. In these courses students learn the attitudes and practices of scientific investigators: logic, precision, experimentation, tentativeness, and objectivity. In courses with a laboratory component students gain experience in methods of scientific inquiry.

#### ***Intended Outcomes***

- Students will come to understand a significant segment of natural science and will become familiar with its major concepts and ways of framing questions. In laboratory courses, students will use laboratory investigations and appropriate procedures to generate accurate and meaningful data and derive reasonable conclusions from them.
- Students will understand and appreciate (if not adopt) the attitudes of science: logic, precision, experimentation, tentativeness, and objectivity.
- Students will develop and practice those communication skills that apply to the relevant discipline.

### ***Rhetoric***

Rhetoric helps student to develop skills in speaking, writing, listening, and critical reading. It also builds competence in research and inquiry as well as in analysis and persuasion, especially in the area of understanding public controversies in their social contexts.

#### ***Intended Outcomes***

- Students will learn to read with understanding and enjoyment;
- Students will write and speak about reading with personal authority and analytical skill;
- Students will be able to write and speak to discover, explain, question and defend ideas;
- Students will be able to take into account fundamental rhetorical concepts when writing or speaking.

(Under review for 2007-2008).

### ***Quantitative or Formal Reasoning***

Courses in this area help develop analytical skills through the practice of quantitative or formal symbolic reasoning. Courses focus on the presentation and evaluation of evidence and argument, the understanding of the use and misuse of data, and the organization of information in quantitative or other formal symbolic systems including those used in the disciplines of computer sciences, linguistics, mathematics, philosophy, and statistics.

#### ***Intended Outcomes***

- Students will learn and practice a method or methods of analytical or formal symbolic reasoning, for example a specific set of mathematical, statistical, computer programming, or logic skills.
- Students will learn to evaluate arguments made in the symbolic system embodied in the course and will become familiar with its major concepts and ways of formulating questions.

(Revised May 2003)

### ***Social Sciences***

Courses in this area focus on human behavior and the institutions and social systems that shape and are shaped by that behavior. Courses provide an overview of one or more social science disciplines, their theories, and methods.

#### ***Intended Outcomes***

- Students will examine the strengths and weaknesses of at least one method of inquiry distinctive of the social sciences, and become familiar with its major assumptions, concepts, and ways of formulating questions. Students will learn to evaluate data, generalizations, and hypotheses in the discipline. Students will have the opportunity to practice the methods of the discipline.
- Students will be given practice in developing positions and supporting their ideas with evidence and reason.

### ***Distributed***

#### ***Cultural Diversity***

Courses in this area foster greater understanding of the diversity of cultures in the United States, and provide knowledge and critical understanding of these cultures, focusing on one or more non-dominant cultures or peoples of the United States. Some courses include comparative study with cultures outside the United States, but the primary focus is on United States experience.

**Intended Outcomes**

- Students should develop a critical understanding of the culture of a group or groups in the United States.
- Students will become familiar with one or more methods of research and critical inquiry into culture.
- In courses that examine the artistic production of a group, students should develop an understanding of the relationship between the artistic production and the culture of the group.
- Some courses will provide a comparative perspective on specific groups.
- In some courses students will develop a greater understanding of the dominant culture, in the context of the dominant culture's interactions with the focus culture(s) that form the primary content of the course.

**Fine Arts**

Courses in this area provide students with knowledge of the history, theory, and appreciation of various disciplines in the creative arts. Courses in this area may also provide students with studio, performance, and production experiences.

**Intended Outcomes**

- Students should develop the ability to recognize the constituent parts of an artwork and of the processes of producing that art.
- Students should have ample opportunity to observe the performance of an art, or when feasible, be actively engaged in the making of that art.
- Students should be able to recognize how aesthetic and critical meanings are attached to artworks and be introduced to some of the ways in which quality can be recognized and assessed.
- Students should be able to recognize aspects of the context (e.g. historical, social, ethnic, economic, geographic) in which artworks are made, particularly how an artwork is linked to the identity of both the artist and the artist's culture.

**Foreign Civilization and Culture**

Courses in this area seek to provide students with knowledge about one or more foreign civilizations, cultures, or societies; stimulate their desire for further study of foreign civilizations, cultures, and societies; and foster international and intercultural understanding.

**Intended Outcomes**

- Students will develop an understanding of an aspect of a culture or civilization not their own.
- Students will be introduced to concepts and artifacts important to or created in the culture or cultures being studied.
- Students will become familiar with one or more methods of research and critical inquiry into civilization and culture.
- Students will be given practice in articulating their understanding and interpretations of another culture.

(Revised March, 2004)

**Health and Physical Activity**

Courses in this area help students acquire knowledge and skills that are conducive to good health and well-being.

**Intended Outcomes**

- Students will understand the theoretical groundings of good health practices, become cognizant of major health risks, and learn strategies for overcoming those risks
- Students will develop critical skills for assessing various structural factors that constrain good health practices and for making informed choices about health behaviors.
- Students will learn and practice the physical and mental skills associated with a specific activity or activities.

(Revised spring, 2004)

(Note: The intended outcomes for the other areas within the distributed category (historical perspectives, humanities, and social sciences) use the same intended outcomes as listed for the corresponding areas above.)

**Oversight of the General Education Program**

As the largest undergraduate college acting as the administrative home of all but three courses within the GEP, the College of Liberal Arts and Sciences has traditionally been the administrative home of the GEP. Oversight of the Program consequently resides in CLAS and is provided by two CLAS committees, the

Educational Policy Committee and, more recently, the General Education Curriculum Committee as specified in the College's Manual of Procedure, [Article VI](#).

Changes in course offerings made by CLAS are accepted by the Colleges of Education, Nursing, and Business. Engineering, on the other hand, does not limit its GEC offerings to those approved for the CLAS GEP (see section above).

### **The Educational Policy Committee (EPC)**

The Educational Policy Committee, under the leadership of the Associate Academic Dean of Programs and Services, has primary oversight of the GEP. EPC is composed of nine faculty members elected from and by the faculty, with three members from the humanities and fine arts, three from the natural and mathematical sciences, and three from the social sciences. A student representative also serves as a voting member.

The EPC meets weekly while the University is in session and examines and develops policy and procedures of the College, including for the GEP. It considers major changes to the Program and works with the faculty of the College through the Faculty Assembly to gain approval for indicated changes.

EPC also appoints members of a second committee, which oversees the GEP, the General Education Curriculum Committee (GECC). EPC gives final approval on recommendations from that committee on the inclusion or exclusion of courses within the Program or on any other related questions of policy or procedure.

In the last two decades, the EPC, under the leadership of the Associate Dean, has been an active steward of the GEP and has recommended significant revisions to the Program:

- In 1989, all students were permitted to use courses to satisfy both major requirements and the requirements of the General Education Program.
- In 1994, a two-year review of the Program by EPC resulted in revision of the Program's oversight, with a comprehensive GECC (discussed below) created to replace multiple committees that had previously overseen individual areas of the Program.
- The 1994 review also led to an ongoing revision of the Program's comprehensive and specific area criteria and intended outcomes, with areas being reviewed each year.
- In 1996, the Distributed area was added to the Program, offering courses in cultural diversity and foreign civilization and culture.
- In 2005, Foreign Language units began offering courses in the Interpretation of Literature area if the courses were taught in English, were introductory, and filled all criteria of the Interpretation of Literature area.

### **The General Education Curriculum Committee (GECC)**

The GECC also provides oversight to the GEP by making recommendations to the EPC on course offerings and policies and procedures. The nine member committee consists of two faculty appointed from each of the three divisions of the CLAS and one student with voting privileges. A liaison from the EPC also serves as a nonvoting member as does a representative from the University Academic Advising Center, providing the committee with additional information and important student perspectives.

GECC reviews requests from departments or programs for approval of courses for GE status. The following materials are required for the review:

- Explanation of the intended audience of the course as well as the department's vision of how the course complements other GE offerings or the department's mission statement.
- Explanation of how the course meets the comprehensive criteria of the GE Program.
- Explanation how the course meets the criteria of each GE area in which approval of the course is sought.
- Explanation of how consistency is maintained if the course is offered in different modes or by different instructors.

- Explanation of Teaching Assistant (TA) training and supervision if TAs are involved with teaching the course.
- Syllabus for each format in which the course is taught.
- Sample assignments, including two representative and/or important assignments.
- Sample quiz.
- Sample mid-term or other major test given in place of a mid-term.
- Sample final exam or final assessment project or paper.

Courses that are recommended by the GECC for GE status are given final approval by the EPC.

The committee also reviews previously approved GE courses on a five-year cycle, examining the offerings of five to eight departments each year. This process is rigorous, requiring departments to submit the following materials:

- A statement from the department about the rationale for the courses.
- An explanation of how courses and assignments fulfill the comprehensive and intended outcomes of the Program.
- A statement of courses' success at fulfilling the criteria of the Program.
- Evidence of consistency of content and evaluation standards across offerings.
- Evidence of the regular offering of courses by well-qualified faculty, instructors, or teaching assistants.
- Evidence of teaching assistant training and oversight.
- Syllabus for each format in which courses are taught.
- Sample assignments.
- Sample quiz.
- Sample mid-term or other major test given in place of a mid-term.
- Sample final exam or final project.

Courses that do not fulfill the criteria of the Program are removed either by the request of the offering department, the committee, or the Associate Dean of Academic Programs and Services.

The committee also develops and periodically reviews suggested modifications in the criteria statements and the guidelines that define the standards for courses to be approved in each area of GE.

Although this review process is thorough, it depends for the most part on the detailed materials submitted by the department in question and does not involve objective assessment measurements that can be tracked from year to year.

### **Quality of Instruction within the GEP**

When departments submit materials for the five-year review of their GE offerings, they must also give evidence of the quality of teaching within the GE courses. The GECC examines the submitted materials for evidence that the department is upholding the College teaching guidelines of the Program. The College expects the best and most experienced teachers to participate in the teaching of these courses:

The EPC expects the College's best and most experienced teachers to participate in GE as instructors and as conscientious guides and supervisors to TAs (see below). Participation by each department's best and most experienced faculty members helps ensure the quality and consistency of the courses offered for GE.

They also help to ensure that GE-approved courses provide a consistent educational experience, across semesters and when multiple sections of a course are offered within a semester. Consistency within a department can be developed by common expectations for courses and by sharing materials and syllabi. . . .

Departments may, on occasion, find it advisable or necessary to assign a visitor or adjunct to teach a GE-approved course. Whenever possible, these instructors should be provided with materials and advice from the tenured faculty who have taught the course. Departments should not routinely assign GE-approved courses to visitors or adjuncts.

The College also has guidelines for the use of TAs in GE courses:

When teaching assistants are used in GE courses, faculty supervisors must ensure that they are adequately trained and supervised. In reviewing courses in which TAs are used, a description of the methods used to select, train, and supervise the teaching assistants must be included with the review materials. It is especially important that TAs who are given responsibility for individual sections (as in language instruction, Interpretation of Literature, and Rhetoric courses) have comprehensive preparation and ongoing oversight. The GECC and the EPC will expect additional information on the training and supervision of TAs in these courses.

When a department submits its review materials to the GECC, it must explain how it provides training and oversight to TAs that might teach the GE courses. During these reviews, the committee pays special attention to the syllabi used, the assignments given, and the description of the TA training or professional development program, looking for consistency in and evidence of supervision by the department.

The following summary by Rhetoric of its professional development program is an example of oversight given to teaching assistants within the GEP:

The Professional Development Program starts off with a three-day workshop in August, the week before classes begin. Advisory Groups of about a dozen new teachers are led by a faculty member and one or two experienced TAs. During this workshop, teachers begin developing general plans for the semester and detailed plans for the opening weeks, all in the context of discussions of larger issues, from rhetorical principles to pedagogical approaches. These discussions begin a conversation about teaching that continues in the required PDP colloquium 3:30-5:20 Thursdays through Fall Semester. Attendance and satisfactory performance in the August Workshop and Thursday colloquium are conditions of employment—part of every new TA and faculty member's contract.

Every Rhetoric TA has a teaching adviser. For PDP participants, it is the faculty leader in PDP; for others, it is a faculty member assigned by the Chair. Before the start of the semester, the adviser reviews and responds to a draft of the course policy statement. By the end of the first week of classes, each TA provides the adviser with a written course description or tentative plan, which should include a schedule of major assignments and indicate the role of other planned activities. At some point, the adviser calls for, reviews, and responds to a sample of student folders. The adviser confirms that teachers are on pace to meet the requirements for major assignments; that students are engaging in a variety of other relevant activities; and that the folder of teaching materials (including assignment sheets) is complete. For PDP participants, this review occurs at midterm and includes grade distributions. Before the beginning of Spring semester, PDP participants give advisers a self-evaluation and response to student evaluations. Advisers are available for conferences and classroom visits, and instructors should make themselves available if the faculty member requests a meeting, a class visit, or materials beyond the minimum outlined above.

The Interpretation of Literature training program is another example of professional development for teaching assistants. An August Orientation Program is organized by six program associates, senior teachers of proven excellence, who are selected in a competitive process for two year terms.

Each PA also leads a group of six or seven new TAs, holding weekly meetings with them during their first semester of teaching, visiting and critiquing their classes, and serving as the first resource for any pedagogical questions. Each PA group is also paired with a faculty advisor, chosen for commitment to and proven excellence in teaching, who sits in on weekly PA group meetings, visiting and critiquing the

classes of new TAs. The PAs and Faculty Advisors work closely together to identify and address any areas that might be improved in the practice of new TAs and to share their experience and best practices with members of the PA group.

The groups meet individually throughout the fall semester except on Thursday afternoons when the PAs have hold whole group sessions involving all new TAs focused on particular aspects of the first semester experience. These plenary sessions may focus on approaches to teaching a particular genre such as drama or the novel or may focus on more mechanical issues such as how to formulate effective writing assignments. The sessions continue in the spring and are required for all new teaching assistants but are open to experienced teachers as well.

Teaching assistants receive additional student feedback from a midterm student evaluation and an end-of-the-semester student evaluation which both they and the program review. At the end of each semester, all TAs in the program are required to submit a self-review, in which they reflect on the experiences of the semester and write a response to student evaluations. At the end of the year, a brief program review, commenting on the teacher training and administrative support offered by the Program, is also required from all teaching assistants.

### **Enrollment Management**

All requirements of the GEP must be met before graduation. Students, however, are required to complete the rhetoric requirement in their first year since it hones writing and speaking skills necessary for the successful completion of assignments in other courses. Typically, students also complete the Interpretation of Literature course within the first year. For most new first-year students, GE courses make up more than half of their enrolled courses. The University and CLAS work together to make sure there are enough open seats to accommodate the GE needs of first-year students.

Each year in March, for example, representatives from the Office of the Associate Provost for Undergraduate Education, CLAS, Admissions, Orientation, the Registrar's Office, and the Academic Advising Center meet to discuss course availability for first-year students. At the meeting, the projections of the number of students likely to attend summer orientation are reviewed, as are declared majors that particularly affect various courses to see where the highest demand will be, the numbers from previous years' experience with filling courses, based on Academic Advising Center input. If it looks like some courses, particular in math and chemistry, will run short of space regardless of how many are reserved, the deans or associate provost can allocate money to the department to hire required instructors. The meeting is held in March so the Registrar can hold seats in advance of early registration in April and so current students can see how many seats will be available and plan accordingly.

As orientation progress through June and July, the Registrar, Orientation, Admissions, AAC and CLAS watch to see if adjustments need to be made, if more sections need to be funded, or if sections can be released to general enrollment if it appears they won't fill with entering first-year students.

