Final Report from General Education Task Force 2007-2009
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Introduction

In September, 2007, Provost Charlena Seymour and the Rules Committee created a joint administration/ Faculty Senate General Education Task Force (GETF) to "re-energize and improve this important component of undergraduate education." The GETF met throughout the academic years 2007-2008 and 2008-2009. It focused on reviewing and making recommendations in a number of areas of General Education: 1) Purpose and Learning Objectives, 2) Curriculum Delivery, 3) Assessment, and the role that 4) resources and systemic challenges play in the effectiveness of General Education (see *GETF Plan*). Each section of this report describes GETF activity relevant to these four areas, including activities taken and recommended next steps.

The GETF used various sources of evidence to inform its work. This evidence included the student perspective (focus groups and survey), course characteristics (various course descriptives including course enrollment, student characteristics, percent enrolled for General Education credit, and pedagogical techniques gleaned from analysis of course syllabi), the instructor perspective (a General Education instructor survey asking which General Education learning objectives they address in their course(s), the challenges they face in teaching General Education, and their recommendations for improvements to General Education), and the administrative/governance perspective (interviews with General Education Council members). See *GETF assessment results*.

The Task Force also reviewed the recommendations and findings from the national Liberal Education reform effort led by the Association of American Colleges and Universities (AAC&U), research on learning and its implications for course and curricular design, and the General Education practices/curriculum structures used at other large research universities.

Finally the Task Force hosted a General Education Workshop for members of the Councils and Committees with responsibility for Undergraduate Education and used it as an opportunity to share the results of the evidence described above and generate ideas for how to improve General Education. GETF and General Education Council members also participated in two assessment workshops (one focused on defining Critical Thinking and the other on methods for assessing General Education) and hosted two campus-wide General Education instructional development workshops offered in association with the summer institute for the new General Education Fellows.

Actions Taken or In Process

- Clarification of General Education Purpose and Learning Objectives

    Current status: The *restatement* was approved by the Faculty Senate in May 2009 (*Sen. Doc. No. 09-060*).

- General Education communications/marketing campaign, including General Education posters, General Education Council Chair's regular communication with instructors, and the new General Education website

Current status: [Posters](#) have been distributed. Gen Ed Council Chair communicates directly with all Gen Ed instructors prior to the start of each semester. The [website](#) was presented at Faculty Senate meeting on April 23, 2009 and is now online.

- Enhanced General Education instructor development and support, including workshops on General Education instruction and assessment and the General Education Fellows program that supports instructors in a year-long focus on enhancing General Education course(s)

    Current status: The Fellows program has entered its second year. The Center for Teaching (CFT) provides ongoing programming specifically focused on Gen Ed instructional support.

- General Education Assessment Tools, including an instructor survey that provides information on the alignment of courses to General Education Learning Objectives

    Current status: See results from *[Gen Ed assessment tools](#)*

- Enhanced support for the General Education Council Quinquennial Review process, including TA support and the creation of an online course submission, review, and approval process

    Current status: Software development is in progress and is expected to be completed by September 2009.

Recommendations for Future Action

1. Explore the GETF proposal for a Four-Credit General Education curriculum and the implementation of an upper-division Integrative Experience.

2. Appoint and give release time for a Director of General Education to provide leadership and regularized overview of General Education delivery.

3. Identify ways for putting more "teeth" into the General Education Council's course monitoring function. For example, implement a "sunset" clause on courses that have not been submitted for review in a timely manner.

4. Continue to monitor Gen Ed course alignment with Gen Ed learning objectives and identify ways to address objectives currently under-represented in the Gen Ed program.

5. Explore ways to enhance General Education assessment: implement a General Education SRTI course evaluation instrument, explore implementation of a campus-based student learning assessment project, continued analysis of course alignment with General Education purposes.

6. Encourage greater support/"buy-in" for General Education by departments through meetings with department heads and chairs, exploration of incentives ("carrots and sticks") and review of TA allocation processes.

7. Continue and expand "marketing" efforts to communicate the value and learning objectives of Gen Ed to students and their families, including website updates, logo creation, more posters around campus, information distributed during Orientation, and testimonials of "success stories."

Gen Ed Goals: Purpose Statement

Part of the General Education Task Force's (GETF) charge was to clarify the purpose of General Education at UMass Amherst. Conversations among GETF members, the Provost, and the evidence drawn from the student perspective all clearly pointed to a need to better articulate why the University of Massachusetts Amherst requires students to take General Education courses, and what students should gain from that part of their educational experience.

The purpose statement the GETF developed draws from two sources: (1) the original 1985 General Education legislation (*Sen. Doc. No. 85-024B*) and (2) the American Association of Colleges and Universities (AAC&U) current research on defining learning objectives associated with a liberal education. For this second resource, the GETF relied primarily on the AAC&U's set of *"Essential Learning Outcomes"* (AAC&U, 2005). These outcomes were developed in consultation with representatives from hundreds of colleges and universities, members of the business community, and analysis of standards from various accrediting bodies and focus on the outcomes that are essential preparation for twenty-first century challenges.

