To: The Faculty
From: The General Education Revision Committee
November, 2004

Dear Faculty:

The committee received a charge from the AAC to present to the faculty "talking papers" presenting at least two possible plans for revising our general education curriculum by the end of fall term 2004, in order to pave the way for general discussion faculty and students in winter 2005. Accordingly, we enclose two talking papers for your consideration. Further information on the potential impact of each of these schemes on specific departments, programs, and faculty loading will follow over winter break. We also enclose the preliminary report we circulated to the faculty last June, which contains the committee's assessment of the goals of a general education curriculum and the problems with our current general education curriculum

We welcome feedback from individuals, departments, and programs either by email or in person. We will be holding division meetings in the first half of winter term and will get feedback from the GenEd board. We will also hold open two meeting slots/week in the first part of winter term. Should individuals, programs or departments wish to meet with us, please contact Karen Brison. We will, in addition, visit the student forum and solicit input from students.

We expect to present a final recommendation to the AAC in the sixth week of the winter term.

We look forward to your recommendations and assessments

Karen Brison,
On behalf of the general education revision committee (Ann Anderson, Seyffie Maleki, Vicki Martinez, Kimmo Rosenthal, Jordan Smith, Mark Walker)

General Education Revision Committee Talking Papers. November 2004.

Introduction: The exploratory phase of the committee, Winter and Spring 2005, resulted in a report (see attached June 04 report) highlighting several problems with our current general education curriculum and stressing several goals that a general education system should ideally meet. To summarize, our report found that a general education curriculum should:

- provide strong foundations in "ways of knowing" across the various disciplines to produce life-long learners, in an era of information explosion where it is impossible to adequately survey existing bodies of knowledge
- help students make connections between disciplines and prompt faculty to think about ways that their discipline contributes to understanding a common set of "big issues" of concern to everyone
- prepare students for an increasingly interconnected world by promoting both international awareness and sensitivity to the connections between world areas

Our report also found that, while our existing general education curriculum had many of these goals, it was no longer meeting them effectively in the following ways:

- some sections of our current curriculum (particularly Section I) are overly "content driven" and could be more effective in building analytical skills. The large size of classes, particularly History and English surveys, prevents instructors from working with students on analytical, writing, and speaking skills. The fact that these courses must be surveys, covering a broad time period, also inhibits instructors from exploring particular issues in depth and from exploring disciplinary "ways of knowing" and approaching the world.
- the current four courses of Section I do not work together effectively to build depth of knowledge. Thus, while "nice in the abstract," in practice, the 4 course sequence limits breadth while not effectively providing depth.
- Sections I and IV prompt some ways of making connections between disciplines (geography and chronology) over others, such as thematic and issue based ones.
- The current curriculum gives too little exposure to areas outside of Europe and the United States particularly since many student fulfill Section IV by studying European languages or by going on terms abroad to Western Europe
- the regional focus of Section I and IV does not leave room for courses comparing various areas of the world, for those focused on international relations, or globalization. The current curriculum also excludes theoretical courses, spanning many geographical areas, exploring cultural diversity, social inequality, international relations, and globalization.
- The previous point is particularly a problem because many faculty hired since 1990 teach courses that do not fit well into the existing general education structure

In addition, our committee felt that:

- our general education inhibits students from exploring the curriculum in their first year by requiring 3 first year courses (most of our comparison schools require only one, or none at all)
- students often approach the general education curriculum with a check box mentality where students try to get their requirements done, without putting much thought into their course selections, in order to free up time for majors and minors.

In response, the committee developed the following goals for our revised general education curricula. A general education curriculum should ideally promote:

- breadth of exposure to disciplinary "ways of knowing"
- ability to make interdisciplinary connections
- reading, writing, analytical and research skills
- increased choice in all requirements in order to promote more active engagement among the students and to get away from the "conscripted student" class
- integration of general education into the students' entire college career by requiring first year requirements, a sophomore seminar, and upper level courses.
- Enabling students to see clear connections between their major and their general education

At the same time, the committee felt that we should move away from:

- the idea that there is a core of essential knowledge about Western heritage, to be taught in large survey classes, which every student should know; since students cannot be exposed to ALL information and perspectives necessary to be a well-informed and critical citizen of our world community, we should instead build analytical skills and the ability to make connections between disciplines, while leaving the choice of subject matter open. This approach avoids privileging some subject matters and theoretical approaches as more important than others.
- a binary opposition of "Western" and "non-Western" Many faculty commented that the current dichotomy: I) inaccurately draws attention away from diversity and "complexity" within the "Western" tradition; ii) unduly implies that "our" heritage is "Western" thus de-emphasizing the contributions of other cultural traditions and particularly from other cultural traditions within our borders; iii) draws attention away from connections between areas of the world.
- Overly restrictive ways of making connections between disciplines. We felt that faculty and students should have a broader range of ways of making connections between disciplines, some thematic (e.g. SMTS) and some geographically focused (e.g. EAS).