The University works especially hard to ensure that enough Rhetoric courses are available, thus allowing students to take Interpretation of Literature or a second rhetoric course if needed within their second semester, with most first-year students taking these two courses in this order during their first year.

GE courses that function as prerequisites for the next level of courses required for a major or for entry into a professional college must also be available to students, and the above committee meets to ensure course availability.

### ***Relation of the GEP to the Major***

In 1981, CLAS ended the restriction of using GE courses as part of the major; as a result, the GEP is now integrated into most majors, generally as prerequisites, cognates, or as courses that may be selected for major-level requirements.

### **As Prerequisites Courses**

GE courses are often required as an introduction to the major in a broad historical or social context; as foundational prerequisites for major level-coursework; or as required cognates. This is especially true in the natural and social science majors.

In the chemistry major, for example, students may fulfill their 7 s.h. GE Natural Science requirement by completing 004:011-004:012 Principles of Chemistry I-II, both introductory courses that are prerequisites for more advanced, required science courses. Cognate courses in mathematics are also required and students taking the first calculus sequence containing two GE QFR courses 22M:025-22M:026 Calculus I-II thus also fulfill the Quantitative and Formal Reasoning area requirement while completing cognate requirements for the major. The chemistry major requires a total of 66 s.h. of coursework with a total of 12 s.h. double counting for the GE Program.

A similar profile also occurs in the social sciences. In the Psychology major, for example, students must take a cognate course in statistics that is also a GE Quantitative and Formal Reasoning course. Likewise, 31:001 Introduction to Psychology is a required course for the major and a GE social science course.

Psychology majors choose four lower-level courses in psychology with most having GE status, and thus one of them is applicable to the maximum of two social sciences for the GEP. Out of the 36 s.h. required for the psychology major, students typically double count 3 GE courses or 9 semester hours toward the major and the GE Program.

### **As Electives Within the Major**

If a specific GE course is not required for the major, it might still be used by students as a choice selected from a menu of courses to fulfill a category requirement within the major. Thus some students within a major might use several GE courses to fulfill requirement categories while another student might choose not to use any. This is especially true in the fine arts, the humanities, and some social sciences, such as history, where students are given a large menu of courses, some also approved for the GEP, to fulfill a requirement of the major and where some of the choices overlap with GE offerings.

Almost all majors require or allow at least one GE course to double count for the requirements of the major and for the GEP, with most requiring or allowing up to two. English is one exception to this general rule, allowing no GE courses to be used for the required semester hours of the major. There is no GEP or CLAS policy limiting or requiring GE courses within the major.

### **As a Component Within Selective and Limited Access Programs or Majors**

The GEP is integrated into the selective and limited access major or program in an unintended but important way. Selective and limited access majors such as those offered by the Tippie College of Business, the College of Education, and the College of Nursing admit students based on their University of Iowa GPA. Since most first and second year students take extensive GE courses, this GPA tends to result not just from required work for the major but also from the courses for the GEP. Thus the GPA has the unintended function of screening applicants for the professional or competitive majors. Since the selective admissions majors tend to require GE courses to fulfill prerequisite or cognate requirements, the students' ability to do well in the GEP has a significant impact on their admittance to a selective or limited access major. This is also true for selective and limited access majors offered by CLAS such as actuarial science, athletic training, communication studies, health promotion, integrative physiology, journalism and mass communication, social work, and sport studies.

Journalism, for example, a selective admission major within CLAS, requires that students complete 30 s.h. of coursework; the GE Rhetoric requirement; and two specific GE courses offered by journalism before the student may apply to the journalism program. These courses provide essential background information for the major, are prerequisites for major-level courses, and the grades earned within them influence admissions decisions.

### III. Assessment and Findings

#### *The Student Perspective*

##### Overview of Measurement Steps to Prepare Format and Content of Student Questionnaire \*

Standard measurement steps require an initial definition of a domain as object of measurement. Recent publications of the Association of American Colleges and Universities give helpful direction in assessing GEPs, as one possible domain of interest, and we have followed many of these suggestions. Pre-eminent in these publications' suggestions is to devise the strategies and measurement protocols in ways that reflect a particular university's own program of general education. We believe we have done so. The domain being measured here is an operable body of norms and procedures (an institution, we can say) which is the GEP at The University of Iowa.

One manifestation of the GEP is the set of four "Goals of the General Education Program" on the CLAS web page, mentioned above. While wishing to accommodate to this set of goals, we found them too diffuse and abstract to allow immediate movement to measurement statements in a closed-response form of questionnaire.

To obtain direction for more specific and concrete embodiments of these general goals, we noted language of committee members of the Common Academic Experience Subcommittee which displayed "goals in use," as it were, and frequent understandings of the general education course instructors expressed in what they intend with such courses. We also combed through two other sections of the GED description in the College of Liberal Arts and Sciences web page, "Comprehensive Criteria for General Education Courses" and "Five-year Review of General Education Courses: Checklist," also discussed above. Here several concrete embodiments appeared moving us closer to the specificity needed to guide writing of questionnaire items: examples being, "critical thinking," "communication," "appreciation of the arts."

The list of eight goals that formed the basis of measurement in the student questionnaire come from an enlargement and specification of the four very general goals to include the more specific objectives found in faculty use, student understandings of the courses, and specific objectives sprinkled throughout the GEP description on the CLAS web page. Fine-tuning of wording included two principles: one was to keep the eight objectives at a consistent level of abstraction; the other was to assure that the definitions of each were comprehensible to the population who would be taking the questionnaire. This was done by pre-testing with representative undergraduate classes.

Hence, as a result, we chose these objectives:

- **Critical thinking** includes skills in evaluating bodies of information and analyzing and judging values expressed by myself and others.
- **Communication skills** include the ability to organize my thoughts clearly and to communicate them effectively in words, writing, and visual displays.
- **Understanding of world complexity** includes understanding distinctive characteristics of different countries and the varied ways countries interact with each other.
- **Appreciation of diversity** includes understanding my own uniqueness and also the uniqueness of persons different from me.
- **Understanding of scientific inquiry** includes the ability to collect and use dependable sources of data and follow standards of scientific method while evaluating results.
- **Social responsibility** includes understanding the importance of bringing my educational skills to contribute to my local community and society as a whole.

- **Appreciation of the arts** includes understanding how visual, written, and performing arts help us think and enhance our emotional lives.
- **Life of the mind** includes developing interests and habits for life-long learning and enjoyment of creations of others and ourselves.

\*These points come from memorandum distributed to the Common Academic Experience Subcommittee on September 22, 2006, November 10, 2006, and December 8, 2006. Student Perspective on the General Education Program.

### **Survey of Students**

We approached the assessment of student judgment about how GE courses contribute to central goals of The University of Iowa undergraduate program with two major priorities.

One priority views the students as one of a group of constituencies consuming (and affected by) the GEP courses with others, for example, being faculty, teaching assistants, and employers. The second priority emphasizes the uses of multiple kinds of measures in assessing the GE Program.

We chose a method of direct, closed-ended questionnaire items for the student survey to complement the oversight already provided by the CLAS, discussed above.

For each of the above objectives, we asked students to respond within the following course groupings: rhetoric, foreign language, interpretation of literature, history, the humanities, natural sciences, social sciences, quantification courses, distribution set, and the major (for comparison purposes).

Surveys were distributed via e-mail to 8251 students [19,474 were registered in the fall semester 2006-07 academic year (exclusive of students from the College of Engineering)]. 972 usable surveys were returned. Frequencies vary depending upon whether students had had the relevant course(s) and whether majors had been declared. (Please note that qualifications of the methodology and the student survey instrument and letter may be found in Appendix B.)

### **Preliminary Analysis**

Our survey represented a unique opportunity to gather data on the topic of GE from students currently enrolled at the university and produced results that spoke to a number of compelling and thought-provoking trends that, together with evidence taken from other sources, help us to understand just what general education may or may not be accomplishing. Here are three key findings.

### **Confirming the Logic of the Distributive System**

When students self-reported the extent to which each of the eight GE goals was actually learned in the distributive categories, the data showed that each category seemed, so to speak, to pull its own weight.

If one takes, for instance, the top two scoring skills, as represented in the GE goals in each distributive category, six of the eight GE goals are supported, with only *social responsibility* and *life of the mind* without any representation in the top two (see Table 3).

If one uses the same procedure and focuses only on goals that represent a three or better on the Likert scales, an even more impressive representation of the eight general education goals prevails.

As noted on Table 4, all of the eight goals are reinforced somewhere in the program when noting goals with a 3+ rating, although obviously critical *thinking*, *understanding world complexity*, and *appreciation of diversity* have multiple points of reinforcement.

Another way to test the rationale of the distribution matrix is to note which goal scored its highest (learned) rating against each subject area category (Table 5). If one does this, one finds that each one of the eight goals manifests in each of the eight distributive categories. In other words, each of the eight categories can make the claim that it does one of the eight goals better than any of the other subject

areas. This is a striking confirmation of the logic behind the distributive matrix. The distributive subject area categories seem to each associate with an expected and logically related general education goal (*understanding scientific inquiry* for the science distribution; *communication skills* for rhetoric courses, and so forth).

**Table 3: Top Two Scoring Goals in Each Subject Area**

		Subject Matter Categories							
General Education Goals		Rhetoric	Foreign Language	Interpretation of Literature	History	Humanities	Natural Sciences	Quantitative & Formal Reasoning	Social Sciences
	Critical Thinking	2.8		3.2			3.2	3.4	3.3
	Communication Skills	3.0	3.5						
	Understanding World Complexity				3.2	3.1			3.2
	Appreciation of Diversity		3.4		3.1	3.1			
	Understanding Scientific Inquiry						3.5	2.9	
	Social Responsibility								
	Appreciation of the Arts			3.0					
	Life of Mind								

**Table 4: Goals with >3 on a Likert Scale, by Subject Area**

		Subject Matter Categories							
General Education Goals		Rhetoric	Foreign Language	Interpretation of Literature	History	Humanities	Natural Sciences	Quantitative & Formal Reasoning	Social Sciences
	Critical Thinking			3.2	3.0	3.0	3.1	3.4	3.3
	Communication Skills	3.0	3.4						
	Understanding World Complexity		3.2		3.2	3.1			3.2
	Appreciation of Diversity		3.4		3.1	3.1			3.0
	Understanding Scientific Inquiry						3.5		
	Social Responsibility								3.1
	Appreciation of the Arts			3.0					
	Life of Mind					3.0			

**Table 5: Subject Area in Which Each General Education Goal Had the Highest Rating**

		Subject Matter Categories							
General Education Goals		Rhetoric	Foreign Language	Interpretation of Literature	History	Humanities	Natural Sciences	Quantitative & Formal Reasoning	Social Sciences
	Critical Thinking							*	
	Communication Skills	*	(*)						
	Understanding World Complexity				*				
	Appreciation of Diversity		*						
	Understanding Scientific Inquiry						*		
	Social Responsibility								*
	Appreciation of the Arts			*					
	Life of Mind					*			

(\*) Foreign language actually scored highest in this category, but one can assume that the score was related to the teaching of communication skills in a foreign language, thereby making rhetoric the key distributive *area* for the teaching of communication skills in English.

**Under-Represented Goals**

If we see each of the eight goals as an equal claimant, we can argue that some short shrift is given to *social responsibility* and *life of the mind*. This may not be a problem because we can argue that some GE goals, by their very nature, transcend subject matter categories more easily than others. Certainly, one could see how *critical thinking* is a more pervasive skill in the curriculum than, say, *social responsibility*. But if the argument is that each of the eight general education goals should be equally apportioned across the general education experience, some work has to be done to determine just how some goals might be able to strengthen their presence in the conduct of the general education coursework.

**General Education and the Goals of Thinking and Communicating**

In the self-reported data provided by the students, communications skills did not have the pervasive presence in the general education experience that thinking skills had.

As noted in Table 6, the scores for the teaching of communication skills in the history, science and quantitative reasoning subject areas were about a standard deviation removed from the highest overall score achieved in the subject area.

This was not the case, however, for critical thinking skills (see Table 7), which likely means that if communication skills are indeed a priority for GE, such skills will require more attention in a number of key distributive subject areas.

The history distribution, for instance, seems to under-perform on the general education goal of communication skills. One would expect the communication skills of writing to be naturally partnered with history courses, but if the self-reported data can be trusted, the place of writing in history and in other distributive areas leaves much room for improvement.

This is worth examining more closely because the survey did not ask a question directly about writing. It referenced communication skills instead, allowing students to broadly interpret communication skills in ways that may not necessarily reflect what actually happened with the task of writing in GE courses. And if any changes are undertaken in any of the distributive areas to give writing a stronger place, attention will have to be dedicated to the potential negative effects that such changes might have on what the subject area already does especially well in the GE plan.

**Table 6: Mean Scores for Communication Skills + Rank Within Subject Area, by Subject Area Category**

	Mean	Rank Within Subject Area	Highest mean for any one general ed goal
Rhetoric	3.0	1 <sup>st</sup>	
Foreign Language	3.5	1 <sup>st</sup>	
Interpretation of Literature	2.9	3 <sup>rd</sup>	3.2
History	2.5	7 <sup>th</sup>	3.2
Humanities	2.7	7 <sup>th</sup>	3.1
Natural Science	2.0	7 <sup>th</sup>	3.5
Quantitative and Formal Reasoning	2.0	5 <sup>th</sup>	3.4
Social Sciences	2.8	5 <sup>th</sup>	3.3

**Table 7: Mean Scores for Critical Thinking Skills + Rank Within Subject Area, by Subject Area Category**

	Mean	Rank Within Subject Area	Highest mean for any one general ed. goal
Rhetoric	2.8	2 <sup>nd</sup>	3.0
Foreign Language	2.9	5 <sup>th</sup>	3.5
Interpretation of Literature	3.2	1 <sup>st</sup>	-
History	3.0	3 <sup>rd</sup>	3.2
Humanities	3.0	3 <sup>rd</sup>	3.1
Natural Science	3.1	2 <sup>nd</sup>	3.5
Quantitative and Formal Reasoning	3.4	1 <sup>st</sup>	-
Social Sciences	3.3	1 <sup>st</sup>	-

### Conclusions

In sum, the self-reported data confirm the rationale supporting the distributive system. Each distributive subject area seems to pay particular attention to and bring unique expertise to at least one of the key

goals in the GE mission. We can say, at least from the standpoint of the students, that each distributive subject area does at least one of the eight goals better than any of the other areas.

Such a finding should give us some satisfaction in knowing that the distributive system is functioning as expected and as designed.

If we view all of the GE goals as equally important, however, the survey evidence indicates that some goals are indeed suffering from some under-representation in the overall mix of GE experiences, and that some thought might have to go into how to bring new attention and authority to these overlooked goals.

The student survey demonstrated that thinking did indeed have some prominence in the GE experience, but that writing was neglected by comparison, including in subject areas that seemed naturally suited to advance communication skills.

The early evidence is that the opportunity to strengthen the writing skills of our students may not have the priority many believe it should have in the GE sequence.

### ***The Faculty Perspective***

Focus group interviews were conducted in February 2007 to obtain faculty perceptions about General Education at Iowa. Faculty were invited to participate in the focus groups with forty-seven faculty from 25 departments or programs participating. The participants included faculty who taught in the GEP and those who did not; respondents in the latter group were able, however, to talk about the impact of GE courses on upper-level classes and coursework in the majors. The focus groups discussed two broad questions: What are the goals of the GEP and are those being fulfilled? (See Appendix C for participating departments; discussion topics; and more detailed results.)

### **Faculty Perceptions of Intended Outcomes**

The focus groups began by discussing the intended outcomes of the GEP. The faculty perception of these align strongly with the stated criteria and outcomes of the program.