The GETF found that the original legislation, the learning priorities suggested by the AAC&U's "Essential Learning Outcomes," and the recommendations of the GETF converged to create a purpose statement (see Table 1) that the GETF believes reflects and elaborates upon the intentions of the original legislation and serves as a restatement of the original legislation that reflects the evolution of pedagogy and curricular needs since the current Gen Ed program was established. In some cases language is drawn directly from the original legislation; in other places the original language has been adapted for purposes of clarity or parsimony.

For two of the learning objectives, new terminology is used that the GETF believes reflects an elaboration of the original intent rather than a change. Specific references have been added to "information literacy" and "technological literacy." "Information literacy" refers to students' capacity to recognize when information is needed and gain access to, evaluate, and appropriately use that information. "Technological literacy" refers to the ability to effectively use computers, databases, and other technological tools. In the "information age" where citizens are bombarded by an array of information, some from dubious sources or of limited veracity, information literacy is an essential skill, and one that might not have been conceptualized in exactly the same way 20 years ago when the General Education program was developed. However, the GETF does not view it as a completely new skill, but as an elaboration of the critical thinking and analytical reasoning learning objectives present in the original legislation. A similar argument is made for the "technological literacy" objective which is seen as an extension and update in terminology for the original "computer literacy" objective.

Finally, the purpose statement includes oral communication as an objective in addition to written communication. This may be the only real addition to the original learning objectives (although the original learning objectives do mention the ability to "articulate" the consequences of one's choice).

Table 1.

UMass Amherst General Education Purpose Statement

Approved by the Faculty Senate, May 2009

The purpose of the General Education requirement is to stretch students' minds, broaden their experiences, and prepare them for:

- Their college experiences and subsequent professional training
- Their careers and productive lives
- Community engagement and informed citizenship
- A diverse and rapidly changing world
- A lifetime of learning

The General Education curriculum does this by engaging students in:

- Fundamental questions, ideas, and methods of analysis in the humanities and fine arts, social sciences, mathematics, and natural and physical sciences;

- The application and integration of these methods of analysis to real world problems and contexts;

- Creative, analytical, quantitative, and critical thinking through inquiry, problem solving and synthesis;

- Pluralistic perspective-taking and awareness of the relationship among culture, self, and others;

- Understanding and evaluating the consequences of one's choices and the implications of one's actions.

- Opportunities to develop and practice the skills of critical thinking, reasoning, communication, and integration of knowledge and perspectives, including:

    o Communicating persuasively and effectively orally and in writing;

    o Working effectively and collaboratively (in groups, across perspectives);

    o Developing information and technological literacy.

Gen Ed Delivery: Alignment with current designations and courses

<u>Learning Objectives</u>

The Gen Ed Purpose Statement identifies the specific types of student learning experiences and learning objectives expected from the General Education program. Having outlined those expectations, the Gen Ed Task Force was faced with the question: "To what extent are these objectives actually being addressed and met in the current General Education program?" In other words, is the program being delivered in a manner that assures that students will actually encounter these learning objectives in their Gen Ed courses?

Existing information about General Education courses proved to not be useful in answering these questions. An earlier analysis of some *General Education Course Syllabi* and the experiences of General Education Council members who review course proposals on a regular basis indicate that many course syllabi do not specifically mention the purposes of General Education or specific Gen Ed learning objectives nor does syllabus text explain how the course will address those objectives.

> The GETF approached this question of alignment using two sources of evidence:

1. The specific requirements for each designation, noting where each of these objectives <u>should</u> be addressed in the Gen Ed program;

2. A *survey all non-TA Gen Ed instructors* asking them to indicate whether or not they addressed each of these objectives in each of the Gen Ed courses they taught. (These data provided the GETF with a cumulative snapshot of how the Gen Ed courses within each designation actually "cover" the stated Gen Ed objectives.)[1]

<u>Alignment Analysis</u>

The GETF used these results to respond to two questions:

1. Are the objectives that should be present in each Gen Ed course receiving adequate representation in courses across the program (as can be determined from instructor reports)?

2. Are courses within a specific designation generally addressing the objectives that are specifically assigned to that designation?

As a first pass at identifying where the largest gaps between Gen Ed expectations and actual course instruction occur, course percentages lower than 75% were noted (meaning, fewer than three-quarters of courses in the designation address the intended objective). One could argue the cut-off should be higher (for example, 100% of all courses in a designation charged with addressing writing should actually address writing). However, in this first analysis the GETF felt

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[1] NOTE: College Writing (CW) courses were also surveyed, but only 2 responses were received (the sample was small (n=4) because these courses are generally taught by graduate students). Therefore, the CW results are not included in this discussion.

a lower cut-off appropriate because it allows for survey respondent error or misunderstanding and/or lack of prior communication about the purposes of Gen Ed.

Findings: Objectives common to all Gen Ed Courses

A review of the original legislation, and the specific requirements for each designation, suggests that there are three learning objectives that should be common to all Gen Ed courses, regardless of designation. They are:

1. Understanding of the fundamental questions, ideas, and methods of analysis in the disciplines;

2. Application of these methods of analysis to real world problems and contexts;

3. Creative, analytical, quantitative, and critical thinking.

Instructor survey results suggest that the first and third of these are addressed in most Gen Ed courses. The second objective, application of methods to real world problems, appears to receive less extensive coverage, suggesting the need to better communicate the centrality of this objective to the General Education program.