The two Ideas that follow both are attempts to reach these objectives.

IDEA 1: Disciplinary "Ways of Knowing" and Inter-disciplinary Clusters

This curriculum emphasizes:

- breadth of exposure to disciplines (Part C);
- ability to make interdisciplinary connections (Parts A and B).
- acquiring reading, writing, analytical and research skills
- integration of general education into the students' entire college career by requiring first year requirements, a sophomore seminar, and upper level courses.
- **Allows for increased student flexibility and choice in fulfilling requirements**

SECTION I: THE CURRICULUM

Total: 10-13 courses; students can **double count** courses taken in Part B with Part C but are required to take at least 10 courses total to complete general education (see attached sample worksheet on page 11 for explanation of double counting). Students cannot satisfy general education requirements with AP credits.

NOTE: Students may satisfy any of the requirements in Parts B and C with appropriate courses taken on Terms Abroad.

Part A: Core: (2 courses)

Promotes skills in reading, writing, research, analyzing texts, and reflecting on the interpretive move from primary sources to secondary texts; prompts students and faculty to consider how various disciplines come together to promote understanding of "the human condition."

1) **First Year Preceptorial**
2) **Sophomore Seminar**

Part B: Distribution requirements: (8 courses)

Promotes breadth of knowledge about the social and natural world, and key skills in analysis, literacy, and numeracy. Students should be encouraged to take several of these courses in their first year in order to accumulate prerequisites, and disciplinary backgrounds, necessary to complete the clusters in Part C.

1. **1 Social Science**: this category includes: psychology, anthropology, history, sociology, economics, political science.

2. **2 Humanities courses** (includes studio and performing arts courses), one of which must be a literature

3. **2 course in Linguistic and Cultural Competency**. This category includes courses in any discipline covering:

- cross-cultural comparison and theories about cultural complexity
- one or more cultural traditions outside of the US
- one or more "minority" cultural tradition within the United States
- a language sequence including at least one course at an intermediate level

4. **3 courses in quantitative reasoning, natural and applied science, technology, and the impact of science and technology on society.**

    - one course in natural sciences, with lab (either from the major, or listed under Science GenEd)
    - one course in quantitative reasoning: includes courses in math or those offered in a number of departments, listed under Quantitative Reasoning GenEd (quantitative reasoning is provisionally defined on page 8, and will be discussed further by the concerned depts. over the break.)
    - one a course selected from the following categories:

      i) same as in first bullet, but need not have a lab

      ii) a general education course from engineering, to foster understanding of technology

      iii) an ID course, with significant science or engineering content, about the impact of science and/or technology on the human world: includes Converging technologies courses listed as CT GenEd.

<u>Part C: Making Connections across Disciplines</u> (3 courses)

Prompts awareness of interdisciplinary connections by requiring students to take 3 courses in an approved cluster, from at least 2 different departments. Possibilities would include 3 courses in any of the existing ID programs and/or clusters of courses proposed by faculty groups and approved by the General Education Board such as **"Converging Technologies," "Ancient studies," "Globalization," "Media Studies," or "Values and Technology."** The committee envisions that the list of approved clusters would change over time with new clusters being proposed and older ones, if no longer a focus of interest, disappearing over time.

SECTION II: EXPLANATION AND DISCUSSION

Part A: Core:

i) **First Year Preceptorial**: will remain as it is now; classes are capped at 16, with special 10 person precepts for Union Scholars. The focus is on reading, writing, discussion, and analysis. Professors select their own reading and topics but these classes do not count for the major, and should not be introductions to particular disciplines. Faculty bring texts from different disciplines, eras, cultures and genres to bear on some common issue of importance to the "human condition."

ii) **Sophomore Seminar**: these will be small courses, capped at around 20, in the sophomore year. These courses can count for the major but should not be merely an introduction to the discipline in question. They must be open to all students, regardless of background, and can carry no prerequisite. A primary focus of the class will be on prompting students to reflect on "ways of knowing the world" including: i) the difference between primary research and secondary sources (i.e. published analyses by others); ii) the process of research and interpretation. Each student will conduct a hands-on research project combining both primary research and secondary sources, culminating in a paper of 10-15 pages at the end of the term. Students will also learn to use library resources (including electronic resources).

This seminar will be open to any department, with the History Department normally teaching roughly half of the sections, several would be offered by the Classics department and the remaining sections would be open to any department. Where possible, the seminar should serve as an introduction to the thematic clusters in Part C.