The faculty, for example, reported that GE aims to produce “educated persons” through the acquisitions of skills and knowledge. The GEP also intends to foster the development of “life skills,” which allow learning beyond the classroom. Faculty expectations of the Program thus correlate with the two priorities of the GEP comprehensive criteria, the acquisition of skills and of qualities that create a liberally educated person.

Within the category of “producing educated persons” the following specific goals were noted by faculty: (1) to provide breadth of study before specialization, (2) to broaden students’ horizons, (3) to provide a common core of knowledge, and (4) to facilitate understanding of different modes of inquiry.

The faculty thus have a clear understanding of the Program and its intended outcomes.

### **Obstacles to Achieving Outcomes**

Much of the focus group time was spent on the obstacles to achieving the above outcomes of the program. Four obstacles were mentioned in the focus groups consistently: (1) students’ characteristics and their perceptions of the GEP, (2) the challenges of teaching writing within the GEP, (3) the problems with large classes, and (4) the structures and funding of GE that create obstacles to learning. In general, these obstacles were seen as related to one another.

Across the focus groups, the students themselves created two central challenges to achieving the goals of the GEP. Students were first of all described as “disinterested” in GE courses and in achieving the goals of GEP, with comments by the faculty on the difficulty of teaching such students. Second, faculty were concerned about students’ lack of preparation for college, particularly for college-level writing. In general students were perceived as lacking readiness for all college work, including the work in GE courses.

A considerable amount of interview time was consequently devoted to talking about the challenges associated with teaching writing and communication skills in GE courses. According to the respondents, these challenges were associated with students' preparation for college-level writing and the size of GE classes at UI. Although many respondents addressed these issues, one faculty member's comments are typical:

In a class of 240 students, I have to have a writing assignment. . . .if we have only one writing assignment . . . essentially all we are doing is evaluating students based on the skills they come in with. We are not actually doing anything to teach the students how to write nor are we establishing any type of baseline for students in terms of what they came in with and how you make progress from where you started.

There is as consensus among the faculty that students lack adequate writing skills and that the GEP does not overcome this obstacle because of the difficulty of teaching writing in large courses. There is also a strong consensus that students need extensive remedial work and that the faculty is not able to supply it because of the time-consuming nature of teaching writing.

Respondents talked extensively about large GE classes as inhibiting effective teaching and learning, noting that it is difficult to fulfill the complex and labor-intensive intended outcomes of the program in communication, critical analyses, and writing in classes of over 50 students.

The faculty do not necessary see small GE courses as the immediate answer to the problem, understanding that small courses require extensive resources and as well as a faculty committed to teaching them. As one faculty member noted, "You could reduce class size to 20, but the professor still has to have the consciousness and change pedagogy; we need to have people who value those opportunities." The faculty have deep ambivalences about the allocation of resources to remedial work and of the being asked to teach those skills when they lie beyond the boundaries of their expertise and of their professional expectations.

Each focus group talked, at least briefly, about incentives and "disincentives" for teaching GE courses at The University of Iowa. Most of the discussions focused on the University's reward system for tenure-track faculty. When asked, for example, about incentives for teaching GE courses, one faculty member noted, "That's one of the problems, really . . . It takes a good amount of effort. It's a real challenge." For many faculty there is simply not enough incentive to become involved in teaching GE courses.

For example, one faculty member even asserted that "there's a disincentive in that [the GE classes] tend to be big. If the idea of [GE] is communication, then that is a difficult task. And the [University's] administrators don't recognize how much work it is to teach one of these courses."

Another echoed these comments: "There is a disincentive. Teaching [GE] is a different kind of work than the 'research and publications' enterprise that we are in . . . . The University needs to recognize the struggle between the research and publication mission and the teaching mission." In response to that comment, another faculty member said, "We've lost people because of this disconnect."

Faculty, in other words, saw a tension between the university's focus on research and its mission of teaching, with its awards going more clearly to outstanding research faculty than to excellent teachers within the GEP.

Faculty pinpointed a third, related obstacle to achieving the outcomes of the GEP, the organization of its curriculum. One respondent's comments about the organization of the GE curriculum is illustrative of others':

I think the list of categories seems a little bizarre. It feels too specific to me. . . .Historical perspectives feels like a subcategory to one of these broader categories. So does rhetoric. Interpretation of Literature feels like it should be an option under humanities. . . .So the list feels like it combines specifics and categories.

Another noted, "I think [the GE curriculum] is very difficult to understand. I think if there was a way to simplify it that makes logical sense . . . it would make far more sense to students and to me. We all find it enormously cumbersome . . ."

### **Strategies for Achieving Intended Outcomes of the GEP**

The interviews also elicited descriptions of effective outcomes of GE courses/experiences. Some instructors within the GEP have found ways to overcome the obstacles to achieving the outcomes of the GEP presented by large courses by using creative teaching strategies and technology. For example, faculty use one minute papers written in class; ungraded email papers; participation and communication through clickers; and using relevant assignments involving online work. Clearly, though, the faculty sees that such creative teaching is borne out of necessity, of finding ways to fulfill the Programs goals in spite of large courses. Creative experimentation takes time and effort and puts a burden on a faculty already feeling challenged by additional student enrollments and lack of resources.

### ***Employer Perspective***

#### **Approach**

We interviewed a small number (13) typical cases of employers who recruit University of Iowa students and also students at other mid-western colleges and Universities with no explicit liberal arts major specified. (For the approach used and the letter sent to employers, see Appendix D.)

#### **Highlights**

The main general comment made about preparation of applicants on the eight dimensions of The University of Iowa GEP was that individuals coming with a baccalaureate degree that included such courses were notably different from those trained in community colleges or who only possessed an array of technical courses. They volunteered, as well, observations of the high quality of University of Iowa graduates they interview and hire in terms of these eight skills.

Every respondent said in some unequivocal manner that all of the eight goals we list were necessary for hiring and essential for promotion. To illustrate, a retail manager from an international corporation, says, "I could map your 8 [goals] with the list of priorities we have for training our corporate leaders" [that is, management positions]. A public safety director, also said in effect, that "We prefer college graduates; the level maturity, perspective, intellectual capacity from these applicants is night and day compared with those trained only in technical skills."

#### **Communication**

Every respondent ranked either communication skills or critical thinking as number one and the other the second priority. The particular meaning given (reflecting their setting) often was instructive.

For example, a retail employer had this to say about communication: "I am responsible for answering impromptu and often highly consequential requests from the media about a product or service. I cannot duck the question and I have to respond with information that is accurate, timely, and confronts the problem or complaint" (such as fielding a question about a stocked product which enters the news as defective or dangerous).

Multiple comments about requirements for writing and public speaking for law enforcement personnel. were also made: "Officers must be able to write clear, concise, complete, and compelling accident and crime reports in order to meet prosecutor (or plaintiff) and magistrate requirements."

#### **Critical Thinking**

There were also multiple comments about critical thinking, though with a special slant. Managers in the corporation have to be able to "get to the bottom of problems" quickly. Police officers (or public employees) have to be able to "connect the dots" [that is, know how things work].

### Other Noted Areas

Appreciation of the arts was seen as important by one interviewee: “My dream is for every one of your students to have the opportunity to attend live artistic events [concerts, ballet, legitimate stage]” (philanthropy). Another, working for a corporation, added, “The arts are big for us. We give a lot of money each year to support artistic endeavors, and we have to know what we are doing.”

The life of the mind was also addressed by one person in a corporation as being key: “The life of the mind is terribly important, in ways that may not be obvious to you. This is very, very important to us. We look for intellectual curiosity; people eager to learn. We want people who are constantly asking why?”

### Summary

There is substantial value in noting the rhetorical caste of the statements made by those interviewed, which add metaphoric color and specificity to their respective workplace contexts for the eight listed competencies.

- **Communication skills:** “The majority of our business depends on communication. This is communication over the phone or e-mail, and our employees have to know how to communicate effectively without visual cues” (corporation).
- **Critical thinking:** “I see that as problem solving, getting to the root cause. If you have that skill, you communicate better, you understand processes, you can improve conflict resolution, you know how to develop labor pools” (corporation, manufacturing).
- **Understanding of world complexity:** All but one of the corporate firms are developing international offices; hence, international skills (foreign language, cultural awareness, knowledge of different political economies is salient (corporation). “You wouldn’t think it was so, but our officers frequently encounter situations where they must be aware of laws and customs of foreign countries pertaining to driving, use of mandated auto safety devices, and family interaction norms [speaking specifically of issues associated with migrants from Latin America, Southeast and East Asia, and Eastern Europe] (recruitment and training of public safety officers).
- **Appreciation of diversity:** “Our people have to be able to live and be effective outside their comfort zone” (corporation; philanthropic organization). “Much of our work is done in teams; teams must bring together and thrive on diversity” (corporation). Two representatives of large corporations described major diversity initiatives implanted in recruitment and training (both to enlarge and refine labor pools and to develop adequately sensitivity to changing audiences and markets).
- **Understanding of scientific inquiry:** “All our employees must be able to read and evaluate all kinds of media that purport to be true. They have to sort out the wheat from the chaff” (corporation).
- **Social responsibility:** “We raise money in a wide variety of ways. But a big emphasis now is to alert students to philanthropy as a basic life responsibility; giving back to the community” (philanthropic organization). “All or employees must be committed to and in kind give back to the community, e.g., Big Brothers, Big Sisters, etc.” (corporation).

Both James O. Freedman (2203) and Derek Bok (2003, 2006)\* argue for reasoned and careful integration of traditional liberal aspects of higher education with other institutions whose priorities are manifestly technical and commercial. Our committee recognizes that not only the vast majority of CLAS undergraduates go to work outside of the academy, but indeed predominantly find first employment in business. We interpret the consistency of the emphases of general education and the priorities the typological employers expressed to us as instructive in mediating the presumption of the two separate cultures of the academy and the market. Compelling writing, critical thinking, appreciation of the differences of others and self are at the very core of the liberal tradition, allowing education to “free the human spirit.” But these and other general education goals decidedly are neither secluded nor irrelevant to the remaining sixty years of our graduates’ lives.

Some assumptions and metaphors about the corporate sector or public bureaucracies are challenged or refined by our interviews. Successful products and services require critical thinking. Institutional survival

depends on the successful communication of ideas. The priority of the group work in these settings follows from mutual respect of distinct individuals. One highly placed labor strategist in an international corporation expressed their driving goal in hiring: "We hire the whole person," a concluding summary statement meant to encompass regard for all eight general education goals.

\*James O. Freedman, *Liberal Education and the Public Interest* (Iowa City, The University of Iowa Press, 2003); Derek Bok, *University in the Marketplace: the Commercialization of Higher Education* (Princeton, Princeton University Press, 2003); Bok, *Our Underachieving Colleges: a Candid Look at How Much Students Learn and Why They Should Learn More* (Princeton: Princeton University Press, 2006).

### **III. Summary**

#### ***Strengths of the Program***

The University does many things well in its General Education Program.

A high level of cooperation among the UI undergraduate colleges exists within the General Education Program, with a shared pool of courses and requirements. Students not accepted into one of the professional colleges consequently may remain in CLAS, finding themselves prepared, in many cases, to enter a new major quickly.

CLAS provides strong oversight for the Program, helping to ensure its quality by requiring documented adherence to the Program's goals; consistency of course offerings; and training or oversight of teaching assistantships.

The University actively manages enrollment issues relating to the GEP through a close association of the Office of the Associate Provost and CLAS with the Academic Advising Center, Orientation, and Admissions, ensuring that enough seats are available in first year GE courses. The University of Iowa thus actively supports its four-year graduation plan through the enrollment management of its General Education Program.

Many of the GE course offerings change frequently and thus represent a flexible curriculum, especially for a large research institution. Although not all GE courses are offered every semester, every GE course is offered consistently, allowing students many choices in almost every field appropriate for undergraduate studies at The University of Iowa.

Two courses within the GEP, Rhetoric and Interpretation of Literature, provide a stable counterpoint to curriculum flexibility. These two courses are taken by almost all students and suggest something of a common first-year experience.

As reported on the student survey, each area of the Program pays particular attention and brings unique expertise to at least one of the key goals in the GE mission. Each distributive subject area, according to the students, does at least one of the eight goals better than any other area, suggesting that the distributive model is working well.

Students, when surveyed, understood many of intended outcomes of the General Education Program and felt they were being met. Faculty also understood the outcomes, suggesting a shared sense of academic values and purpose as reflected in the GEP.

Employers, during the interviews, recognized the importance of the intended outcomes of the GEP and spoke well of their value and of an education from The University of Iowa, in part because of the strength of the GEP.

#### ***Weaknesses of the Program***

The hybrid and evolutionary nature of the Program has resulted in some confusion in both its intentional and unintentional outcomes. Rhetoric and Interpretation of Literature seem to function in part as transitional academic experiences and yet there has been no attempt to examine this experience or to understand how it might help students academically.

Both faculty and students see the names of the GE areas as cumbersome and unclear. The Program, for example, uses titles of traditional disciplines, such as humanities or social sciences, which students do not always understand; the name of particular courses (Interpretation of Literature; Rhetoric); the name of a skill (Quantitative and Formal Reasoning); and a nondescript name for the most recently added category, "Distributed." The organization and the names of the components of the Program fail to create a sense of coherency.

The distributed category of the General Education Program conveys many of the University's current aspirations for cultural diversity and the globalization of the curriculum. At the same time, the category is different in structure and name from the other categories and many find it confusing. Perhaps its placement near the end of the Program in all charts and schemas as well as the difference in its name reinforce its seeming lack of integration.

The GEP at Iowa is ambitious, with numerous, detailed criteria and intended outcomes but, as a result, it is sometimes difficult for students and faculty to understand all of the program's goals or to see them achievable.

Faculty, like students, feel that practice and achievement in writing and communication skills in the GEP are lacking. Faculty in particular discuss how difficult it is to teach communication and writing skills in large lecture courses. Although some faculty have found creative solutions by using technology, there is still a sense that GE courses can be a burden. Students also noted in the survey that they want more exposure to writing and communication skills.

Although a strong review process for the GEP is in place, it has been difficult to track suggestions made by the committees overseeing the Program and to collect data on the achievements of its intended outcomes.

### ***Recommendations***

This committee recommends that the College of Liberal Arts and Sciences appoint a committee in consultation with the Office of the Provost to study and suggest possible new organizational structures and area names for the General Education Program.

The goal of this restructuring is to create a more coherent, integrated program focusing, if possible, on the unique educational and cultural experiences offered by The University of Iowa. The credit hour requirements of the overall Program and of the specific areas should remain basically the same.

The new committee should additionally suggest revisions to the criteria and intended outcomes of the program and its various areas that both simplify and highlight distinctive and coherent qualities of the reorganized Program.

This committee should recommend its findings in a report to the College.

The membership of the newly appointed committee should broadly represent the University with the majority of its members from the faculty of the College of Liberal Arts and Sciences, especially those with a particular knowledge or involvement with undergraduate teaching and the General Education Program. A student and a non-voting liaison from the Academic Advising Center should serve on this committee if possible to represent students' perspectives. The committee should consult frequently with other offices and programs.

At an appropriate point, we recommend that the College isolate one or two General Education outcomes to assess in a manner it feels practical and useful. We suggest that the assessment focus on communication skills and, most likely, on writing skills, the areas both faculty and students felt were particularly lacking within the Program. Such findings might become the basis for future additions or revisions to the GEP in the area of communication, as suggested by this study.

We also recommend that the General Education Curriculum Committee, under the guidance of EPC, create methods of tracking departmental responses and implementation of recommendations made by these CLAS committees.