On a possibly related point: an analysis of course characteristics conducted by the Office of Academic Planning and Assessment (OAPA) shows that there are a number of courses with General Education designations that enroll a relatively small proportion (<50%) of students who are taking the course to fulfill a Gen Ed requirement. In most cases the non-Gen Ed students are taking the course to fulfill a major or some other requirement.

Table 2 shows the proportion of courses within each designation that have this "mixed" enrollment. The first two rows show the number of courses that fall into each of the two course categories. The third row shows the proportion of all Gen Ed courses within the designation that have mixed enrollment. The fourth row shows the proportion of courses that reflect 80% of all first year Gen Ed enrollments that fall into this category.

Table 2. Percent of Gen Ed Courses with <50% Gen Ed enrollments, by designation[2]
(This information reflects students' self-reports on the campus's course evaluation instrument Student Response to Instruction, or SRTI).[3]

	AL	AT	HS	SB	I	SI	BS	PS	R2
Total # Gen Ed Courses	59	33	51	76	33	6	30	31	36
# Gen Ed with "Mixed" enrollment (i.e., <50% of students are enrolled for a Gen Ed requirement)	16	10	10	34	9	1	8	10	26
% of total Gen Ed courses with "Mixed" Enrollment	**27%**	**30%**	**20%**	**45%**	**27%**	**17%**	**27%**	**32%**	**72%**
% of 70 1st year enrollment Gen Ed courses[4] with "Mixed" Enrollments	**0%**	**14%**	**0%**	**38%**	**0%**	**0%**	**23%**	**71%**	**73%**

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[2] AL=Literature, AT=Arts, HS=Historical Studies, SB=Social & Behavioral Sciences, I=Interdisciplinary, SI=Science Interdisciplinary, BS=Biological Science, PS=Physical Science, R2=Analytic Reasoning
[3] SRTI Question Wording: Which best describes this course for you?:
   1. Requirement for your major/minor; 2. General education requirement; 3. Other requirement; 4. Elective.
[4] These courses represent 80% of all first year general education enrollments.

Note in particular the high number of Physical Science and R2 courses (particularly those with the greatest proportion of first year enrollments) that fall into the "mixed" category. Social and Behavioral sciences also have a relatively high proportion of courses with mixed enrollments.

The GETF sees the presence of these "mixed-purpose" courses as potentially problematic, suggesting a barrier to effectively addressing the learning objectives for General Education.

<u>Findings: Objectives associated with specific designations</u>

The GETF recognizes that other objectives are intended to be addressed in specific designations, rather than across all Gen Ed courses. In these instances, the survey results revealed that 80% or more of courses in the relevant designation report addressing these objectives (with one exception noted below):

1. Pluralistic perspective taking and awareness of the relationship among culture, self, and others (AL, SB, U, G);

2. Communicating persuasively and effectively in writing (in addition to being present for First Year Writing, this objective is addressed in all courses in the "Social World" category <u>except</u> SB, where only 73% of instructors indicate they address writing).

These results are generally reassuring. The question of whether it should be expected that SB courses contain a writing requirement (particularly for those courses that are quite large) may need to be addressed.

<u>Findings: Objectives with no current designation "home"</u>

In addition to the lower coverage of writing in SB courses, four other objectives currently receive less coverage than is ideal (i.e., <75% of courses address the objective). These include:

1. Understanding and evaluating the consequences of one's choices and the implications of one's actions (results indicate this is addressed in "I" and the small number of "SI" courses represented in the survey);

2. Communicating persuasively and effectively orally (indication of this occurring in the AL designation; also note: the original legislation suggests that oral communication can be one of the options for assignments in AT);

3. Working effectively and collaboratively (not sufficiently addressed in any of the designations identified here);

4. Developing information and technological literacy (information literacy was recently incorporated into the first-year and junior year writing requirements, there is also the indication that it is introduced in the BS designation; technological literacy referenced in first-year writing and in PS).

The GETF did not make specific recommendations for how these gaps should be addressed. However, it is clear these objectives will need to be formally assigned to some Gen Ed designation(s) or to specific course(s) within the program.

GETF discussions do provide some guidance in how to proceed. For example, GETF members who teach in various "Social World" designations expressed an interest in incorporating the learning objectives discussed in this section into their designations. In addition, GETF members who teach BS/PS courses expressed concern that the original legislation gave BS/PS designated courses no responsibility for oral or written communication, for information or technological literacy, or for helping students evaluate the consequences of their actions. The GETF members felt this was a serious gap in representing the central learning objectives of the sciences. These discussions suggest areas where the assignment of learning objectives could be altered.

Limitations

The instructor survey is a useful step in reviewing whether the General Education learning objectives are actually being addressed in the Gen Ed program. While the results provide a sense of the Gen Ed course landscape, they do not provide a complete picture. First, these data do not include the responses of TAs, a group that provides a large proportion of Gen Ed instruction (see *curriculum mapping results* for sections not covered in this group). In addition, the survey did not provide definitions of these objectives and instructor responses might be subject to errors due to this lack of clarity in meaning. Following from that, the results reflect instructors' instructional <u>intentions</u>. They do not tell us what students actually learn or how they perform on each of these learning objectives as a result of their Gen Ed experiences.