The kind of primary and secondary research involved will, of course, vary with the discipline. For instance, a history seminar might involve students collecting oral histories, working in archives, or reading published letters or documents (primary sources) and also reading historical analyses of similar material (secondary sources). An anthropology seminar would involve students interviewing people and doing observations of social behavior (primary sources) and then reading anthropoloigical analyses (secondary sources). A literature seminar could involve reading of novels, autobiographies, and/or published letters (primary sources) with critical literature analyzing these works (secondary sources). In science and engineering, primary research could take the form of a lab. This would be a special kind of GenEd science where students combine lab work on a particular project with doing library research on published papers on this topic; a science/engineering seminar could also, in lieu of a lab, combine readings from textbooks (secondary sources) and the writings of scientists and engineers--both professional and popular (primary sources). Thus a seminar on modern physics probably could not use Einstein's journal articles on

general relativity, but it could use popular writings by Einstein and his contemporaries and thereby capture the flavor of how the new physics was presented to a non-technical audience at the time. A current popular account of relativity, or a textbook on modern physics, would have to be considered secondary sources. Similarly a seminar on cosmology could use some of Steven Hawking's popular writings. a seminar on evolution could use Charles Darwin.

- Large history/classics surveys are replaced with small courses focusing on skills in reading, writing, discussion, analyzing texts, and reflecting on the process of analysis in moving from primary texts to analysis;
- Sophomores will get early exposure to library and primary research to prepare them for larger research projects later in their academic career.
- The current emphasis in the first year on "Western heritage" is replaced by a focus on key analytical skills and the process of analysis, with a topical focus on a variety of geographical areas, disciplinary approaches, and thematic issues.
- This formulation also fosters greater awareness of the world community by moving away from a binary opposition of "Western" and "non-Western" societies and allowing for greater opportunities to take courses in areas of the world outside of the US and Europe
- students choose among many options so there are fewer disgruntled "conscripted" students who are predisposed to be disengaged from the subject matter.
- Opens up the core of general education to many disciplines and approaches, thus potentially spreading student enrollments more evenly
- Opens up the first year so students can explore the curriculum; students are encouraged to take a broad array of courses in the first year by the distribution requirements in Part B. This could also push students out of the "check box" mentality, where they take courses just to satisfy requirements, and prompts them to actively engage in their course selection.
- There would be an increase in classes under 20 in the fall term, which could potentially improve our US News rating, although potentially, creating these courses would push other classes, now under 19, over that number.

Part B: Distribution Requirements:
This section preserves our existing emphasis on breadth of exposure to the disciplines of the college and prompts students to accumulate a foundation in various disciplines necessary to make inter-disciplinary connections in Part C. A few key changes have been made from our existing requirements:

a) **social science requirement**:
   - history has been added to the menu of options since there may no longer be a required history course in the core.

- The category has been broadened to include any social science course instead of being restricted to an introductory level course. This will allow the various social sciences autonomy to decide on how best to introduce students to their discipline; E.G. SOME may choose to develop thematic courses, that introduce key disciplinary ways of knowing but fit with thematic clusters in Part C.

b) **2 Humanities courses, one of which must be a literature**:
   - broadens the definition of humanities courses that can count for general education by breaking the connection with the history surveys and by no longer requiring historical surveys.
   - allows greater autonomy for departments to define ways of introducing students to their disciplines.
   - includes studio and performing arts, which have no place in our current general education program.
   - allows students greater breadth in exploring multiple areas of the world, as well as thematic approaches to disciplines, and courses in creative expression.
   - includes new faculty doing comparative studies, courses on globalization and postcolonialism and thematic courses that do not fit into the existing lit/civ rubric

c) **2 course in Linguistic and Cultural Competency:**
   - includes courses in cross-cultural comparison, in international relations, and in theoretical understandings of cultural and social complexity
   - The requirement is reduced to two courses because students can now take courses in cultural complexity in Part A, B and C. This requirement serves the function of making sure that students who take no such courses in other sections take at least one course prompting them to consider social and cultural diversity.
   - moves away from the "West" "non-West" formulation

d) 3 courses in Science, Technology and Quantitative Reasoning:
   - The expanded definition recognizes the importance of understanding the human environment of technology and its impact on the social and natural world and includes engineering and computer science courses
   - This also allows for courses prompting students to reflect on the social and cultural forces shaping scientific research.
   - **NOTE**: quantitative reasoning is provisionally defined herein the following way, so as to include certain designated courses outside the mathematics department that fit the following criteria. This is in keeping with the practices of our comparison schools and recognizes that the particular intellectual skills fostered through the study of mathematics can also be encouraged in some other disciplines. The following definition is provisional and will be discussed by concerned departments over the break. **Provisional definition**: Students are required to take one course in Quantitative Reasoning. These are courses typically, but not exclusively, offered in the Mathematics and Computer Science departments, whose primary focus is to : I) develop skills in logical and quantitative reasoning

including the ability to deal with abstraction and to apply conceptual material to concrete problems; ii) develop problem-solving skills including the ability to work through complex problems requiring multiple computational steps; iii) develop the ability to effectively communicate solutions to problems in a logical and precise manner

Part C: Interdisciplinary Connections: This section preserves our current emphasis on inter-disciplinary connections but opens up more options for ways of making such connections (and the disciplines included) by moving from the current 3 tracks in Section I to a menu of tracks. The committee has discussed a couple of options (not mutually exclusive):

I) Students could take 3 courses in any of the existing ID programs as long as these courses came from at least 2 different departments (Science, Technology and Medicine in Society; American Studies; Gender Studies; Religious Studies; Environmental Studies; American Studies; Russian and Eastern Europe Studies; Africana Studies; East Asian Studies; Latin American and Caribbean Studies; Biochemistry; Bioengineering). This both takes advantage of existing programs and encourages faculty, administrative, and student interest in these programs.