**Appendix A**  
**Fall 2007 Course in the General Education Program**

**Rhetoric**

010:001 Rhetoric I  
010:002 Rhetoric II  
010:003 Accelerated Rhetoric  
010:004 Writing and Reading 3 s.h.  
010:006 Speaking and Reading 3 s.h.

**Interpretation of Literature**

08G:001 The Interpretation of Literature  
009:005 Texts and Contexts in France and the French-Speaking World  
009:070 World, Nature and Ecology in French Literature

**Foreign Language**

American Sign Language

Arabic

Chinese

French

German

Greek

Hindi

Italian

Japanese

Latin

Portuguese

Russian

Sanskrit

Spanish

Swahili

Other Course Sequences

Departments offering elementary/intermediate language sequences that have not been approved by the GECC and EPC may ask the College for permission to have students' grades in the final course in the sequence substitute for a proficiency test. Students who successfully complete the final course in these sequences may then contact the CLAS Academic Programs & Services office and ask to have their degree evaluations reflect their completion of the Foreign Language component.

**Historical Perspectives**

01H:005 Western Art and Culture Before 1400

01H:006 Western Art and Culture After 1400

01H:016/039:016 Asian Art and Culture

010:141/036:138 Rhetoric and Past Public Controversy

016:001 Western Civilization I: The Ancient and Medieval Worlds 3-4 s.h.

016:002 Western Civilization II: The Early Modern World 3-4 s.h.

016:003 Western Civilization III: The Modern World 3-4 s.h.

016:005/039:055 Civilizations of Asia: China

016:006/039:056 Civilizations of Asia: Japan

016:007/039:057 Civilizations of Asia: South Asia 3-4 s.h.

016:011 Issues in Human History: The Vietnam War in Historical Perspective

016:012 Issues in Human History: Communities and Society in History

016:014 Issues in Human History: Europe's Expansion Overseas

016:015 Issues in Human History: Gender in Historical Perspective

016:017 Issues in Human History: Twentieth Century Crisis

016:020 Issues in Medieval Society

016:022 Issues in Human History: Nature and Society in Historical Perspective

016:023 Issues in European Politics and Society  
019:091 Cultural and Historical Foundations of Communication  
20E:030 Greek Civilization  
20E:031 Roman Civilization  
025:144 History of Music I  
025:146 History of Music II  
026:033 Philosophy and Human Nature  
026:034 Philosophy and the Just Society  
032:001 Judeo-Christian Tradition  
032:004/039:064 Living Religions of the East  
032:025/016:035 Medieval Religion and Culture  
032:026/016:036 Modern Religion and Culture  
032:030 Introduction to Islam  
041:094 Religion and Culture of the Slavs  
049:002 Theatre and Society: Ancients and Moderns 4 s.h.  
049:003 Theatre and Society: Romantics and Rebels 4 s.h.  
049:112 History of Theatre and Drama I, 4 s.h.  
049:113 History of Theatre and Drama II, 4. s.h.  
113:012 Introduction to Prehistory

### **Humanities**

01H:001 Art and Visual Culture  
01H:002 Arts of Africa  
01H:003 Art of Pre-Columbian America, Native America, and Oceania  
01H:004 Masterpieces: Art and Cultural Paradigms  
01H:066 Introduction to American Art  
008:184/049:114 Contemporary Theatre and Drama  
08C:001 Creative Writing Studio Workshop  
08G:002 Biblical and Classical Literature  
08G:003 Medieval and Renaissance Literature  
08G:004 Epic and Tragic Literature  
08G:005/149:005 Literatures of Native American Peoples  
08G:006 Fictions  
08G:007 Poetry  
08G:008 Drama  
08G:009 American Lives  
08G:011 Literature and Sexualities  
08G:012 Comic and Tragic Literature  
08G:013 Literatures of Latinos/as in the USA  
08G:014/129:008 Literatures of the African Peoples  
08G:015 Women and Literature  
009:030 Cultural Misunderstandings: France and the US  
009:055/033:055 Revolutions, 3, 4 s.h.  
010:131/036:143 Classical Rhetoric and Greek Culture  
13E:017/117 Medieval German Literature: Heroic and Erotic, 3, 4 s.h.  
13E:118 The Third Reich and Literature  
13E:119 German Film  
018:132 Images of Modern Italy 3, 4 s.h.  
20E:014 Hero, God, Mortal: Literature of Greece  
20E:015 Love and Glory: Literature of Rome  
20E:108/049:180 Greek Drama in Translation  
20E:112/008:125 Classical Mythology  
20E:115/032:164 Greek Religion and Society  
20E:116/032:118 Roman Religion and Society  
024:102/07S:112/097:115/113:103/169:102 Introduction to Museology  
025:013 Concepts and Contexts of Western Music

025:014 Great Musicians  
 025:104 Music of Latin America and the Caribbean  
 026:061 Introduction to Philosophy  
 026:102 Introduction to Ethics  
 030:030 Introduction to Political Thought and Political Action  
 032:002 Religion and Society  
 032:003 Quest for Human Destiny  
 032:006/039:006 Introduction to Buddhism  
 032:007/039:020 Asian Humanities: Japan  
 032:008/039:018 Asian Humanities: India  
 032:009/039:019 Asian Humanities: China  
 032:015 New Testament Survey  
 032:016 Religion and Liberation  
 032:034/129:050 Introduction to African-American Religions  
 032:051 Religious Thinkers of the West  
 032:052 Woman and Islam in the Middle East (Fall 2007)  
 032:111/131:111 Religion and Women  
 032:155 Human Rights and Islam (Fall 2007)  
 033:040 The Good Society  
 033:050 Making Choices: Interdisciplinary Perspectives  
 033:142 Natural Sciences and Human Cultures  
 033:154 Human Nature and the Impact of Science  
 035:020 Contemporary Spanish American Narrative  
 038:020 Contemporary Brazilian Narrative  
 041:093 Slavic Folklore  
 041:101 Russian Literature in Translation 1800-1860  
 041:102 Russian Literature in Translation 1860-1917  
 045:001 Understanding American Cultures  
 048:002 Survey of Film  
 048:010 Contemporary Cinema (Fall 2007)  
 048:021 European Film History  
 048:040/008:040 Major Texts in World Literature I  
 048:041/008:041 Major Texts of World Literature II  
 049:001 Art of the Theatre  
 049:118 American Women Playwrights: 19th and 20th Century  
 129:061/045:030 Introduction to African American Culture  
 137:080 Dance and Society  
 143:050 Honors Seminar in Humanities  
 169:072 Leisure and the Liberal Arts

### **Natural Sciences**

002:001 Introduction to Botany (Lab), 4 s.h.  
 002:002 Introductory Animal Biology (Lab), 4 s.h.  
 002:010 Principles of Biology I (Lab), 4 s.h.  
 002:011 Principles of Biology II (Lab), 4 s.h.  
 002:021 Human Biology (Lab), 4 s.h.  
 002:022 Ecology and Evolution, 3 s.h.  
 002:040 Biology of the Brain, 3 s.h. (Effective beginning Fall 2007.)  
 002:081 Human Genetics in the Twenty-First Century, 3 s.h.  
 002:095 Plants and Human Affairs, 3 s.h.  
 002:145 Introduction to Neurobiology, 3 or 4 s.h. (NS GE through summer 2007. See note above.)  
 004:005 Technology and Society, 3 s.h.  
 004:006 Technology and Society Laboratory (Lab), 1 s.h.  
 004:007 General Chemistry I, 3 s.h.  
 004:008 General Chemistry II, 3 s.h.  
 004:011 Principles of Chemistry I (Lab), 4 s.h.

004:012 Principles of Chemistry II (Lab), 4 s.h.  
 004:016 Principles of Chemistry Lab (Lab), 2 s.h.  
 004:018 Chemical Science I, 3 s.h.  
 004:019 Chemical Science II, 3 s.h.  
 004:020 Chemical Science Laboratory (Lab), 2 s.h.  
 012:003 Earth History and Resources (Lab), 4 s.h.  
 012:004 Evolution and the History of Life (Lab), 4 s.h.  
 012:005 Introduction to Geology (Lab), 4 s.h.  
 012:007 Age of Dinosaurs (Lab), 4 s.h.  
 012:008/159:008 Introduction to Environmental Science, 3 s.h.  
 012:008/159:008 Introduction to Environmental Science (lab), 4 s.h.  
 012:114 Energy and the Environment, 3 s.h.  
 012:140 Natural Hazards, 3 s.h.  
 027:053 Human Anatomy, 3 s.h.  
 027:130 Human Physiology, 3 s.h.  
 029:003 From Quarks to Quasars, 3 or 4 s.h.  
 029:006 Physics of Everyday Experience: How Things Work, 3 s.h.  
 029:008 Basic Physics, 3 s.h.  
 029:008 Basic Physics (Lab), 4 s.h.  
 029:009 Directions in Modern Physics, 3 s.h.  
 029:009 Directions in Modern Physics (Lab), 4 s.h.  
 029:011 College Physics I (Lab), 4 s.h.  
 029:012 College Physics II (Lab), 4 s.h.  
 029:027 Physics I (Lab), 4 s.h.  
 029:028 Physics II (Lab), 4 s.h.  
 029:044 Physics of Sound, 3 s.h.  
 029:050 Stars, Galaxies, and the Universe, 3 s.h.  
 029:050 Stars, Galaxies, and the Universe (Lab), 4 s.h.  
 029:051 Introductory Astronomy Laboratory (Lab), 1 s.h.  
 029:052 Exploration of the Solar System, 3 s.h.  
 029:061 General Astronomy I (Lab), 4 s.h.  
 029:062 General Astronomy II (Lab), 4 s.h.  
 029:081 Introductory Physics I (Lab), 4 s.h.  
 029:082 Introductory Physics II  
 029:082 Introductory Physics II (Lab) 4 s.h.  
 029:084 Introductory Physics II Lab (Lab) 1 s.h.  
 044:003 Introduction to Earth Systems Science (Lab), 4 s.h.  
 113:013 Human Origins, 3 s.h.  
 143:070 Honors Seminar in Natural Sciences, 3 s.h.

### **Quantitative and Formal Reasoning**

22C:005 Introduction to Computer Science  
 22C:016 Computer Science I: Fundamentals, 4 s.h.  
 22M:006 Logic of Arithmetic  
 22M:009 Elementary Functions, 4 s.h.  
 22M:010 Finite Mathematics, 4 s.h.  
 22M:012 Theory of Arithmetic  
 22M:013 Mathematics for Business, 4 s.h.  
 22M:015 Mathematics for the Biological Sciences, 4 s.h.  
 22M:016 Calculus for the Biological Sciences, 4 s.h.  
 22M:017 Calculus and Matrix Algebra for Business, 4 s.h.  
 22M:025 Calculus I, 4 s.h.  
 22M:031 Engineering Calculus I: Single Variable Calculus, 4 s.h.  
 22S:002 Statistics and Society  
 22S:008 Statistics for Business, 4 s.h.  
 22S:025/07P:025 Elementary Statistics and Inference

22S:030 Statistical Methods and Computing  
026:036 Principles of Reasoning  
033:060 Scientific Reasoning  
036:017 Theory and Practice of Argument, 4 s.h.  
103:013 Language and Formal Reasoning

### **Social Sciences**

3:117/103:172 Psychology of Language  
003:118/103:176 Language Development  
06E:001 Principles of Microeconomics, 3-4 s.h.  
06E:002 Principles of Macroeconomics, 3-4 s.h.  
019:090 Social Scientific Foundations of Communication  
019:095 Media and Consumers  
028:075 Health in Everyday Life  
030:001 Introduction to American Politics  
030:030 Introduction to Political Thought and Political Action  
030:040 Introduction to the Politics of the Industrial Democracies  
030:041 Introduction to the Politics of Russia and Eurasia  
030:042 Introduction to the Politics of Developing Areas  
030:050 Introduction to Political Behavior  
030:060 Introduction to International Relations  
030:061 Introduction to American Foreign Policy  
030:070 Introduction to Political Communication  
030:140 Government and Politics of Europe  
030:146/044:161 African Development  
031:001 Elementary Psychology  
031:013 Introduction to Clinical Psychology  
031:014 Introduction to Child Development  
031:016 Introduction to Cognitive Psychology  
034:001 Introduction to Sociology: Principles, 3-4 s.h.  
034:002 Social Problems, 3-4 s.h.  
034:020 Principles of Social Psychology  
036:070 Communication and Everyday Life  
036:074 Media and Society  
044:001 Introduction to Human Geography, 4 s.h.  
044:010 The Contemporary Global System, 4 s.h.  
044:011 Population Geography  
044:019 Contemporary Environmental Issues  
044:030 The Global Economy  
103:011 Language and Society  
103:055 Languages of the World  
113:003 Introduction to the Study of Culture and Society, 4 s.h.  
113:010 Anthropology and Contemporary World Problems  
113:014 Language, Culture, and Communication  
113:119 Urban Anthropology  
129:060 Introduction to African American Society  
143:060 Honors Seminar in Social Sciences  
169:070 Perspectives on Leisure and Play  
003:117/103:172 Psychology of Language  
003:118/103:176 Language Development  
06E:001 Principles of Microeconomics, 3-4 s.h.  
06E:002 Principles of Macroeconomics, 3-4 s.h.  
019:090 Social Scientific Foundations of Communication  
019:095 Media and Consumers  
028:075 Health in Everyday Life  
030:001 Introduction to American Politics

030:030 Introduction to Political Thought and Political Action  
 030:040 Introduction to the Politics of the Industrial Democracies  
 030:041 Introduction to the Politics of Russia and Eurasia  
 030:042 Introduction to the Politics of Developing Areas  
 030:050 Introduction to Political Behavior  
 030:060 Introduction to International Relations  
 030:061 Introduction to American Foreign Policy  
 030:070 Introduction to Political Communication  
 030:140 Government and Politics of Europe  
 030:146/044:161 African Development  
 031:001 Elementary Psychology  
 031:013 Introduction to Clinical Psychology  
 031:014 Introduction to Child Development  
 031:016 Introduction to Cognitive Psychology  
 034:001 Introduction to Sociology: Principles, 3-4 s.h.  
 034:002 Social Problems, 3-4 s.h.  
 034:020 Principles of Social Psychology  
 036:070 Communication and Everyday Life  
 036:074 Media and Society  
 044:001 Introduction to Human Geography, 4 s.h.  
 044:010 The Contemporary Global System, 4 s.h.  
 044:011 Population Geography  
 044:019 Contemporary Environmental Issues  
 044:030 The Global Economy  
 103:011 Language and Society  
 103:055 Languages of the World  
 113:003 Introduction to the Study of Culture and Society, 4 s.h.  
 113:010 Anthropology and Contemporary World Problems  
 113:014 Language, Culture, and Communication  
 113:119 Urban Anthropology  
 129:060 Introduction to African American Society  
 143:060 Honors Seminar in Social Sciences  
 169:070 Perspectives on Leisure and Play

**Distributed: Cultural Diversity**

01H:003 Art of Pre-Columbian America, Native America and Oceania  
 01H:104 American Indian Art  
 07B:154 Education, Race, and Ethnicity  
 07B:180 Human Relations for the Classroom Teacher  
 08G:005/149:005 Literatures of Native American Peoples  
 08G:011 Literature and Sexualities  
 08G:013 Literatures of Latinos/as in the USA  
 016:040 Perspectives: Diversity in American History  
 016A:112 Chicana/o History  
 016A:065/129:065 Introduction to African American History  
 019:165 African Americans and Mass Communication  
 025:080 Jazz Cultures in America and Abroad (Fall 2007)  
 032:016 Religion and Liberation  
 032:034 Introduction to African-American Religion (Fall 2007)  
 032:060/149:060 Introduction to Native American Religious Traditions  
 033:075 Cultural Diversity and Identity  
 034:018/131:018 Gender and Society, 3 or 4 s.h.  
 034:066 Social Inequality  
 035:143/048:196 Cuban American Literature and Culture  
 045:001 Understanding American Culture (Summer 2007)  
 103:150/113:173 Language and Gender