Finally, one can argue that a very generous threshold was used for identifying where misalignment exists. Is it really sufficient when only three quarters of instructors report that they address an objective that all Gen Ed courses are supposed to address, or that all courses within a given designation are supposed to address? Given the preliminary nature of the study and the possible confusion over definitions and terms, this cut-off seemed reasonable for this stage of Gen Ed review. However, the goal should be for increased alignment of objectives with instruction <u>and</u> with student learning/performance.

Recommendations

Recommendations for enhancing alignment focus on two essential elements in delivering Gen Ed: Support for Gen Ed instructors and Actions Taken by the Gen Ed Council.

<u>Recommendations for Instructional Support and Development</u>

Given the uneven communication of Gen Ed purposes and learning objectives in current Gen Ed syllabi and evidence of instructors' lack of clarity about the Gen Ed purposes and learning objectives, a major focus of the GETF was to make recommendations for how to improve communication and support to Gen Ed instructors. These recommendations include:

1. Build better means for communicating these objectives to instructors through the new Gen Ed website, departmental meetings, other marketing strategies;

2. Develop instructional tools to help instructors align their course goals with Gen Ed expectations (e.g., syllabus examples, sample General Education statements and objectives, etc.);

3. Implement regular communication from the Gen Ed Council chair encouraging instructors to adapt their syllabi to more directly address these objectives;

4. Provide instructors with instructional development opportunities, like the new Gen Ed Fellows program, where they can focus on these objectives and develop additional methods for addressing and assessing them in their courses.

Initial implementation of each of these recommendations has already taken place, with plans to continue to improve or expand the initial steps.

Actions Taken and Future Recommendations for Gen Ed Council

1. The Gen Ed Chair now communicates with all Gen Ed instructors prior to the start of each semester, thanking them for teaching Gen Ed, reminding them of the Gen Ed purposes and learning objectives, and requesting that the instructors address these objectives in their course syllabi;

2. The Council has reviewed their current course review rubrics and the forms instructors submit to apply for Gen Ed status for their courses. They are in the process of modifying these forms so that they more directly reflect Gen Ed purposes and learning objectives.

3. In collaboration with the Office of Academic Planning and Assessment (OAPA), the Council will pursue the use of a SRTI course evaluation instrument designed specifically for Gen Ed courses, focusing specifically on students' experiences related to the Gen Ed purposes and learning objectives.

4. The Council should consider how to ensure that the learning objectives that do not currently receive adequate coverage (as indicated in the instructor survey) are addressed within the requirements/designations. This may require assigning these objectives to specific designations or courses.

Gen Ed Delivery: Enhancing Student Learning

Background

How might the current UMass Amherst Gen Ed program be adapted to enhance student learning within the context of a large research University? The GETF explored answers to this question by reviewing evidence about the UMass Amherst General Education experience, the extensive research on how individuals learn, and the innovative General Education practices in place at other research universities.

The review of this evidence and the research suggested areas for improvement in the General Education curricular design. Students, and in some cases faculty and advisors, talk about General Education as something to "get out of the way" as opposed to viewing the program as a coherent educational experience that draws from students' previous knowledge, helps them build upon that knowledge through ongoing practice, emphasizes deep versus surface learning, and offers them opportunities to learn in community with others. Survey and focus group results show that many students have trouble seeing the relevance of General Education to their own interests, or to preparation for the work place. Some students express dismay when their Gen Ed course experiences seem more like high school than college-level work. While students are in many cases critical of some of their experiences, they do acknowledge the value of General Education (see, for example, Appendix A). They also express appreciation for those courses that help them relate the subject matter to "real life", that use instructional strategies that actively engage students in the topic, and that use varied assignments and assessment methods that foster "learning over cramming." (see *GETF assessment results*)

In September 2008, the GETF sponsored a meeting of the University Councils and Committees that have responsibility for various aspects of the undergraduate learning experience (i.e., the General Education Council, Undergraduate Education Council, Undergraduate Writing Council, Undergraduate Deans Council) to facilitate a larger conversation about how to enhance learning in General Education. Together the 60 participants reviewed the evidence described above and generated ideas for improvements to the UMass Amherst Gen Ed model. The curricular priorities they identified centered on:

1. creating <u>better alignment</u> between Gen Ed learning objectives and students' actual experiences;

2. <u>improving coherence</u> so that students revisit core Gen Ed goals throughout their learning experiences;

3. <u>enhanced integration</u> of General Education content and experiences with "real world" questions, the majors, and post-college preparation; and

4. <u>building community</u> for students – by building student cohorts that focus on a common theme, infusing more interaction in the classroom, or offering more small class experiences.

Drawing from these recommendations and guided by principles of good practice in enhancing learning, the GETF proposes exploring the following alterations to the General Education program:

1. Move from a 3-Credit to a 4-Credit General Education Course Model

2. Create an Upper-Level Integrative Experience

Rationale

The Four-Credit course option in conjunction with the upper-level integrative experience provides an important opportunity to reinforce a number of the key curriculum design principles that enhance student learning (see Appendix B for a brief overview of this literature). Specifically, this proposal will improve the opportunities for students to "Focus on Deep Knowledge," "Learn in Community," experience greater "Coherence" in the General Education curriculum, and have structured opportunities to "Synthesize" and "Integrate" their General Education experience. As one member of the GETF described the proposed changes, "The potential for the pedagogy is phenomenal!"