II) Faculty could instead or in addition to the above, propose thematic clusters to be approved by the Gen Ed Board and the AAC, and based on guidelines in the final proposal. Some suggestions that have already been made are: **"Converging Technologies," "Ancient studies," "Globalization," "Media Studies," or "Values and Technology."**. The onus would be on faculty to propose clusters, and to suggest the courses that would count for the cluster. The list of clusters would be dynamic and could be modified over time. **The subcommittee would develop criteria for clusters (e.g. must span at least 3 disciplines, at least one course must be offered in the cluster every term) for the final proposal.**

- Students have greater choice of disciplines within these tracks than under current tracks.
- opens up a broader range of ways of making connections between disciplines, some thematic (e.g. SMTS) and some geographically focused (e.g. EAS).
- fosters greater awareness of the world community by moving away from a binary opposition of "Western" and "non-Western" societies and allowing for greater opportunities to take courses in areas of the world outside of the US and Europe.
- requires students to spread general education throughout their college career instead of "getting it out of the way" in their first year. It does this by requiring students to move beyond introductory courses in disciplines (taken as part of the distribution requirements) to upper level courses needed to make thematic connections.

- building ID clusters in to general education requirement would encourage faculty interest in exploring inter-disciplinary connections and administrative support for interdisciplinary studies.

SECTION III: POSSIBLE CONSEQUENCES ON DEPARTMENTS, PROGRAMS AND STAFFING

- 700-900 First year enrollments will now be released from required history/classics surveys. Overall, replacing required surveys with 50+ enrollments with required sophomore courses capped at 20 will cause an increase in enrollments in other courses, and increased pressure on particularly popular departments in social sciences and elsewhere. There will be an increased demand for first year electives. **(NOTE: Kimmo is working on analyzing the potential impact and the committee will send out more detailed information over winter break).**

A few things will potentially offset some of the effects:

- In winter and spring terms, some of these enrollments can be absorbed into sophomore level courses (since first term freshmen will have acquired some prerequisites). The burden on sophomore enrollments will, in turn, be decreased by the 560 enrollments of sophomores absorbed into sophomore seminars.
- history and classics intend to recreate some of their first year surveys as electives, and can also offer other first year or sophomore level courses, thus absorbing some of the students released from the first year surveys; at present, for instance, freshmen do not usually take history electives because they take History general education surveys; without these surveys, freshmen might well enroll in history electives.
- some of the sophomore seminars could potentially replace courses that are now, in fact, smaller than 19

- Possibly, staffing these classes could make it more difficult to recruit first year preceptors. This could be offset by the fact that these courses can count for the major and thus staff could still be spared to teach precept.

A MORE IN DEPTH ANALYSIS OF IMPACT ON ENROLLMENTS WILL FOLLOW OVER THE BREAK

Appendix: DOUBLECOUNTING
(Students are not allowed to triplecount courses)

Students are required to take a minimum of 10 different courses under the envisioned Gen Ed program. Unlike the current program, there is significant opportunity for doublecounting.

Here is an example : suppose we develop an ID cluster on Media Studies and a student takes Philosophy 23, Philosophy in Film; Anthropology 11, Ethnographic Film; Chinese 13, Asian-American Film and Performance.

This student's Gen Ed profile might look as follows (recall they need 10 courses so it limits the extent of doublecounting).

There are obviously other variations, for example if the student also took a foreign language, let's say Chinese, they may wish to doublecount Anthropology 11 as their Social Science and Chinese 13 in the Humanities category instead use Chinese language in the Cultural Competency section. But they CANNOT triple count ANT 11 for Media studies, social sciences, and cultural competency.

Part A: Core

FYP _____
Sophomore Seminar _____

Part B: Distributions

Social Science

1.

Humanities

1.Philosophy 23
2. (lit)

Cultural Competency:

1. Anthropology 11
2. Chinese 13

Natural Science, Quantitative Reasoning etc.