113:110/149:110 Indians of North America  
129:060 Introduction to African American Society  
129:061/045:030 Introduction to African American Culture  
131:010 Introduction to Women's Studies  
131:055 Gender, Race, and Class in the US  
149:049 Introduction to American Indian and Native Studies  
154:060 Sex and Popular Culture in Postwar US (Summer 2007)

**Distributed: Fine Arts**

01B:001 Elements of Art  
01C:060 Ceramics I  
01H:001 Art and Visual Culture  
01H:002 Arts of Africa  
01H:003 Art of Pre-Columbian America, Native America, and Oceania  
01H:004 Masterpieces: Art and Cultural Paradigms  
01H:005 Western Art and Culture Before 1400  
01H:006 Western Art and Culture After 1400  
01H:016/039:016 Asian Art and Culture  
01H:066 Introduction to American Art  
01N:015 Undergraduate Sculpture I  
08C:001 Creative Writing Studio Workshop  
08N:020 Introduction to Creative Nonfiction Writing  
025:013 Concepts and Contexts of Western Music  
025:014 Great Musicians  
025:059 Performance Instruction for Non Majors, 1 s.h.  
025:082 Group Piano I Non Music Majors, 1 s.h.  
025:104 Music of Latin America and the Caribbean  
025:080 Jazz Cultures in America and Abroad (Fall 2007)  
025:144 History of Music I  
025:146 History of Music II  
033:161 The Arts in Performance, 3 s.h.  
049:001 Art of the Theatre  
049:002 Theatre and Society: Ancients and Moderns, 4 s.h.  
049:003 Theatre and Society: Romantics and Rebels, 4 s.h.  
049:020 Basic Acting  
049:062 Playwriting I  
049:114/008:184 Contemporary Theatre and Drama  
049:118 American Women Playwrights: 19th and 20th Century  
137:001 Beginning Tap, 2 s.h.  
137:002 Beginning Jazz, 2 s.h.  
137:003 Beginning Ballet, 2 s.h.  
137:004 Beginning Modern Dance, 2 s.h.  
137:011 Continuing Tap, 2 s.h.  
137:012 Continuing Jazz, 2 s.h.  
137:013 Continuing Ballet, 2 s.h.  
137:014 Continuing Modern Dance, 2 s.h.  
137:022 Intermediate Jazz, 2 s.h.  
137:023 Intermediate Ballet, 2 s.h.  
137:024 Intermediate Modern, 2 s.h.  
137:080 Dance and Society  
137:103 Major Ballet I, 1-2 s.h.  
137:104 Major Modern Dance I, 1-2 s.h.  
137:106 Dance Performance, 0-1 s.h.  
137:113 Major Ballet II, 1-2 s.h.  
137:114 Major Modern Dance II, 1-3 s.h.  
137:123 Major Ballet III, 1-3 s.h.

137:124 Major Modern Dance III, 1-3 s.h

**Distributed: Foreign Civilization and Culture**

01H:008 Themes in Global Art (Fall 2007)  
01H:005 Western Art and Culture Before 1400  
01H:006 Western Art and Culture After 1400  
01H:016/039:016 Asian Art and Culture  
08G:014/129:008 Literatures of the African Peoples  
009:113 French Civilization  
009:114 French Civilization  
009:147/048:105 French Cinema  
013:105 German Cultural History  
013:115 Contemporary German Civilization  
013E:017/13E:117 Medieval German Literature: Heroic and Erotic ¾ s.h.  
013E:118 The Third Reich and Literature  
013E:119 German Film  
013E:120 Germany in the World (Fall 2007)  
016:001 Western Civilization I, 4 s.h.  
016:002 Western Civilization II, 4 s.h.  
016:003 Western Civilization II, 4 s.h.  
016:005/039:055 Civilizations of Asia: China  
016:006/039:056 Civilizations of Asia: Japan, 3-4 s.h.  
016:007/039:057 Civilizations of Asia: South Asia, 3-4 s.h.  
016E:107 The Hellenistic World and Rome  
016E:110 Medieval Civilization  
016E:113 Economic and Social History of Medieval Europe  
016E:117 History of the Medieval Church  
016E:125/0131:181 Society and Gender in Europe 1200-1789  
016E:126 The French Revolutions and Human Rights  
016E:127 European History in Text and Film, 4 s.h.  
016E:156 Germany since 1914: Weimar, Hitler, and After, 4 s.h.  
016E:177 Imperial Russia: 1801-1917  
016E:178 Soviet Union 1917 1945  
016E:179 Soviet Union 1945 1991  
016W:194/039:134 Imperialism and Modern India  
016W:196/039:154 Modern China: 1600s to 1920s  
018:132 Images of Modern Italy, 3,4 s.h.  
20E:014 Hero, God, Mortal: Literature of Greece  
20E:015 Love and Glory: The Literature of Rome  
20E:150/0131:152/1054:121 Gender and Sexuality in the Ancient World  
030:141 Russian/Post Soviet Politics  
030:143/039:178 Government and Politics of the Far East  
030:144 Latin American Government  
030:146/044:161 African Development  
032:004/039:064 Living Religions of the East  
032:006/039:006 Introduction to Buddhism  
032:007/039:020 Asian Humanities: Japan  
032:030 Introduction to Islam  
035:020 Contemporary Spanish American Narrative  
038:020 Contemporary Brazilian Narrative  
032:052 Woman and Islam in the Middle East (Fall 2007)  
038:114 Culture and Civilization of the Portuguese Speaking World  
039:018/032:008 Asian Humanities: India  
039:019/032:009 Asian Humanities: China  
041:093 Slavic Folklore (Fall 2007)  
041:094 Religion and Culture of the Slavs (Fall 2007)

041:098 Introduction to Russian Culture  
041:099 Russia Today  
044:010 The Contemporary Global System, 4 s.h.  
0113:125/039J:125 Japanese Society and Culture  
0113:131 Latin American Economy and Society  
0187:099 Introduction to Russia, the Soviet Union, and its Successor States

**Distributed: Health and Physical Activity**

028:020 Alcohol and Your College Experience 1 s.h.  
028:021 Tobacco and Your College Experience 1 s.h.  
028:022 Resiliency and Your College Experience 1 s.h.  
028:035 Stress Management 2 s.h.  
028:036 Physical Activity Through the Life Span 3 s.h.  
169:045 Health for Living 3 s.h.

## **Appendix B Student Survey**

### **Form and Delivery System/Methodological Caveats**

Surveys were distributed via e-mail to 8251 students [19,474 registered in the fall semester 2006-07 academic year (exclusive of students from the College of Engineering)]. 972 usable surveys were returned. Frequencies vary depending upon whether students had had the relevant course(s) and whether majors had been declared. Additionally Ns fluctuate with some missing responses (these being excluded in all analyses).

Some qualifications of the methodology include the following:

- a) The issue of the samples and populations. The objective of the standardized survey is not to yield some point estimation of a population parameter. There is too little knowledge of any of the populations (students, faculty, and so on, so far as numbers, representiveness, and confounding factors are concerned) to claim such an outcome. The purpose of this measurement vehicle is to complement the others: by being somewhat standardized, requiring relatively little time to complete, and being as much as possible an efficient vehicle for eliciting a fairly large amount of information.
- b. Some accommodation to representiveness (short of point estimation, which is impossible) occurs with comparing a small amount of demographic information in the questionnaire with respective demographic information for the college as a whole; and taking steps to involve faculty, alumni, and employers that reflect knowledge our university offices have of the demographics of these populations.
- c. There is no way to determine the sample size needed for adequate power in prediction. But we suggest sufficient numbers be obtained for the student population to allow some bivariate and multivariate breakdowns by sex, class in school, and major.
- d. With regard to format, a major criterion with such a standardized measure is that it be different from the others. That is, whereas documents from oversight of the courses are by definition qualitative, and ACE forms refer to specific courses and direct sentiment outcomes, and focus groups can explore a range of meanings and experiences with the different constituencies, this method seeks to be relatively **non-expansive** in its coverage and intentionally limits response options.

This is one of several format options (and measurement models) that we considered. For example, to elicit the amount of information possible with this grid system through a Likert model would be much more space- and time consuming. Or using a semantic differential format would be valuable if our committee really wanted to tease out different "meaning spaces" of different constituencies. Because the overall strategy proposed will use other means to uncover more tacit meanings held about the General Education Curriculum, the semantic differential format seems less effective here as an alternative.

After pretesting of some options for formatting the questions and response alternatives, we chose a four-response option and used WebSurvey as the vehicle for distributing the student survey and archiving the responses. (The survey may be found at the end of this section.)

### **Some Preliminary Observations of Results**

Given the delivery system there is uncertainty about the percentage of return. However, using population figures kept by the university there was over representation of women in the sample. Women represent 55% and men 45% of undergraduates (exclusive of the College of Engineering). Women made up 68% of the sample and men 32%.

There is evidence of some sex/evaluation interaction across some of the GED areas and a few of the dimensions (Interpretation of Literature, History, Humanities, and the Major, with women uniformly being more positive than men when this occurs. Because of the over-sampling of women, this pattern counsels caution in judging a few of the dimensions in those areas.

There is some class standing/GED area interaction, with Rhetoric, Interpretation of Literature, and History showing a few differences in dimensions based on lower class or higher class standing based on hours

(with lower class being higher in evaluation); and with higher class standing showing higher evaluations in some dimensions of the major.

The following illustrative statistical results are provided:

- Means and standard deviations for all 10 GED areas and all 8 dimensions for each.
- Difference of means tests using sex as an independent variable (again for all 10 GED areas and all 8 dimensions for each).
- Differences of means tests using number of hours taken as a source of a dichotomized independent variable class standing (dichotomization was at the median of 60; again for all 10 GED areas and all dimensions for each).
- Generation of an 8-dimension index for each of the 10 GED areas; determination of across-item means from these indices for each GED area.

### **Student Survey**

This is the introductory statement sent to students who then could elect to take the survey instrument entitled, "General Education Program."

Dear University of Iowa Student:

We would like to ask you some questions about your experiences with The University of Iowa General Education Program. The General Education courses make up approximately 1/3 of all course work for our students. This means students make a tremendous investment in the set of courses; and the faculty and The University of Iowa administration invests a large amount of resources in teaching the courses. We are asking students, faculty members, alumni, and employers of our students their views about our General Education Program. Like all university's we emphasize some common set of courses; but we also continue to try to evaluate the set of courses and adjust the Program to meet student needs and changes in society our students face after graduation.

We have broken down the four main goals of General Education in the College of Liberal Arts and Sciences into eight outcomes. This list follows, with brief definitions of the meaning of the goals within the General Education Curriculum at The University of Iowa.

*Critical thinking* includes skills in evaluating bodies of information and analyzing and judging values expressed by myself and others.

*Communication skills* include the ability to organize my thoughts clearly and to communicate them effectively in words, writing, and visual displays.

*Understanding of world complexity* includes understanding distinctive characteristics of different countries and the varied ways countries interact with each other.

*Appreciation of diversity* includes understanding my own uniqueness and also the uniquenesses of persons different from me.

*Understanding of scientific inquiry* includes the ability to collect and use dependable sources of data and follow standards of scientific method while evaluating results.

*Social responsibility* includes understanding the importance of bringing my educational skills to contribute to my local community and society as a whole.

*Appreciation of the arts* includes understanding how visual, written, and performing arts help us think and enhance our emotional lives.

*Life of the mind* includes developing interests and habits for life-long learning and enjoyment of creations of ourselves and others.

We know students vary in how many of these courses you take. But for courses you have taken in the course groupings and your major, please give an estimate as accurately as you can of how those courses contributed to meeting the learning goals listed. To show the degree of contribution, please use the following categories:

- a – The course or courses contributed a great deal
- b - The course or courses contributed a modest amount
- c - The course or courses contributed fairly little
- d - The course or courses did not contribute at all

### **Student Survey Instrument: General Education Program**

Thank you for agreeing to complete this survey.

General Education is designed to promote eight major learning outcomes which are listed below. We'll be asking you about each of the following:

*Critical thinking* includes skills in evaluating bodies of information and analyzing and judging values expressed by myself and others.

*Communication skills* include the ability to organize my thoughts clearly and to communicate them effectively in words, writing, and visual displays.

*Understanding of world complexity* includes understanding distinctive characteristics of different countries and the varied ways countries interact with each other.

*Appreciation of diversity* includes understanding my own uniqueness and also the uniquenesses of persons different from me.

*Understanding of scientific inquiry* includes the ability to collect and use dependable sources of data and follow standards of scientific method while evaluating results.

*Social responsibility* includes understanding the importance of bringing my educational skills to contribute to my local community and society as a whole.

*Appreciation of the arts* includes understanding how visual, written, and performing arts help us think and enhance our emotional lives.

*Life of the mind* includes developing interests and habits for life-long learning and enjoyment of creations of ourselves and others.

If you need to remind yourself of what any of these phrases refer to, you can always scroll back up to this list.

We know students vary in how many of these courses you take. But for courses you have taken in the course groups and your major, please give an estimate as accurately as you can of the degree of contribution those course made to meeting the learning goals listed.

1) Have you taken any **Rhetoric** courses at the University of Iowa?

No (Skip to question 2)

Yes

How much did **Rhetoric** contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2) Have you taken any **Foreign Language** courses at the University of Iowa?

No (Skip to question 3)

Yes

How much did **Foreign Language** contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3) Have you taken any **Interpretation of Literature** courses at the University of Iowa?

No (Skip to question 4)

Yes

How much did **Interpretation of Literature** contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4) Have you taken any **Historical Perspectives** courses at the University of Iowa?

- No (Skip to question 5)  
 Yes

How much did **Historical Perspectives** contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5) Have you taken any **Humanities** courses at the University of Iowa?

- No (Skip to question 2)  
 Yes

How much did **Humanities** contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6) Have you taken any **Natural Science** courses at the University of Iowa?

- No (Skip to question 7)  
 Yes

How much did **Natural Science** contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7) Have you taken any **Quantitative or Formal Reasoning** courses at the University of Iowa?

- No (Skip to question 8)  
 Yes

How much did **Quantitative or Formal Reasoning** contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8) Have you taken any **Social Science** courses at the University of Iowa?

- No (Skip to question 9)
- Yes

How much did the **Social Science** courses contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9) Have you taken any **General Education Courses** (such as Cultural Diversity, Fine Arts, Foreign Civilization and Culture, or Health and Physical Activity) at the University of Iowa?

- No (Skip to question 10)
- Yes

How much did courses in one or more of these **Other General Education Courses** contribute to your growth in each of the following areas?

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
------------------	-----------------------	-----------------------	-----------------------	-----------------------

10) How much did courses in your **Major(s)** contribute to your growth in each of the following areas?

I have not declared a major (skip to question 11)

	A great deal	A modest amount	Fairly little	Not at all
Critical thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of world complexity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of diversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding of scientific inquiry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of the arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life of the mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**So we can make comparisons of viewpoints among students and groups of faculty, employers, and alumni, please provide us with some background information.**

11) What is your present major(s) (or say “open major” if undecided)?

12) How many semester hours of class work have you completed toward completion of your undergraduate degree?

13) What is your sex?