<u>Four Credit Option</u>

Moving from three-credit to four-credit General Education courses offers students in the early stages of their college career the chance to spend more focused time on fewer courses, facilitating the opportunity to engage in the "deep knowledge" highlighted in the research. Students would be able to explore a topic or discipline in more depth and spend more time practicing the critical thinking and communication skills associated with the discipline. The four credit course design also makes it more possible for instructors to incorporate varied learning experiences (independent work, group work, application to "real world" topics, additional hands-on work) to facilitate student engagement in their learning (addressing "Learning in Community" and "Integrating Education and Experience"). These courses could also offer more challenge to students by requiring greater participation in the course.

This option also offers the possibility of a more efficient use of instructional resources. For example, this option may mean that fewer, better, General Education courses can be offered. A streamlined set of courses would help facilitate the General Education Council's Quinquennial Review process, make communication with instructors and departments more manageable, and potentially improve alignment of course and General Education learning objectives.

<u>Upper-Division Integrative Experience</u>

In recent years there has been increased emphasis on integrative learning as an essential component of preparing college students for their future. The Association of American Colleges and Universities (AAC&U), a national organization taking a leadership role in general education and liberal learning curricular development, identifies integrative learning as one of the Essential Learning Outcomes (see Appendix B) students need to develop to excel in a "complex and volatile world" (AAC&U, 2007, p. 13). At the same time, the burgeoning research into how individuals learn has highlighted the challenge that novice learners face in making connections among seemingly disparate sets of information and experiences (see, for example, the National Resource Council, 1999 & 2001). Therefore, institutions of higher learning are being called upon to offer students multiple opportunities to practice "integrating and applying their learning" to new situations, challenging questions, and real-world problems (AAC&U, 2007, p. 13).

The upper-division integrative experience provides a structured context for students to reflect on their own learning and explore the connections between the broad exposure provided by General Education and the more focused exposure of their major (offering a "Synthesizing Experience"). This experience would also provide students with opportunities to practice General Education learning objectives like oral communication, collaboration, and interdisciplinary perspective taking, at a more advanced level ("Coherence"). Finally, it offers students an additional common learning experience within their major ("Learning in Community").

The manner in which this experience is implemented, including whether these experiences would be coordinated and offered at the School/College level or the departmental level, is dependent upon the level of administrative support for this effort and the cooperation/involvement of academic departments.

> Distribution of Requirements: A Possible Model

The following table shows one option for how this proposal might change the distribution requirements for General Education:

Table 3. Changes in Distributions: One Example

	Current Courses (credits)		Proposed Courses (credits)	
	Lower Level # of Credits	Upper Level # of Credits	Lower Level # of Credits	Upper Level # of Credits
Writing	1 (3)	1 (3)	1 (3)	1 (3)
Social World				
AL / AT	2 (3)		1 (4)	
HS	1 (3)		1 (4)	
SB	2 (3)		2 (4)	
Other social world	1 (3)			
G & U	*		*	
Biological & Physical World				
BS	1 (3)		1 (4)	
PS	1 (3)		1 (4)	
Other BS/PS	1 (3)			
Analytic Reasoning				
R1	1 (3)**		1 (3)**	
R2	1 (3)		1 (3)	
Integrative Experience				1 (3-4)
# of Credits	Lower Level=36 Upper Level=3 Total=39		Lower Level=33 Upper Level=6-7 Total=39-40	
# of Courses	Lower Level=12 Upper Level=1 Total=13		Lower Level=9 Upper Level=2 Total=11	

* The G (3 credits) and U (3 credits) requirement may overlap or stand alone

** May test out of requirement

In this model, the number of courses required in the Social World area decreases from 6 to 4 and the number in the Biological and Physical World from 3 to 2. Writing and Analytic Reasoning remain the same (both in terms of number of courses and number of credits). The total number of General Education courses required is reduced from 12 to 10.

Next Steps

The GETF is enthusiastic about the potential of this proposal to enhance student learning and facilitate the goals of General Education. There are, however, numerous challenges and questions that need to be addressed before the feasibility of this proposal can be discerned. Below is a brief summary of the issues the GETF has raised:

- **Course Design**:

  Four Credit Option: The Four Credit change assumes additional student work, which can take various forms but would generally not include additional contact hours. The question then becomes, how will the content/activities of current three-credit Gen Ed courses be changed to meet the requirements of an additional credit? And, what instructional support will be available/will be needed to make these changes? Some possible models for additional credit: additional assignments, increased content, additional instructional activities (e.g., group work, out-of-class/applied experiences, online instruction/tutorials, blended instruction, etc.). What kinds of criteria need to be in place, and what type of monitoring would need to occur to ensure that the courses fulfill the requirements of a four credit course?

  Integrative Experience: These experiences by nature have an interdisciplinary focus. Will instructors in departments be prepared to approach the course in an interdisciplinary/integrative manner? Can this requirement only be fulfilled through an integrative course, or could students use other experiences (community service learning, a thesis, applied experiences) to fulfill this requirement? If non-course options qualify, what are the supervisory/advising resources necessary for this approach? What will be the criteria for establishment of these courses/experiences? Who will monitor their alignment with Gen Ed purposes?

  The GETF recommends that, as an initial step, the campus support a set of pilot courses to help identify the specific design implications of this proposal.