1.Science with Lab _____
2. Quantitative Reasoning _____
3. Third course: _____

Part C: ID Cluster: Media Studies

1. Philosophy 23
2. Anthropology 11
3. Chinese 13

Concerns raised in discussions:

1) **Terms Abroad**: since these don't explicitly fulfill the cultural competency requirement will this mean that engineers and science students won't be able to fit one in their programs. Will this lead the administration to put less resources into Term's abroad? Will students now lack the "push" needed to get them to consider Term's Abroad? Can we include them as an option for fulfilling cultural competency? Could they be turned into clusters? E.g. going to York would be considered to fulfill your cluster requirement?
2) **clusters**:
   I) will the courses cohere in some fashion? Should we require groups of faculty to attend each other's courses and/or to come up with a list of common goals to be met in all courses in the cluster? Can we require/recommend an intro course for at least some of the clusters? Could we suggest that some courses are foundational and should be taken first? Can soph·seminars serve as intros to clusters?; Should we have students write a paper at the end of their third course to show they have made connections? Should we build into course evaluations something about whether they saw connections? Should cluster coordinators do exit interviews to see if students are making connections?
   ii) science/engineering clusters: science departments mentioned that they would like to participate in clusters but couldn't envision many with as many as 8-10 courses in them. Can we have science/engineering/CT kinds of clusters that are available only to certain majors (who have the background science and math required) and have fewer courses since a smaller audience will be taking them (e.g. some kind of biophysics cluster that a bio or physics major could take)?
   iii) coordination problems: will it be a logistical nightmare to make sure that the right courses are offered regularly to service 15-20 clusters? Will this turn out to be impossible to keep up as clusters proliferate and compete with needs to service courses for majors? Who will coordinate this?
   iv) checkbox problems: is this system going to be so complex as to push students into even more of a checkbox mentality as they strive to find courses that double count for requirements to get through with the fewest courses possible?
   v) distribution problems: will this make it difficult for certain depts. with less capacity to participate in attractive clusters to attract students?
   vi) can clusters be within one dept since this would be easier to coordinate and courses might cohere better?
   vii) should we require that some courses be team taught in order to ensure real inter-disciplinarity instead of ships passing in the night?
   viii) If clusters can come and go who will ensure that they don't disappear while students are still mid-stream?
3) **sophomore seminar**:
   i) how is this different from a disciplinary methods course and why wouldn't it be better just to require people to do something like this in their major? Can we just have a "research across the curriculum"

requirement ((similar to WAC) instead of having a designated sophomore seminar?

ii) Can we define a generic set of research skills (e.g. library skills, skills in assessing web sources) that go across disciplines that everyone should cover and focus on these rather than having people do projects?

iii) Can these goals be met in classes as large as 20?

iv) How do the sciences fit in: a couple of science depts. (physics and geology) feel that they might like to teach soph seminars but feel that "primary source" secondary source distinction doesn't work for them – they can't really make the students do labs because then these would be more labor intensive than other soph seminars – but there is no point in having them read original research in physics – can we define this more broadly as a course focusing on library research skills and learning to assess and interpret research claims but not necessarily involving reading primary research or doing labs? Some scientists also commented that they did not think meaningful research was possible for sophomores particularly if there is no prerequisite to soph seminars.

v) Can sophomore seminars have a pre-requisite to allow for meaningful sophomore research in more hierarchically structured fields?

vi) How will we ensure that this will be a consistent experience for students if many depts. are contributing?

vii) Will there be pressures on departments across the college to offer sophomore seminars?

viii) Will any department who wants to offer a seminar be able to do so?

4) **Distribution requirements**:

i) Should we have a creative expression requirement?

ii) Science requirements: should we allow team-taught courses to count as a second science? If we do, can we have some sort of guidelines to make sure this is genuine team teaching and not just two profs splitting the days? Can CS courses count for the third course in this section under the bullet "courses for understanding the human world of technology" (this now says engineering courses – does this include CS?)

iii) Math/QR: should this be just a division 3 and 4 (but not psych) requirement? Should we remove psychology from Div 3 or should we treat this like the science requirement: they can apply to have their courses considered just like they can apply to have their courses considered for genEd science? Should it be QR or mathematical reasoning? Should statistics courses count? What do we want the students to know: mathematical reasoning (focusing on symbolic logic) or quantitative reasoning? If the former should philosophy courses in logic also count? Should the GenEd board continue to judge which courses meet the criteria or should there be a special standing group of "experts" who judge? If so, should this also apply to

all the other sections of GenEd (e.g. special standing group to determine what should count as cultural and linguistic competency…)

iv) cultural competency: are we watering down the cultural diversity requirement by reducing it to two and not explicitly requiring exposure to a "non –western" culture?

v) If we move away from departmentally rooted requirements to thematically rooted ones, who will guard against the "lowest common denominator effect" of no one taking responsibility for the courses and thus not taking the time to do a good job?