Male       Female

14) Please tell us anything else you would like us to know about your experience with your general education courses and how/whether they contributed to you realizing the central goals of the general education program at The University of Iowa (for example, the ones we have listed at the start of this questionnaire).

When you “Submit Survey” below, you will be directed to another website where you may enter your name and email address for a chance to win your choice of an iPod shuffle or an iTunes gift card.

Submit Survey

**Appendix C**  
**Faculty Focus Groups**  
Research Methods

**Sample**

Faculty were invited to participate in the focus groups via an email message from Tom Rocklin, Associate Provost for Undergraduate Education and Chair of the Common Academic Experiences Subcommittee, the entity examining General Education for the self-study. Forty-seven faculty from 25 departments or programs participated in the focus groups. The participants included faculty who taught in the General Education Program and those who did not; respondents in the latter group were able, however, to talk about the impact of General Education courses on upper-level classes and coursework in the majors. The following departments were represented:

Departments Represented in the Focus Groups

**The focus groups included one faculty member from each of the following:**

Biology  
Economics  
Finance  
Integrative Physiology  
Journalism  
Management Sciences  
Psychological and Quantitative Foundations (Education)  
Psychology  
Religious Studies  
Spanish and Portuguese

**The focus groups included two or more faculty from each of the following:**

Art and Art History  
Computer Science  
English  
Geography  
History  
Mathematics  
Music  
Nursing  
Philosophy  
Physics and Astronomy  
Political Science  
Rhetoric  
Sociology  
Teaching and Learning (Teacher Education)  
Theatre Arts

**Data Collection**

Five focus groups were conducted between February 16 and February 26, 2007. Each group was conducted by a facilitator and note-taker. These roles were performed by students in the Graduate Programs in Student Affairs in the UI College of Education, all of whom had training in qualitative research methods. In addition, each group was observed by a member of the Common Academic Experiences Subcommittee. Interviews were tape recorded and lasted about one hour.

Interview questions were prepared by the Common Academic Experiences Subcommittee (see specific topics below); these questions served as the basis for discussion in all of the focus groups. The questions were divided into two topic areas: (1) Goals of the General Education Program at The University of Iowa, and (2) Delivery of the General Education Program at Iowa.

## **Topic 1: Goals of the General Education Program at UI**

- What are the goals of the General Education program at Iowa?
- To what extent is the General Education program accomplishing those goals? In what ways is it not accomplishing them?
- In what ways, if any, should the goals be different?

## **Topic 2: Delivery of the General Education Program**

- Who should teach General Education courses?
- In what ways, if any, does the designation of a course for General Education credit affect the way you teach the course? In what ways should designation of a course for General Education credit affect the way it's taught? Is this the same for all General Education courses?
- What are the incentives for teaching in the General Education program? What factors discourage teaching in the General Education program? What incentives (or removal of what obstacles) would most improve the General Education program?

### **Data Analysis**

The researchers – the group facilitators and note-takers -- reviewed the audiotapes and prepared detailed descriptions of the interviews; in most cases, these descriptions were transcripts of the interview tapes. The researchers met on March 9, 2007 to talk about the data across the interviews and identify tentative themes and categories of data. After that group meeting, Elizabeth Whitt, Faculty Fellow in the Office of the Provost and Professor in the Graduate Programs in Student Affairs, reviewed the transcriptions and developed final themes and categories. This rest of this report is organized according to (1) responses to the first 2 interview questions – what are the goals of General Education at UI and how effectively are those goals being met --, and (2) other interview themes. Respondents' words are used throughout to illustrate the themes.

### **Detailed Results**

#### Goals of General Education at The University of Iowa

In response to the question, "What are the goals for the General Education Program at The University of Iowa?," participants described both intended goals and unintended outcomes. Each is described in the following section. Intended goals are organized by general categories of responses and sub-categories and participants' words are used as illustrations.

#### Intended Goals

Responses across the focus groups can be grouped into 2 categories of intended goals of General Education (GE) at UI: (1) General Education is intended to produce "educated persons" and (2) General Education is intended to foster the development of "life skills." Respondents described these goals as related and integrated, not discrete.

#### General Education is Intended to Produce Educated Persons

Within the category of "producing educated persons" are the following specific goals: (1) to provide breadth of study before specialization, (2) to broaden students' horizons, (3) to provide a common core of knowledge, and (4) to facilitate understanding of different modes of inquiry.

#### To provide breadth of study before specialization.

Across the groups, respondents described the primary goal of GE as providing students a broad background of study and knowledge prior to focusing on coursework in a specific major. One faculty member stated, "The goal [of GE] is to provide a well-rounded education in areas students might not choose if given free choice." Another noted "[The goal] is to make sure that somewhere in their college career, students must take courses outside their major or discipline." This breadth of study "exposes them to a variety of knowledge disciplines and a variety of people."

One respondent asserted, "We ask our students to specialize pretty early," so GE "ensures a breadth of experiences so they don't focus too narrowly too quickly." Another noted, "Students often think they know what they want to do when they come in, but that's not really where they're going to end up. We really try to work with students to use the General Education requirements so they can explore majors, explore broadly . . . The idea that they can take a course in anthropology or geology . . . is unthinkable to them in high school. So that kind of exposure to other fields – they may change their major."

In addition, GE requirements "provide a breadth of knowledge for study in the professional schools." A faculty member in a professional program noted, "Our students specialize early . . . so the general education requirements, at least here at Iowa, are interspersed throughout our curriculum . . . We design a curriculum to keep bringing them back to content of the disciplines that have a broader orientation . . . it gives them some sense of the human condition. So for us, it's vitally important to bring them back in contact with other disciplines."

#### To broaden students' horizons.

Related to the goal of providing breadth of study is the goal of "broadening students' horizons." General education requirements are intended "to force students to get acquainted with something very much outside of their experience;" "a lot of students have a fairly narrow background and it's a revolution for them to be able to appreciate diversity of thought." For example, "Forcing them outside their comfort zones to look at foreign civilizations is good. I'm proud of the fact that this university has as much foreign language requirements as it does." In addition, general education "should make students uncomfortable. It should challenge them. They should have to rethink . . . to understand other people's beliefs -- which is why we have a cultural diversity requirement -- as well as their own, from several points of view."

#### To provide a common core of knowledge.

In general, respondents stated GE at Iowa is intended to provide a common core of knowledge that serves as a common foundation for upper-level study, regardless of major. One faculty member noted, "What is the minimum you need to have to be called an educated person? This is more or less what we're trying to get to. We are turning out educated people and we want to make sure we don't miss something everyone should know."

Some faculty identified specific courses and disciplines as part of this "common core." For example, "Reading, writing, and arithmetic -- [and] history is very important. I think you've got to know where you come from." Science – "preferably experimental science with hands-on laboratory experience" --, arts, humanities, and foreign languages also were specified as part of the "core."

Other respondents, however, focused not on specific courses, but on general ways of thinking and understanding across disciplines: "There is no common core of knowledge across disciplines, but we can provide a common core of methods of inquiry across disciplines, a common method of learning about the world." On the other hand, one respondent questioned this perspective on the "core": "Are we missing something about common ideas? The old core curriculum has gone away . . . because no one can agree on a core anymore, which may not be a good reason for it to go away."

#### To facilitate understanding of different modes of inquiry.

A common assertion across the groups was that GE is intended to help students understand, appreciate, and use different ways of knowing and different methods of discovery across disciplines. Thus, goals of GE include "helping students learn how to solve problems, conduct research, and think in different ways so they can approach problems from multiple standpoints," "understanding modes of inquiry appropriate to different disciplines – how historians know and how anthropologists create knowledge," and "empirical reasoning." In the words of one faculty member, "What's important is that they come up with some way of gauging the world as logically and informatively as possible . . . I think it's very important that students understand the realms of these different ways of understanding and what they can do in those realms." Another commented, "[they also need] understanding of where information comes from. If you study history, you need to know . . . how historians come up with history." Yet another asserted, "Ideally you're introducing a way of looking at the world and some slice of knowledge to be learned."

#### General Education is Intended to Foster the Development of Life Skills

Within the category of “fostering life skills” are the following specific goals: (1) to foster understanding of, and develop skills in, different ways of thinking and problem-solving and (2) to develop effective communication skills.

To foster understanding of, and develop skills in, different ways of thinking and problem-solving.

Respondents asserted that GE at Iowa is intended to “teach students to think in different ways,” including skills in “effective reasoning,” and “critical thinking.” One faculty member asserted, “I don’t think the goal of [GE] should be dumping knowledge in people’s heads. It’s teaching people to think in different ways, and the goals or the virtue of that is that you go on to the rest of your life and have a way to think about that.” In a similar vein, a respondent commented, “Being able to [trace logical decisions] . . . will stand you in good stead the rest of your life. You can get information from a department for a little while, then it’s gone. But reasoning skills stay with you the rest of your life.” Another noted, “We want to help them in thinking for themselves – help students see their agendas and where they want to go. To digest, improvise, use it on their own.”

In several groups, this goal included “how to evaluate knowledge and information” and “how to discern valid sources of information.” Much of this discussion focused on sources of information on the internet and the challenges of teaching students how to think critically about those sources. One faculty member commented, “I think this is a difficult sort of thing to teach and you have a difficult time separating out what is worthwhile reliable information, and what to be more skeptical of, and to be skeptical at all. Greater skepticism is called for.”

“Ethical decision making” also was mentioned as a goal of GE. Students “need to be able to make ethical decisions for the rest of their lives and how to do it properly. They need to know how to reason in that framework.”

To develop effective communication skills.

Effective written and oral communication skills also were mentioned across the groups as goals of GE at Iowa. In the words of one respondent – a faculty member in a scientific discipline -- , “Writing should be a central pre-occupation of the liberal arts experience.” Another put it this way: “Goals of writing, reasoning, and argument . . . I try to teach this at every step of the way.” In addition, another said, “The basic goal of gen ed is the ability to reason [and] under the ability to reason are certain skills they need, communication skills, reading, writing, listening, speaking.”

Another commented, “One of the things we’re always asking is ‘What kind of provision is made, even in large courses, for writing and speaking?’ For students to be able to express themselves, both on the page and orally . . . And I think that is central to what we’re doing.” Yet another said, “Every general education course should satisfy the criterion [of] Communication and there are multiple ways in which faculty have incorporated that into their classes . . . [We’re] trying to get the students to think about other forms of communication, oral presentations, group projects, how to be on the receiving end of communication. We have some math faculty, for example, who talk about trying to get students trained to communicate how they are solving problems . . . So there are a variety of ways that people are trying to pursue this and it goes beyond writing – just many forms of communication.” Writing also was mentioned as an area of difficulty in implementing the goals of GE, an issue addressed in the next major section of this report.

Not Goals

Several respondents offered opinions about that the goals of GE at UI are not, or should not include. One faculty member, for example, asserted that “service learning, health habits, and [other] life skills” are “what secondary school is for . . . And if they don’t do the job, it’s not our job to make up for poor secondary school preparation along with those kinds of practical issues.”

Unintended Outcomes

In the process of identifying and discussing the goals of GE at Iowa, several respondents talked about unintended consequences of GE: (1) “To force faculty to take a broader view of their discipline, to present things in ways other than we do as scholars,” (2) to “provide training and experience for graduate

students” who teach GE courses at Teaching Assistants, and (3) to “serve as a screen into upper-division majors” that require certain grade point averages and/or preparation for admission.

#### To What Extent, and How Effectively, are the Goals for General Education Achieved?

The interviews elicited descriptions and discussion of obstacles to achieving the goals of general education and examples of effective outcomes of, and strategies for, GE courses/experiences. The latter are addressed later in this report in the section about teaching strategies.

#### Obstacles to Achieving Goals for General Education

Four obstacles were mentioned consistently: (1) students’ characteristics and perceptions of GE, (2) challenges of teaching writing, (3) large classes, and (4) structures and funding of GE. In general, these obstacles were seen as related to one another.

#### Students

Across the focus groups, students comprised several challenges to achieving the goals of GE. First, students were described as “disinterested” in GE courses and in achieving the goals of GE. For example, “Students take these courses [but] they’re not interested in them; they’re just completing a requirement and they’re not putting in a lot of effort.” Another respondent added, “And they’re looking for the easy ones.” Students’ attitudes about GE courses affects both learning and teaching: “I do think . . . most of them don’t want to be there and so the instructor has to, in a way, sell it to them in the beginning. I think that’s a challenge and you get tired of that.” Another faculty member noted, in a similar vein, “It’s a relief for me to stop teaching [GE courses].” A colleague responded: “Me, too. Then I can teach courses for people who actually want to be there.”

Across the groups, faculty also were concerned about students’ preparation for college, particularly their writing skills, a topic addressed in detail in the next section. In general, however, students were perceived as lacking readiness for college-level work, including general education. One respondent noted, for example, students’ transition from high school to college: “I keep thinking about making the transition from high school to college, and some of these courses that – in high school they have teachers looking over their shoulders every day, saying ‘Did you turn your homework in?’, and giving assignments five days a week. They get in college in the gen ed courses and they have a midterm and a final. So they wait until the midterm to actually start working because in high school they had work to do, but the teacher was there babysitting them. So maybe there is some transition . . . One of the purposes [GE courses] serve is a transition to upper-level courses [where] the expectation later on is that [they’re] taking more responsibility.”

In a similar vein, another noted, “There’s a huge cognitive leap for many of them – not all of them – when they come here. Their out-of-class study time in high school is three hours a week, so when they say [they’re studying] six hours a week and are studying harder than they’ve ever studied, but we’re saying, well you actually need 20. It’s leading them through those processes because I know we’ve had students who have never had an essay exam in high school.”

Several respondents talked about gaps in students’ academic preparation. For example, “Students don’t know the things I would expect them to know. Students aren’t working with the same pool of knowledge.” Another respondent described students in his/her Honors classes: “I’m going through this process with my Honors students now of brainstorming questions, feedback . . . and even some of my Honors students are absolutely puzzled. They say, ‘What do you mean, brainstorm questions? You mean we have to write back to you again?’ And they just keep coming to me saying, ‘We don’t understand what this is.’ It’s like it’s so foreign to them, the whole process.”

In response to some of these challenges, one faculty member stated, “I’ve gone to un-announced quizzes. It’s kind of an elementary thing, but . . . it’s documented that students won’t come to class . . . [students] think, ‘I’ve got to organize my time and I’m going to go to the places where there’s an incentive to go.’ So now I’m a real hard case and . . . call names, that type of thing.” Another recommended being more clear with students about the value of GE requirements: “I would love to see in the syllabus or talked about in the first five minutes of class – because so many of the classes serve as the introduction

to the discipline – five minutes on why this is a social science and how this fits into their General Education requirement. What is social science and what are social science questions? So students are bombarded with a bigger picture of how it all fits. I think that would go a long way in helping them see what the purpose of [GE] is.”

Some respondents, however, perceived students differently. One stated, for example, “You know you can look at the glass as half empty or half full. While some students – we may not touch them, but guess what, we may not touch them anyway. And other students – you know, I’ve seen the light turned on in some students who otherwise never would have thought about it . . . I can see the light go on because they’re thinking about things in different ways, and it’s wonderful. It’s wonderful in the classroom.” Another asserted, “I think we should give our students credit; most of them are pretty bright people and I see them being pretty engaged, most of them . . . I think most of them have an understanding that there is, there’s a reason to have the [GE requirements] . . . Having gone through orientation a couple of times, I heard it getting drilled into them, if they’re paying attention, and I think most of them are paying attention.”