- **Instructional Support & Resources:** What will these proposals mean for faculty time and workload, and what impact will they have on departmental offerings? Will there be a decrease in the number of General Education courses needed in the lower division, and will the resources associated with those courses (in particular, TA support) be re-allocated to help support the increased requirements of a four credit course? What other support will be made available to help instructors re-design their courses to 4 credits and/or develop integrative experiences for students? What are the increased advising workload and advising opportunities associated with these moves?

- **Logistics:** Redesigning credit structure and requirements has a number of serious implications that will need to be addressed, requiring an intensive planning. Among the issues that need to be considered:

<u>Four Credit Option</u>: How will the change be managed? A piecemeal or staged change seems unworkable, particularly from the student perspective. What is a workable timeline for making the change wholesale (and what support would be required to make this happen)? What would happen to Gen Ed courses that do not become four credit courses – do they no longer qualify as Gen Ed? Would there be enough courses to meet the need if this were to happen? What are the "carrots and sticks" that could be used to facilitate the shift? What about various one-credit options (in RAPs, Commonwealth College, etc), are these affected in some way? What other logistical implications (e.g., credit overload ramifications, etc.) need to be taken into account?

<u>Integrative Course/Experience</u>: How can majors/programs that already have integrative experiences (e.g., Commonwealth College, others) be accounted for?

- **Resources:** Will there be resource savings associated with the four credit model (and the concurrent decrease in the number of lower division Gen Ed courses students must take)? If so, what do the savings look like (i.e., number of courses, TA shifts, etc.,) and will those resources be reallocated to address the issues outlined above?

- **Departmental Response:** What are the implications of these changes at the departmental and school/college level? How do we ensure that departments help support these instructional changes and the time commitment it will require of instructors and TA's? What structures can be put in place to help facilitate departmental cooperation/"buy-in"?

- **Student Response:** What is the student response to this option? How will it affect them? How does the campus insure that this change does not adversely effect students timely progress to degree?

Recommendation

The aim of this proposal is to improve student learning and more fully achieve the purposes of General Education at UMass Amherst. However, as this list suggests, there are numerous questions that need to be addressed before moving forward. The GETF recommends that this proposal be given full consideration by the General Education Council. Given the scope of this proposal the General Education Council may want to create a Task Force to explore the issues involved in implementation.

Assessment: Monitoring and Assessing Gen Ed Effectiveness

The best of intentions, the most thoughtful design, and well crafted learning objectives do not ensure that a General Education program is effective in delivering the intended curriculum or in helping students develop the knowledge, skills, and perspectives the curriculum intends. It is essential that the campus also put processes in place that monitor the alignment of General Education courses with program purposes and that makes it possible to collect systematic evidence of the effectiveness of the program in helping students meet General Education learning objectives. These process can help the campus identify where changes and improvements should be made and provide evidence that demonstrates to ourselves, to students and parents, and to the larger society that the campus is meeting its responsibilities for student learning and development.

The GETF's discussion of program effectiveness focused on two questions:

1. How can curricular effectiveness and alignment with General Education purposes at both the course and the program level be monitored?

2. How do we know (and how can it be demonstrated) that UMass Amherst General Education is meeting its stated purposes?

Monitoring the General Education Program Effectiveness

UMass Amherst General Education is expansive and complex. As of March 2009 there were 546 Active General Education courses offered by more than 60 departments and programs. For the 2007-2008 Academic Year, 411 General Education courses were offered (represented by 1196 course sections). These course sections were taught by 279 faculty members, 127 lecturers, and 274 Teaching Assistants. The scope of the General Education program presents a challenge for the campus's efforts to ensure that General Education course offerings are in alignment with, and reinforce, program purposes and intentions for student learning.

The evidence the GETF was able to review as a part of its work reinforced the challenge the University faces in ensuring alignment. The results of the survey of General Education instructors indicated that while many of the General Education objectives are addressed by most (75% or more) of the General Education courses within the relevant designation, there are some objectives that are not currently adequately addressed (see the "Alignment" section of this report for more information on the alignment analysis). Syllabus analyses and the experiences of General Education Council members who review course proposals on a regular basis indicate that many course syllabi do not specifically mention the purposes of General Education or explain how the course will address those objectives.

The GETF's recommendations regarding improving communication to faculty about General Education's value and purposes will help improve course alignment with General Education objectives (see discussion in Alignment section of this report).

The Faculty Senate governance structure provides another important means for ensuring General Education course alignment through the Quinquennial General Education course review process. Indeed, one of the strengths of the General Education program is that the

Faculty Senate General Education Council is charged with reviewing all General Education courses on a five year cycle (in addition to reviewing and approving all new General Education course applications). The Council reviews course syllabi, course assignments related to General Education learning objectives, and departmental statements that describe the specific ways in which the course meets the expectations for that course's General Education designation(s).