5) oversight issues: should we have a separate board just to coordinate and oversee clusters? Should we have separate standing boards to oversee things like the QR requirement? One person (who added that this was in no way a personal comment on Kimmo whom he considers to be an excellent Dean) suggested that a new GenEd curriculum would reinvigorate faculty interest in GenEd and that we could get faculty even more interested and involved by having a faculty head of the GenEd board as there was right after the current GenEd curriculum was implemented. There would be many issues involved in looking for ways to encourage effective team teaching and inter-disciplinarity that should be the focus of faculty interest – perhaps we could re-invigorate faculty interest in GenEd and in committee work by having a faculty run board addressing some of these new issues

6) Macro issues:

I) lots of people have raised issues about allocation of faculty lines and distribution of work across the college: if the new GenEd leads to shifts in enrollments patterns will the college re-allocate lines in accord with these shifts?

II) One faculty member commented that a general education curriculum should establish a clear mandate for the administration to build specific areas of the curriculum by hiring faculty in those areas. He felt that the new general education curriculum should retain the current structure but add in new tracks in EAS, LACS, and Africana studies. As faculty retired in relevant departments, the administration would then have a mandate to ensure that new hires fitted these new tracks so that eventually, about 40% of the students could be accommodated in these new tracks. It was important in his mind for students to come away with a core of knowledge about some world civilization. Those who took the Western options in Section I would have to take a non-Western option in Section IV and vice versa.

III) One faculty member suggested that the proposal was moving in the right direction but should also provide an element for the junior year so that our curriculum would provide students with special work on skills and special small classes with individual attention for all 4 years of college. He suggested that students

who did not go on terms abroad as juniors could do service internships. He also suggested that the emphasis on research skills could be strengthened by adding in a Research across the curriculum requirement, similar to WAC.

IV) One faculty member commented that he would like to see a mandated Converging Technologies element to the curriculum.

V) Some students and a few faculty members said that they would prefer distribution requirements to Idea I.

VI) One faculty member suggested that the WAC requirements be revisited as well to require a sophomore writing portfolio that would be reviewed by a committee.

VII) A few faculty members suggested that FYP should be reconsidered as well: some wanted to get rid of it altogether saying that the drain on college resources was not worth the results; some wanted to revert to a common reading list; one felt that precept should be more narrowly focused on composition.

Appendix: Response to Concerns Raised by Faculty and Students

Numerous concerns were raised by faculty and students. I have summarized these concerns in the next document and explain here in more general terms the issues that arouse and the subcommittee's response.

1) **Terms Abroad**: several faculty and students wanted Terms Abroad to be included more centrally in the proposal, perhaps as an option for fulfilling the Cultural and Linguistic Complexity requirement. Faculty and students felt that some students needed an "extra push" to undertake a Term Abroad and that students in highly structured programs (e.g. engineering) would not be able to fit a Term Abroad into their studies unless Terms Abroad fulfilled a general education requirement.

   In response, the subcommittee made explicit that courses taken on Terms Abroad would in most cases fulfill the Cultural and Linguistic competency requirement, because these courses usually do deal with a culture outside the US. In the unusual cases when students take courses not dealing with the culture and society of their host country on a Term Abroad, these courses would usually fulfill some other general education requirement or some major requirement for the students.

2) **Clusters**: several faculty were concerned that courses in clusters would not cohere, and that students would not pick up thematic connections. Some faculty called for measures to strengthen coherence such as requiring an introductory course for each cluster and requiring faculty to come up with a list of themes to be covered and perhaps to audit each other's courses. Faculty were also concerned about the potential complexities of ensuring that enough courses would be regularly offered to allow students to complete clusters and that the effort to ensure course availability would lead to pressure on departments to divert attention away from their majors. Some science and engineering faculty were concerned that their departments would not be able to contribute to clusters since offerings in interdisciplinary areas were few. A couple of departments felt that it would be better to allow clusters to be contained within a single department (a "mini-minor") since departments could then easily make sure that courses would be coordinated.

   Coordination issues: the subcommittee felt that requiring students to take an introductory course for each cluster would be a logistical nightmare and would place large demands on faculty resources to the extent that departments might have to reduce the size of their majors in order to ensure the introductory courses be offered with sufficient frequency to support this requirement. We weren't sure that we felt that the cost in terms of providing students with strong disciplinary foundations in their majors was worth the potential benefit. We did, however, feel, that if the faculty involved in some course clusters felt strongly that their introductory course was offered with sufficient frequency, and that such an

introduction was sufficiently necessary, they could strongly recommend that students take this course first and perhaps could make it a pre-requisite to other course offerings. Individual clusters could also designate an array of courses as "foundational" and strongly recommend (perhaps on the Advisor's Advisor) that students take one or more of these foundational courses. Students who went on to turn their cluster into a minor could also then be required to take key introductory courses. The intent of the cluster system is to prompt interest in interdisciplinary connections among faculty and students; if clusters become too complex and rule-bound, faculty may become reluctant to participate and students may begin to choose clusters just according to what seems easy.