### Writing

In most of the groups, a considerable amount of interview time was devoted to talking about the challenges associated with teaching writing in GE courses. According to the respondents, these challenges were associated with students’ preparation for college-level writing and the size of GE classes at UI. Although many respondents addressed this issue, one faculty member’s comments are typical:

[Writing] is another important part of the mission of general education. I have often been very concerned with the execution of writing by students. In a class of 240 students, I have to have a writing assignment. The papers have to be written based on content and quality of writing that gets to the ability to communicate ideas in an intelligible and compelling fashion. One of the things I struggle with as an instructor for the course is if we have only one writing assignment and we are grading on the quality of it, essentially all we are doing is evaluating students based on the skills they come in with. We are not actually doing anything to teach the students how to write nor are we establishing any type of baseline for students in terms of what they came in with and how you make progress from where you started.

Another’s comments also were typical: “ My students are terrible writers. I’m just at a loss. I don’t know where to begin, that’s how bad it is . . . It seems to me we are stretched thin. We have such big enrollments. I cannot coach 45 students in a semester how to write an essay. It’s just impossible.” A faculty member who focuses on achieving “the goals of writing, reasoning, and argument” across his/her courses noted, “It’s becoming a harder and harder sell . . . Students are seeking courses that don’t require writing, reasoning and argument . . . Students don’t take at face value why writing is useful . . . It’s like pulling teeth.” Another commented, “The younger generation communicate in different ways than we do. They text, IM . . . but they need to learn a serious effective writing style, but they don’t see the point of it because they text and get across what they’re talking about.” Yet another noted, “I’m absolutely alarmed when I get a paper from a student and find out they have no concept of grammar. When I start talking about structures of sentences and parts of speech, they’re blank.” Concerns about writing were not, however, limited to undergraduates. For example, “The TAs grew up in this same educational process. I have to re-write my TAs’ papers.”

Other faculty noted the connection between writing skills and reading. For example, “One of the subtexts that hasn’t been brought up is that teaching writing means teaching reading. [The Pew Center] reports that 80% of Americans 18 to 22 [years of age] don’t touch a newspaper in a week . . . I think one of the problems in getting them to participate in an iterative editorial process is that they’re a-literate . . . They can read, but they just don’t need to.” Another respondent concurred: “One of my colleagues and I were just talking the other day and we were saying the problem is not that the students can’t write, it’s that they can’t read. They don’t read the question, so they write something totally irrelevant.” Yet another said, “A lot of it is the inability to actually take the time to read [an exam question] and think about what it is asking.” Another noted, “We see it also in mathematics . . . Everyone is concerned with the word problems and how hard they are to do. And what I have to explain is, number one, they have trouble

reading the problem. I mean, we're talking about structured sentences. This is not a newspaper, it's not a book, it's just a few [sentences]. They need to be taught that. So it's tough."

In a later section of this report, respondents address structural aspects of GE at Iowa, but one of those aspects is relevant here: writing across the curriculum. One faculty member noted, for example, when talking about the challenges of "teaching writing" in GE, "This university doesn't have a writing-across-the-curriculum program as do most universities." Another commented, "I wonder about writing-across-the-curriculum – courses across departments that are writing-intensive. It would require more credit for students and more time for faculty to read. But I would love to do this – to read through a paper once for the philosophy and then a second time for the rhetoric, the structure, the organization."

### Large Classes

Respondents talked about large GE classes as inhibiting effective teaching and learning. One faculty member noted, "All our GEs are huge. Is general education best done where [students] are interacting with the teacher?" Another described him/herself as "a non-entity in the lecture hall. They won't talk to me – like, 3 people, maybe. They talk to the TAs and they talk to each other a great deal. So I've begun to think about it spatially, like how can I infiltrate from my silent spot up front? I'm talking, but I have no idea what happens in that classroom. Absolutely no idea."

Reflecting on the goals of GE courses, a respondent asserted, "To me it is very hard to try to teach communication, critical analyses, and writing in classes of over 50 students, and they are all bigger than that by quite a lot. The TAs end up doing it in the sections and you wonder how effective that is." Another commented, "These are skills that are labor-intensive to teach. And it comes back to the small class sizes. I teach colloquia for majors and there you're able to see real progress over the course of the semester . . . And I don't see that in the large classes, the large lecture classes where they turn in a paper and they get it back with lots of comments, but God knows if they actually read or absorb those."

In summary, one respondent asserted, "If you really want to get the job done, have small classes. I think that's the headline." But the financial implications of reducing the size of GE classes were raised by several faculty. For example, "Small classes would be a great goal for General Education [but] it's hugely expensive . . . not only in money, but in the time that's going to be devoted by the people earning that money. But experience has shown that it's a way to make progress, and the people who are committed to it, as opposed to temps or adjuncts or graduate students who are here only for a short period of time, are more desirable than the alternatives. But it's very expensive." Another commented, "I guess I would have to say that if it came down to more small classes versus more permanent faculty, I'd go for small classes." On the other hand, as one faculty member noted, "You could reduce class size to 20, but the professor still has to have the consciousness and change pedagogy; we need to have people who value those opportunities."

### Organization of the GE Curriculum/Requirements

All of the groups spent some time discussing the ways in which GE is organized (e.g., curricular structures, departmental contributions, consistency of contributions and quality) and, in most cases, these issues were seen as obstacles to achieving the goals of GE.

One respondent's comments about the organization of the GE curriculum is illustrative of others':

My take is that I buy in fully to the purpose of having GE courses [but] I think the list of categories seems a little bizarre. It feels too specific to me. I think there are years of a political process that is gone into these which courses. So quantitative, social sciences, natural sciences, and humanities, so those four categories seem reasonable categories to me. They are fairly broad, but you want students to have exposure to at least one social science course, humanities, natural science. But these other ones feel too specific to me. They feel like sub-categories. Historical perspectives feels like a subcategory to one of these broader categories. So does rhetoric, interpretation of literature feels like it should be an option under humanities. We have these very specific requirements and then we have these broad categories. If we are going to do that, then I think it would make more sense, be more interpretable if you had categories of

courses students could take and then here are some specific requirements you have to take. So the list feels like it combines specifics and categories.

Another noted, "I think [the GE curriculum] is very difficult to understand. I think if there was a way to simplify it that makes logical sense . . . it would make far more sense to students and to me. We all find it enormously cumbersome . . . I do think it is something that has been put together politically over the years. It needs to be re-examined fundamentally." Echoing these sentiments, another respondent posited, "There seems to be an official version of [GE] for a website – 'people who are educated should be able to . . .'. But what you can't put on a website is 'don't graduate people who can't do those things.' So GE ends up being a screen into upper division majors, which I think compromises the whole idea in the first place."

Some respondents had specific recommendations for improving the GE curriculum. One recommended, for example, "Maybe [we need to] bound it more, or limit it, instead of having it so wide and diffuse . . . I also think we're in different times and with things like the world wide web . . . we're not helping students understand and process visual information [such as graphs and maps]. Visual thinking is actually pretty important to intellectual development." Another said, "Some institutions have gone to core competencies instead of courses, like a writing competency or a critical thinking competency. It's just a different way to organize, and then, of course, the GE requirements satisfy one or more of the core competencies . . . The idea is, maybe you have a writing competency and to satisfy that competency you have to take a course in which you write a paper."

Another respondent called for a focus on "outcomes":

It seems to me in some ways given this thrust on outcomes we ought to be asking ourselves first 'what outcomes do we want?' and then 'what kinds of courses do we want to put together to get those outcomes?' If the outcomes mean people need to be understanding different modes of knowing, then we ought to be able to articulate what it is we want them to do in those areas so that they can be informed people within the 21<sup>st</sup> century. Now I don't think it's impossible with the way we have it structured, but I'd like to start with those outcomes. If we're going to be proactive and not let the national commissions tells us that we're going to have to come up with some standardized test -- we want to be able to say what it should be. When students finish their [GE requirements] or graduate, what is it we think they should be able to do? Work out ways of them demonstrating and honing and us then helping them develop those kind of skills and particular skills that they'll take with them the rest of their lives so that they can convert information and changing technology and a changing world and have that set of ways in engaging within a world for themselves. What do you want them to be and what kind of experiences does it take to get them there?

Other respondents noted positive aspects of the current structure. For example, "Our system before [1981] was a set of core requirements. It was much more set courses, and in terms of a common experience, it was more of a common experience for students. One thing I really like about the system of our current structure is . . . the way the University uses it. All the colleges – Engineering is somewhat different, but not entirely – draw on the same set of General Education requirements. And that's a tremendous benefit to our students who are going off into the other colleges, [in contrast to] other institutions where each college has its own set of requirements." Another noted, "I like the flexibility because it allows our students to take their high school experiences and expand on them . . . [For example], a student who's had AP European History in high school can come here and take Ancient History. So they're not forced into a course that doesn't allow them to take advantage of what they've already done."

As part of the conversations about the size of GE classes, some respondents also noted the heterogeneity of students in GE classes; in general, this was related to both concerns about ways in which GE is organized at UI and student characteristics. One respondent noted, "I've been frustrated that there isn't a better enforcement of pre-requisites in certain fundamental courses before they move on. So one [concern] is ordering of requirements. I can go into all kinds of specifics of what is lacking in their abilities as they supposedly move beyond the GE level. Certainly, writing is a major factor in my field.

They don't know how to write." One respondent called for "certain benchmarks. Until you can do these things, you cannot move in these areas. We should have some say in the quality and expectations." Another noted, "You've got the good students in the class complaining, literally, because it's too easy. And I think it's too easy. But 30% of the students are dropping the class because it's too hard. In a course like [one I teach], you start off with 200 and end up with 150 and still some people fail."

#### Teaching General Education Courses

Respondents talked about several issues related to the delivery of GE courses: (1) who should teach GE courses, (2) how GE courses should be taught, and (3) incentives and "disincentives" for teaching GE courses.

#### Who Should Teach GE Courses?

All focus groups were asked "Who should teach GE courses?" Some respondents noted "We all should." But the responses to this question in several groups focused on having "the best faculty" teach GE courses. As one faculty member stated, "The best faculty have the opportunity to say what this discipline is really about in a most meaningful way." Another commented, "Students don't want to be there [in GE classes]. It may seem like it's a waste to have your best faculty in those classes, but I think it's just the opposite. It's necessary. It needs to be your best teachers. They don't even need to have the best grasp of the discipline, they need to be able to teach." On the other hand, one respondent asserted, "Despite the fact that the University professes that our best and brightest are engaged in General Education teaching, that is not, in fact, the case. We have a lot of part-time faculty, a lot of graduate students who have been here a very long time or are kind of hanging on, delivering our general education curriculum."

What characterized the "best faculty" was a matter of much discussion. Comments such as "there's a lot of different kinds of best" were typical. Yet several respondents attempted to define "best." One respondent posited "Someone who has a broad grasp of the field, someone who can engage students in a discussion of major topics, someone who can bridge the theoretical and the practical. Someone who can really walk on water – that kind of approach! This is needed in the first class because this is when the student is the most needy and has the least understanding." Another "would add passion to that because students pick up on that. They sometimes say . . . 'this isn't what I want to major in, but this professor really loves what he or she is doing.' They pick up on that and it really excites them."

At the same time, however, respondents noted that "everyone wants the best faculty." As one noted, "There's a real tension here about getting your best faculty in these classes because, you know, the Honors program wants the best faculty." Added another, "Or the graduate programs, or the professional programs." A faculty member responded to this discussion: "Maybe that says that same person should teach that same course for an extended period of time so that we can rotate the best to different courses."

The role of TAs in GE courses also was raised across the groups. As one faculty member noted, "The reality is, with big classes, you may have your best faculty teaching, but the close contact students have [is] with Teaching Assistants. They don't have the faculty there." Another respondent stated, "This is a bit of a sore subject – quite controversial. There's something in the University preamble that emphasizes [the role of] faculty, but many [GE] courses are taught by TAs. If so, there needs to be heavy supervision from the faculty. Faculty are better teachers than TAs – or should be, otherwise we should quit." Another commented, "Not to disparage TAs, but my suspicion is if there's room for improvement [in the GE curriculum], it's here. Because it's too easy to let your TAs go when they have their own section." On the other hand, one respondent said, "I like the model of having graduate students teach; it's a shame there's been a shift into adjunct faculty." Another noted, "I actually think that one of the things that does help is that teaching assistants are closer to where the students are; they speak their language. I mean, my students have to translate all the pop culture references [to me]."

#### Strategies for Teaching GE Courses

Comments about who should teach GE courses led to discussions about the ways in which GE courses are, and/or should be, taught. Strategies tended to focus on (1) fostering understanding of different ways of thinking about knowledge and meaning making, (2) facilitating student engagement and participation in large classes, and (3) teaching writing. Regarding the first, a science faculty member described his/her approach: "[I] think consciously that this may be the only natural science class these students ever get [so

I] spend time thinking and talking about how the knowledge was created, what the process was, rather than just 'This is what we know.' "

### Teaching Large Classes Effectively

Some groups discussed at length strategies for use in large classes and respondents offered examples of their own teaching practices. A respondent described his experience using "one minute papers": "I've had the large lecture class do a one minute write at the end of the lecture. [They answer the question] 'What do I know now that I didn't know before?' And then it turns into a two-minute write, and then they say, 'We're not done.' But they just turn in those pages, and I comment on them and take them to the top of the next class and say, 'Here's some questions that came up.' And that's sort of tying it back, answering, defining the concept that was undone, or raising an interesting point, or reading a whole discourse that someone has written on the topic that was really sharp."

One group talked quite a bit about posting class notes on line. One respondent commented, "It's one thing if an instructor wants to put an outline up there, but there are some instructors that put a complete set of notes out there. And then I'm sitting there telling students they must go to class and they're saying they can get notes on line." Another noted, "I think this is a real problem." "Because it's on line, they're not taking notes. Well, taking notes is part of the learning process. [On line notes are] not the active form of learning that students need to internalize and learn the material." Yet another said, "I'm terrified the students are going to say 'Why don't you just scan the notes and put them on line,' and I refuse to do it."

A faculty member who does put notes on line said, "I tell the students, 'If you can learn this on your own, that's fine with me. You do not need to come to class. I put my lectures on line, but that's nowhere near my full set of notes. I'm the type of lecturer who puts minimal amount of text on slides . . . I say, 'You can learn that from the book if you want to, but what I say in class is going to be more of what's on the test.'" Another respondent explained, "I put my notes up on line and I tell them to bring them [to class] because . . . if they don't have the notes, they spend all their time writing and they don't listen. They're too busy copying so they don't learn."

Another group had an extensive conversation about "clickers" in GE courses. Faculty who had used them described their uses and effectiveness. In general, "clickers" were mentioned as one way to get students in large classes to engage with the material, with the instructor, and with one another. For example, "I've used them in all different forms. I've used them a lot actually, for quizzes, to keep attendance, and to keep grades. So, instead of having homework, which I don't have enough TAs to grade, we use these . . . But it works incredibly well. The attendance is 100% and the top prize is passing the exam with 100% and many of them have done that . . . For these big science courses, it has increased participation in class. I routinely talk to my students and in a class of 300 students, I'll have 50 students that raise their hands and talk . . . [But] they're very expensive." Another respondent who uses "clickers" described his/her class as "brimming with excitement. And I'm not kidding. This sounds like an advertisement for these, but it's not. [When] you put up the right answer, there are people literally cheering . . . They really, they're there. I think this is something they can really relate to as young people."

On the other hand, one faculty member asked, "How does one balance the current pedagogical fad of group efforts, of collaboration, with the fact that we expect students to grow as individuals, and we expect them to demonstrate that as individuals, not as part of a group. I think there's a tension here that I haven't been able to resolve in my own mind, but it needs to be addressed in how these [GE] courses are structured."