The GETF affirms the importance of this monitoring system while also acknowledging the enormity of the task. In consultation with the General Education Council, the GETF identified a number of strategies for supporting and enhancing the Council's efforts. Some recommendations specific to streamlining and supporting the actual course approval and Quinquennial review process have already been put into place:

1. Funding for the development of an online course application, review, and record keeping system that would not only streamline the application and review process but also create a better system for tracking reviews over time, updating course approval lists, and implementing other record management components of the process (preliminary version expected Fall 2009);

2. Increased administrative support through the appointment of a graduate student assigned to help the Council communicate with departments and instructors, managing the Quinquennial review process and record keeping needs, and providing ongoing maintenance for the Gen Ed Website;

3. Assessment staff consultation to support the Council's efforts to develop revised course review forms.

Monitoring program effectiveness is closely linked to the larger need for encouraging departmental buy-in and cooperation. Currently, departments offering General Education courses don't always respond to requests for Quinquennial Review documents nor do they always take the process seriously when they do provide documentation. The GETF believes that creating departmental "buy-in" is both a major challenge and an important priority. It will take dedicated leadership, enhanced communication, and policies with "teeth" to address this challenge.

The specific recommendations for the future are:

1. Appoint and give release time for a Director of General Education to provide leadership and regularized overview of General Education delivery. This position would fill a serious gap in the ongoing functioning of General Education program by providing day-to-day monitoring of General Education's effectiveness, coordinating advocacy efforts, and generally serving as a dedicated "point person" for the program.

2. Organize a process where representatives from the General Education community (the Director of General Education, members of the General Education Council, etc.) meet with department heads and chairs or individual departments/programs to discuss General Education and the department's role in ensuring its effectiveness. *(Planning committee is in place, plans for launch of effort in fall 2009.)*

3. Put a "sunset provision" into place for all General Education courses such that courses that have not been reviewed within a certain period of time lose their General Education designation.

Student Assessment

One of the major contributions the GETF has made to the General Education program was to clarify its purposes and provide a statement of the intended learning objectives for the program. Having completed this statement, the GETF turned to analyzing the extent to which the General Education program is actually accomplishing those learning objectives. To begin to answer this question, the GETF reviewed instructors' reports of which learning objectives they emphasize in their Gen Ed courses (instructor survey) and student self reports (through surveys and focus groups) about the quality of their General Education experiences, the kinds of instruction that helps them learn, and what they believe they have gained from General Education.

While these are important information sources, they provide only <u>indirect</u> evidence of student learning. The instructor survey tells us what instructors teach (or, what they intend for students to learn) and the student survey and focus group data tells us what students believe they are achieving as a result of General Education. There currently is no direct systematic evidence of students' actual performance on these objectives[5].

The University will participate in the *Voluntary System of Accountability* beginning in 2009-2010, the requirements for which include use of a standardized assessment test of student learning related to General Education objectives (i.e., critical thinking and writing, within the contexts of the humanities, social sciences, and natural sciences). This test, administered to a random sample of first year students and seniors, will provide the campus and the public with a single score for the University's student learning outcomes performance (i.e., student performance is: well above, above, at, below, well below what would be expected at an institution with similar students of similar academic abilities). While the University's participation in the VSA will address external pressures for higher education accountability, the GETF recognizes the limitations of this type of assessment for providing the information that would be most useful for internal program monitoring and improvement. The VSA student outcome results will not provide the campus with: (1) Authentic evidence of student performance (meaning, actual student work from UMass Amherst courses); (2) Evidence of students' performance on the range of UMass Amherst general education learning objectives; (3) Evidence that helps clarify the areas of student performance in need of most improvement; or (4) Insights into what improvements should be made to the student experience, instructional practices, or curricular design. These represent substantive gaps in the usefulness of the VSA outcomes data for informing changes and enhancements to the General Education program.

Following from these observations, the GETF makes the following recommendations for Student Assessment:

1. Continue to support current General Education assessment methods (periodic administration of instructor survey, student surveys and focus groups, regular analysis

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[5] This does not mean that there have been no efforts to begin direct assessment of student learning objectives. Two earlier projects focused on assessing student writing competency in the junior year serve as important stepping stones for assessing General Education outcomes. The first of these was the Writing Across the Curriculum Assessment Group (WACWAG) project, that brought a group of faculty from varied disciplines together to identify common (cross-disciplinary) objectives for writing in the Junior Year. The second was a *pilot assessment of writing competency* at the Junior Year that tested three different assessment methodologies (timed essays, essays drawn from Junior Year writing courses, and student portfolios).

of course demographics and instructor types, and aggregated SRTI course evaluation results);

2. Augment current indirect assessment measures by developing and piloting a set of General Education specific Student Response to Instruction (SRTI) items that would provide information about students' course-specific experiences and perceived learning related to relevant General Education learning objectives;

3. Move forward with a program of <u>direct</u> assessment of student learning. Provide support for a pilot campus-based student learning assessment project. The purpose of this project would be to involve instructors and relevant administrators in designing and implementing a systematic assessment of student performance on a set of General Education learning objectives. The assessment of student coursework in relationship to the learning objectives for General Education will provide instructors with additional insight into the alignment of General Education course work and goals, clarify the extent to which students are performing at expected levels on key learning objectives, and provide evidence to internal and external parties regarding the effectiveness of the General Education program in facilitating student learning.

4. Consider imbedding student learning assessment into the integrated experience component of General Education (see discussion of integrative experience in the "Enhancing Student Learning" Section).

5. Pursue the feasibility of implementing a Student Learning Portfolio opportunity for interested students and departments. Students could use the portfolio to reflect upon and demonstrate their learning and development (on General Education learning objectives, learning objectives in the major, and extra-curricular skills). This could be implemented on a pilot basis in academic departments with an interest in using this tool for their own program assessment efforts or to help support students' post-college career advancement.