Strain issues: The subcommittee felt that the potential strain on the faculty was mitigated by the fact that we would start with over 10 existing ID programs many of which already offer numerous courses per term (LACS, EAS, Gender Studies, SMTC, American Studies are all robust programs). New clusters could be added in a conservative fashion. One faculty contributed the following calculation: "Here's a calculation: 12 clusters and 30+ students per course, 2000+ students in the college, each needing 3 of these courses over 4 years, (2000+ students)x(3/4 courses/year)=750+ students in clustercourses/yr /(30+ students/course) ~ 25 cluster courses needed per year /12 clusters ~ 2+--> Then, including room for students taking these clusters for non GenEd purposes, if each current cluster offer 3 courses per year, it should suffice."

Science and Engineering Clusters: The subcommittee wanted to allow for higher-level science and engineering clusters that might be open only to particular majors who had the correct pre-requisites. Converging Technology clusters might be of this nature. We felt that in such cases, fewer courses would be required since the departments concerned could sit together and coordinate their schedules to make sure that the small number of eligible students would be able to take the cluster courses.

Single Department Clusters: The subcommittee felt that single department clusters did not satisfy the central idea that students and faculty should be pushed to think about how discrete disciplines contributed to larger issues. Interdepartmental coordination was necessary to help students integrate knowledge and reflect on disciplinary assumptions and also to push students and faculty to think about larger issues of common concern. Students already have the option of completing minors in departments and many do so.

3) **Sophomore Seminars**: Faculty raised concern about the need for a sophomore seminar; some people felt that it would be better to require students to do such a course within their own major or to institute a "research across the curriculum" requirement similar to WAC. Other faculty wanted to make sure that students took sophomore seminars outside of their majors and/or wanted the sophomore seminar not to count for any major. Some departments were concerned that they would be pressured to contribute while others were concerned that the form of the

seminar would make it difficult for them to contribute. Concerns were raised that the experience would not be consistent across sections, leading to student unhappiness.

Response: The subcommittee felt that it would be difficult to require departments to offer such a sophomore course for their majors since many students wait till late in the sophomore year to declare a major and many departments already find it difficult to staff all requirements. Similarly, it would be difficult to institute a RAC requirement that made small classes available to all students in their sophomore year; the subcommittee felt strongly that it was good for students to have a small class where work on reading, writing and analytical skills was continued in their sophomore year; students also said that they would like earlier direction on the process of library research and primary research (where appropriate). It would be difficult to ensure such focused attention in small classes with a RAC requirement. If there is a widespread desire to offer such sophomore courses, this can be taken in to account in the allocation of future faculty lines; but the subcommittee was operating under explicit instructions from the AAC to work with existing faculty resources. In addition, the subcommittee felt that general education should prompt students to explore outside their major and that there was a generic set of reading, library and analytical skills that could be offered across the curriculum. On the other hand, students could not be required to take a sophomore seminar outside of their major, since many change majors or choose majors at the end of the sophomore year. If the sophomore seminar did not count for the major, it would be difficult to staff both this seminar and freshman precept. Faculty, however, should be discouraged from turning the sophomore seminar into a discipline specific methods course, and should instead focus their attention on a more widely applicable set of skills in doing library research, defining research problems, reflecting on the process of moving from primary to secondary sources and so on. Several departments had indicated interest in teaching the sophomore seminar so the subcommittee did not feel that departments would be pressured against their will to offer seminars. In response to comments that it would be difficult for science and engineering departments to work with the original definition of sophomore seminars, the subcommittee changed the definition of the seminar in order to allow for library-based courses for those disciplines that felt it was difficult to require primary research from sophomores. It is impossible to ensure complete coherence across sections; however, faculty can be given common guidelines and can have regular get-togethers ("sophomore seminar lunch") in order to maximize consistency.

4) **Distribution Requirements**: A few faculty called for a creative expression requirement. Numerous concerns were raised about the quantitative reasoning requirement with some departments arguing that the requirement now worked well because it was the responsibility of just one department and others arguing that the definition should include a broader range of departments. A few comments were made about the perceived "watering down" of the science requirement and of the cultural diversity requirement, which did not require a

"non-Western" course. A couple of faculty argued more globally that it was better to tie distribution requirements to specific departments who would take responsibility for those requirements and thus would do a better job.

Creative Expression: The subcommittee (and several of the faculty involved in these courses) felt strongly that existing resources did not support a creative expression requirement since some of the departments concerned already have trouble fulfilling major requirements. The subcommittee also felt that it was undesirable for students to take practica courses just to satisfy a requirement and that this would severely undermine the quality of the experience in practica such as orchestra and choir. The subcommittee felt that a curriculum allowing for students to take creative expression courses would be sufficient.