### Teaching Writing

Just as writing and concerns about the quality of students' writing were mentioned often in the interviews, strategies for teaching writing, particularly in large classes, also were identified and discussed. One faculty member's comments are illustrative: "One of the things I've seen and really loved, in terms of seeing where students are coming from out of high school and where they need to get by the time they start their major work, are the gen ed courses where they have to do a research paper in pieces. You know, there's an outline and then they get feedback on the outline, so that there's a learning process that's going on that is setting explicit expectations."

A faculty member in science described his/her efforts to teach writing in large science classes:

I've tried at least, since I've been here, in the big intro courses, to do a couple of writing assignments, and as we all know, it can be hard when you have 350 students, but one of the things that I think is important, especially in science, general science education, is to learn how to critically use the Internet. And science is a great topic, especially astronomy, in particular, because there are so many myths, and there's so much bad information, I mean, in all of our fields, but especially in astronomy. So we do, I have them do, a couple of writing assignments, and the goal there is to suss out good from bad astronomy on the Internet. And I always tell them, once you leave this course, your only exposure to physics and astronomy is most likely going to be the media. So that's my sort of spin on it, and it's worked really well. They absolutely love it. It can be a grading nightmare, and I have help with that. But it's one of the most enjoyable experiences. They're so shocked that you have them write about science. It's really, it's refreshing because a lot of them are quite good at writing, and they're not quite as good at working out problems, so it's been a good experience.

Yet another example was offered from a humanities class:

One thing I've tried in my gen ed courses, is that after the lectures are over, I had them email me a one page, single spaced statement of what we've done, a critical response to it. Emails help because they can do it after the course is over, and then I email them back on Saturday morning with a number of sentences. And it's exhausting, it takes 5 hours a week or something to do this, but it's ungraded, so they don't have to worry about being sure that they know what they're doing while they're doing it, cause that's a big concern. I'm trying to teach them something, they don't have a quiz yet, and they're going to get a grade, so it's ungraded. I've noticed that over the course of the semester, it's remarkable, just by having them sit and do this, their writing gets so much cleaner, than if they went to the writing center once or twice a semester, though that would help, too.

The use of computers to teach writing was a topic of discussion in several groups. For example, "We know that students don't mind going to computers . . . I do know for example, that when TAs have established things like, you have to submit 3 questions to the website on the reading, and then other people are responding to them and so forth. And so they are actually using the website for their class, the teacher doesn't have to monitor it all and it's all being done through the kind of websites that they're familiar with, and the TAs are a lot better at setting up than I am."

#### Obstacles to Teaching General Education Courses

Each focus group talked, at least briefly, about incentives and "disincentives" for teaching GE courses at UI. Most of the discussions focused on the University's reward system for tenure-track faculty. When asked, for example, about incentives for teaching GE courses, one faculty member noted, "That's one of the problems, really. Unless you're a masochist. It takes a good amount of effort. It's a real challenge." Another asserted, "I think there's a disincentive in that [the GE classes] tend to be big. If the idea of [GE] is communication, then that is a difficult task. And the [University's] administrators don't recognize how much work it is to teach one of these courses." Yet another echoed these comments: "There is a disincentive. Teaching [GE] is a different kind of work than the 'research and publications' enterprise that we are in. When you teach seminars or grad courses, you either are teaching about something from the research and publications enterprise or you are getting ideas for it. The University needs to recognize the struggle between the research and publication mission and the teaching mission." In response to that comment, another faculty member said, "We've lost people because of this disconnect." One faculty member asserted that "We might actually have a reverse incentive system going. If you're a serious researcher and you're anybody in the field, what are you doing teaching the big Gen Ed classes? I think I see this, maybe not in my department because we have senior faculty teaching [GE], but I've seen other departments where it's the new kid on the block or a hired lecturer who is teaching [GE]." On the other hand, a respondent asserted "Faculty should be able to teach their research and share their excitement with first-year [students]."

Several respondents commented, however, on their commitment to teaching GE courses, despite “disincentives.” For example, one stated, “I think one of the issues is that there aren’t a whole lot of rewards for teaching these courses. You have to do it because you love teaching it. Because you like it at the end of the semester if somebody says, ‘I thought I was going to hate this class, but I didn’t.’ All the rewards are internal; there are few external rewards for taking on these classes.”

Some of the groups addressed this concern. For example, a respondent asked, “Why can’t there be a reward structure for encouraging the best faculty to teach [GE] courses?” Another faculty member noted, “And faculty are easily rewarded because we have nothing. I mean, I’d be happy if my phone calls were paid for for the year.”

There were respondents, also, who asserted that “teaching counts” in promotion and tenure decisions. For example, one noted, “The simple fact is that teaching is viewed with great favor, let’s put it that way . . . Demonstrated effectiveness [in teaching] is very important.”

## Appendix D Employer Interview Methodology

### Approach

We interviewed a small number (12-15) typical cases of employers who recruit U of Iowa students with no explicit liberal arts major specified. Contacts were identified through the U of Iowa Career Center and associations of committee members. Occupational spheres represented were from corporate retail (e.g., sales or service), public sector (e.g., government employee, public safety), public relations and marketing, and staff positions in professional settings. Interviewees were from middle to upper management and representatives of general hiring networks from their fields (a local franchise manager of a national or international corporation or a local profession setting with national or international affiliations). Interviews were in person when possible and over the telephone when not. Contacts were made via e-mail with the attached letter (which included the student questionnaire).

### Letter to Employers

Dear Sir or Madam:

Would you be willing to talk with me for 15 minutes about the General Education Requirements which make up part of the undergraduate curricula at The University of Iowa? I could call you at a time convenient to you, or meet you at your offices.

The University of Iowa is in the middle of an extended process of evaluation for re-accreditation by the Higher Learning Commission (HLC) of the North Central Association, a process which will continue until spring 2008. Many of our university programs are now preparing self-evaluations, a major one being an assessment of the General Education Requirement (sometimes called the "core" requirement) which makes up about one-third of a student's 120 hour graduation total. We have asked students in a mailed survey for their comments on these General Education Requirements. We have set up focus group discussions with faculty and teaching assistants to learn their views about this portion of the undergraduate program. **We would also like very much to know the views of employers of University of Iowa students about these General Education Requirements.**

For your information, I have attached a copy of a cover sheet sent to students about their survey, which includes information on the goals of General Education (from the standpoint of the University). Courses intended to fulfill these goals come from nine groups of departments (rhetoric, foreign language, interpretation of literature, history, the humanities, natural sciences, social sciences, quantification courses, and a mixed group (including the arts and physical education).

I would appreciate your views on these three questions.

1. To what extent are these skills (listed on the enclosed cover sheet) valuable to you in hiring employees to your company?
2. If the skills are valuable in your priorities for identifying, hiring, and retaining employees, are University of Iowa students adequately prepared in these areas when they graduate?
3. What general skills in this list of eight, as part of a General Education program, would you add? Or subtract? (Jane Schildroth of The University of Iowa Career Center has worked with our department for some years helping us develop a special course that links the academic careers of students with employer expectations. This is why I approached her for ideas about people, such as yourself, that could provide the employer viewpoint on this required or "core" set of courses in The University of Iowa curricula.)

I will call to see if you have a slot of time to talk with me. Or, please feel free to e-mail me to suggest a time, and I will accommodate to your schedule (stephen-wieting@uiowa.edu).

Thank you for considering this; your perspective will help us a great deal.

Sincerely,

Stephen G. Wieting  
Associate Professor of Sociology  
HLC Common Academic Experience Subcommittee

Encl.

## Appendix E Bibliography

### Bibliography: General Education

1. Mortimer Jerome Adler, *The Paideia Proposal: An Educational Manifesto*, New York, Macmillan, 1982.
2. Mortimer Jerome Adler, *The Paideia Proposal: An Educational Syllabus*, New York, Macmillan, 1984.
3. Mortimer Jerome Adler, *Reforming Education: The Opening of the American Mind*, New York, Macmillan, 1988.
4. American Sociology Association Task Force on Assessing the Undergraduate Sociology Major, *Creating an Effective Assessment Plan for the Sociology Major*, Washington, DC, American Sociological Society, 2005 (available at <http://www.asanet.org/galleries/APA/Assessment%20Final%20Copy%202005.pdf>).
5. Association of American Colleges, *Integrity in the College Curriculum: A Report to the Academic Community*, Washington, DC, 1985.
6. Association of American Colleges, *A New Vitality in General Education*, Washington, DC, 1988.
7. Association of American Colleges and Universities, *Strong Foundations: Twelve Principles for Effective General Education Programs*, Washington, DC, 1994.
8. Association of American Colleges and Universities, *Greater Expectations: A New Vision for Learning as a Nation Goes to College*. Washington, DC, 2002.
9. Association of American Colleges and Universities, *Taking Responsibility for the Quality of the Baccalaureate Degree*, Washington, DC, 2004.
10. Association of American Colleges and Universities, *Liberal Education Outcomes: A Preliminary Report on Student Achievement in College*, Washington, DC, 2005.
11. Daniel Bell, *The Reforming of General Education: The Columbia College Experience in Its National Setting*, New York, Columbia University Press, 1966.
12. William J. Bennett, *To Reclaim a Legacy: A Report on the Humanities in Higher Education*, Washington, DC, National Endowment for the Humanities, 1984.
13. Wendell Berry, *Standing by Words*, San Francisco, North Point Press, 1983.
14. Allan Bloom, *The Closing of the American Mind: How Higher Education Has Failed Democracy and Impoverished the Souls of Today's Students*, New York, Simon and Schuster, 1987.
15. Derek Bok, *Beyond the Ivory Tower: Social Responsibilities of the Modern University*, Santa Monica, Hennessy and Ingalls, 1982.
16. Wayne C. Booth, *The Company We Keep*, Berkeley, University of California Press, 1988.
17. Wayne C. Booth, *The Vocation of a Teacher*, Chicago, University of Chicago Press, 1988.

18. Ernest L. Boyer, *The Quest for Common Learning: The Aims of General Education*, Washington, DC, Carnegie Foundation for the Advancement of Teaching, 1981.
19. Ernest L. Boyer, *College: The Undergraduate Experience in America*, New York, Harper and Row, 1987.
20. G. R. Boynton and Sheila D. Creth, eds., *New Technologies and New Directions*, Westport, CT, Meckler, 1993.
21. Lynne V. Cheney, *50 Hours: A Core Curriculum for College Students*, Washington, DC, National Endowment for the Humanities, 1989.
22. Paul L. Dressel and Lewis B. Mayhew, *General Education: Explorations in Evaluation*, Washington, DC, American Council of Higher Education, 1954.
23. Jean Bethke Elshtain, *Public Man, Private Woman: Women in Social and Political Thought*, Princeton, NJ, Princeton University Press, 1981.
24. Peter Ewell, *General Education and the Assessment Reform Agenda*, Washington, DC, Association of American Colleges and Universities, 2004.
25. Stanley Fish, *Is There a Text in This Class? The Authority of Interpretive Communities*, Cambridge, MA, Harvard University Press, 1980.
26. Stanley Fish, "Canon Building: The Basic Issues," *National Forum*, 69, 3, Summer, 1989, pp. 13-15.
27. Frances D. Fergusson, "Fostering Community: Liberal Learning and Core Curricula," *National Forum*, 65, 3, Summer, 1983, pp. 13-16.
28. A. Bartlett Giamatti, *The University and the Public Interest*, New York, Atheneum, 1981.
29. A. Bartlett Giamatti, *A Free and Ordered Space: The Real World of the University*, New York, Norton, 1988.
30. E. D. Hirsch Jr., Joseph F. Kett, and James Trefil, *Cultural Literacy*, Boston, Houghton Mifflin, 1987.
31. E. D. Hirsch Jr., Joseph F. Kett, and James Trefil, *The Dictionary of Cultural Literacy*, Boston, Houghton Mifflin, 1988.
32. Jack Hitt, E. D. Hirsch Jr., John Lakiski, Jon Pareles, Roger Shatuck, and Gayatri C. Spivak, "Who Needs the Great Works?" *Harper's Magazine*, September, 1989, pp. 43-52.
33. Harvey Holtz and others, eds., *Education and the American Dream: Conservatives, Liberals, and Radicals Debate the Future of Education*, Granby, MA, Bergin and Garvey, 1989.
34. Robert Maynard Hutchins, *The Higher Learning in America*, New Haven, Yale University Press, 1936.
35. Robert Maynard Hutchins, *Education for Freedom*, Baton Rouge, Louisiana State University Press, 1943.
36. Mary E. Hubba and Jann E. Freed, *Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning*, Boston, Allyn and Bacon, 1999.

37. Elizabeth A. Jones and James L. Ratcliff, "Which General Education Curriculum Is Better: Core Curriculum or the Distribution Requirement?" *Journal of General Education*, 40, 1991, pp. 69-101.
38. Sandra L. Kanter, Zelda F. Gamson, and Howard B. London, *Revitalizing General Education in a Time of Scarcity: A Navigational Chart for Administrators and Faculty*, Boston, Allyn and Bacon, 1997.
39. Clark Kerr, *The Uses of the University*, New York, Harper and Row, 1963.
40. Bruce A. Kimball, *Orators and Philosophers: A History of the Idea of Liberal Education*, New York, Teachers College Press, 1986.
41. Andrea Leskes and Ross Miller, *General Education: A Self-Study Guide for Review and assessment*. Washington, DC, Association of American Colleges and Universities, 2005.
42. Andrea Leskes and Barbara D. Wright, *The Art and Science of Assessing General Education Outcomes: A Practical Guide*, Washington, DC, Association of American Colleges and Universities, 2005.
43. Alasdair MacIntyre, *After Virtue*, Notre Dame, IN, University of Notre Dame Press, 1981.
44. Leo Marx, "A Case for Interdisciplinary Thinking," *National Forum*, 69, 2, Spring, 1989, pp. 8-11.
45. National Endowment for the Humanities, *Humanities in America: A Report to the President, the Congress, and the American People*, Washington, DC, 1988.
46. Susan Moller Okin, *Women in Western Political Thought*, Princeton, NJ, Princeton University Press, 1979.
47. Neil Postman and Charles Weingartner, *Teaching as a Subversive Activity*, New York, Delacorte Press, 1969.
48. Neil Postman, *Teaching as a Conserving Activity*, New York, Delacorte Press, 1979.
49. James L. Ratcliff, D. Kent-Johnson, Steven M. La Nasa, and Jerry G. Gaff, *The Status of General Education in the Year 2000: Summary of a National Survey*, Washington, DC, Association of American Colleges and Universities, 2001.
50. Philip Rieff, *Fellow Teachers*, New York, Harper and Row, 1973.
51. Frederick Rudolph, *Curriculum: A History of the American Undergraduate Course of Study since 1636*, San Francisco, Jossey-Bass, 1977.
52. Frederick Rudolph, *The American College and University: A History*, New York, Knopf, 1962.
53. Robert Scholes, "Three Views of Education: Nostalgia, History, and Voodoo," *College English*, 50, 1, March, 1988, pp. 322-333.
54. Robert Shoenburg, ed., *General Education and Student Transfer: Fostering Intentionality and Coherence in State Systems*, Washington, DC, Association of American Colleges and Universities, 2005.
55. Judith N. Shklar, "Facing Up to Intellectual Pluralism," *Political Theory and Social Change*, David Spitz, ed., New York: Atherton Press, 1967, pp. 275-95.

56. L. Robert Stevens, G. L. Seligmann, and Julian Long, eds., *The Core and the Canon: A National Debate*, Denton, TX, University of North Texas Press, 1993.
57. Woodrow Wilson Center, *The Teaching of Values in Higher Education*, Washington, DC, 1986.