Quantitative and Mathematical reasoning: The subcommittee deeply appreciates the current efforts of the Math department to create and staff high quality GenEd Math courses that prompt math-phobic students to appreciate mathematical reasoning. We did not, however, think that these Math courses would be undermined by allowing courses from other departments to also satisfy a quantitative reasoning requirement. The subcommittee worked with Math and Computer science to define a range of intellectual skills to be fostered by QMR courses (focusing on numeracy, the ability to use non-trivial algorithms, and abstraction). Several members of the subcommittee were persuaded that a high quality statistics course would promote those skills and also felt that a solid understanding of the concepts behind statistics was a valuable skill for many students allowing them to assess newspaper and journal articles with a critical eye. We felt that the best strategy was to let the Math dept define with a rigorous set of criteria that such a course should satisfy, and then allow any department to apply for GenEd QMR credit.

Broadening of Science Requirement: The subcommittee felt that it was important to provide a niche for engineering courses in our general education curriculum because of the importance of understanding the human world of technology. The subcommittee also felt that the proposal had the potential to allow some students to do more science courses, not fewer, since they could now take a science and engineering cluster.

Non-Western Courses: Several members of the subcommittee felt strongly that we should move away from the West/non-West dichotomy and should instead promote a more general awareness of the complexities of culture, the obstacles to cross-cultural tolerance, and the relationship between world cultural traditions. If students are not required to take "Western" track, there is no need to specifically requirement a "non—Western course."

Departmentally-rooted requirements: The Subcommittee felt that all departments should be motivated to offer high quality courses even if general education requirements were not tied exclusively to their departments. All

departments have an interest in attracting majors and attracting good students as majors and so should be motivated to have high quality general education courses. There are also costs to tying requirements too narrowly to a few departments: this locks up college resources; it leads to uneven enrollments with some departments being overstressed and others under-enrolled; it leads to conscript classes and disgruntled students; it also has potential to alienate faculty in some departments who are marginalized by the curriculum.

5) **Preceptorial:** a few faculty members commented that they wanted to reconsider FYP. Some wanted to go back to a fixed reading list; one person suggested making it a composition course; a couple people suggested getting rid of precept altogether.

   Response: the subcommittee felt that the current form of FYP fits in well with the goals of our proposal since precept now both works on key skills and prompts faculty and students to think about how different disciplines contribute to the understanding of larger issues. Students generally don't emerge from preceptorial as polished, professional writers; but this is not because precept is a bad course; it is in the nature of the enterprise that learning to read, write, and think is a long term process requiring repeated practice continuing over a period of years.

6) **Macro Issues:** Comments in this category were ones that the subcommittee felt could not be incorporated within the existing proposal and/or the mandate given us by the AAC. These were suggestions that called for additional resources and/or reflected a philosophy of education different from the one expressed in the proposal. Two faculty members said that a general education curriculum should establish a mandate for the administration to build certain departments and offerings. One wanted to maintain the present structure of GenEd but add in tracks in section I in EAS, LACS, and Africana studies. One wanted to make Converging Technologies a central required element. One faculty member suggested adding in a Research Across the Curriculum requirement and building in a required junior year experience; students who did not go on Terms Abroad could do a service learning project. One faculty member suggested revising the WAC requirements so there would be a sophomore writing portfolio assessed by a faculty group. A few faculty members also wanted it spelled out whether tenure lines would be reallocated to meet the demands of the new program.

   Beyond the Scope of Our Mandate: The subcommittee realizes that a new general education curriculum might lead to the changes in the allocation of tenure lines but had been given no power to make recommendations along those lines. Some members of the subcommittee supported the idea of service learning, research across the curriculum, and revamped writing requirements but felt that all of these things required new resources and should be dealt with separately. In addition, some members of the subcommittee felt that a truly significant service learning experience not only required a full time coordinator but would not work unless it was voluntary. It goes against the spirit of service to require it.

Similarly, the subcommittee did not feel that it could come up with a proposal that established a long-term mandate for faculty hiring, either in Converging Technologies or in multiculturalism, since we had been explicitly told that we could not do that. Our proposal had to work within existing resources although it need not lock those resources into place: we came up with a scheme that would make use of existing faculty but could allow for flexibility in the future direction of the college.

Philosophical Differences: In addition, at least some members of the subcommittee were philosophically opposed to a curricular revision that locked in a particular, narrowly defined, subject area (be it Converging Technologies or Multiculturalism) as the required core. Converging Technologies and Multiculturalism are both important; however, both have problems as the sole focus of a new curriculum, which would require a long-term investment in faculty resources. At least some members of the subcommittee felt that there were many things that it was equally important for our students to know. We preferred a more flexible system that built on existing ID programs to establish multiple areas of strength, particularly since many of our existing ID programs (and new clusters that have been proposed) deal with significant and central issues such as: understanding cultural difference and the world system; understanding the relationship between technology and society; appreciating religious difference and the impact of religion on human life and so on. We felt that both faculty and students respond well to choice. Furthermore, defining a set core curriculum places a strain on college resources and on community relations since any narrowly defined core excludes some peoples' interests.