Resources and Structural Challenges:
Issues Not Directly Addressed by the GETF

THE GETF began with a diagram that served to clarify and focus its efforts (see the *GETF plan*). Following from the Provost's initial charge, the GETF spent the majority of its time focusing on the issues represented by the three boxes in the corners of the diagram triangle: Purpose and Goals, Delivery, and Assessment. This report provides evidence of the extensive achievements made in each of these areas.

After reviewing the initial plan (which showed only the three issues identified above), the GETF noted the importance of including the two issues represented inside the triangle: Resources and Systemic Challenges. Discussions of the challenges and constraints these two sets of issues place on a fully successful implementation of the UMass Amherst General Education program were woven through the GETF deliberations (see Appendix C: "General Education: Delivery, Resource, and Structural Challenges"). To the best of its ability, the GETF worked to make recommendations or implement strategies for addressing these challenges. However, there are a number of issues that were raised on a regular basis but were not within the capacity of this GETF to adequately address. Among the challenges minimally (or not at all) addressed are: insufficient TA development, inconsistent and unclear TA allocation process; lack of effective incentives for individuals teaching or departments offering Gen Ed courses (see Appendix C for a fuller description of these issues as well as other challenges associated with Gen Ed delivery).

The GETF did dedicate part of one meeting near the end of its deliberations to brainstorming low-cost ways to address some of these challenges. Table 4 shows the ideas generated during that discussion.

These ideas reflect only a few of the possible solutions to these challenges. The GETF's hope is that these issues can be more fully addressed as budgetary constraints and administrative priorities allow. In the meantime, the document in Appendix C serves as reminder of the continued challenges associated with providing an enriching General Education experience for students, faculty, and administrators alike.
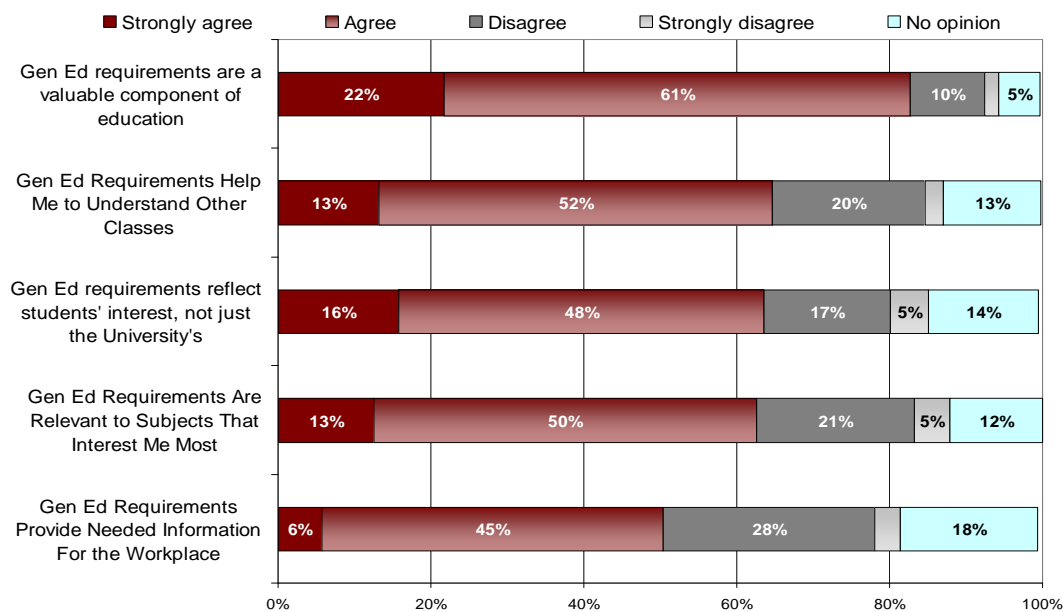
Table 4: Some Possible Solutions to Resource and Systemic Challenges

Instructor Incentives	Departmental Incentives	TA Allocation & Support
Reward exceptional Gen Ed teaching, through: - Mobile parking permit for a year - Highlight success stories on Gen Ed Website, newsletter, Collegian article, other award - Travel money to professional meetings Support to instructors: - Work-study students in major could help with Gen Ed courses - Students with merit-based aid could be assigned to instructors Annual report include instructor contributions to Gen Ed (similar to diversity item)	Adjust instructional course loads to promote more creativity (reduce class size, ensure TA support) Faculty seek time or money; Departments seek faculty or TA positions	TA funds should be entirely within the Provost's Office Have TAs assigned solely to Gen Ed courses Workshops for TAs who work just a few hours for a course on how to maximize their time Mid-Year TA training

Appendix A.

Survey*: Student Agreement to Gen Ed Statements

Legend: ■ Strongly agree ■ Agree ■ Disagree ☐ Strongly disagree ☐ No opinion

Statement	Strongly agree	Agree	Disagree	Strongly disagree	No opinion
Gen Ed requirements are a valuable component of education	22%	61%	10%		5%
Gen Ed Requirements Help Me to Understand Other Classes	13%	52%	20%		13%
Gen Ed requirements reflect students' interest, not just the University's	16%	48%	17%	5%	14%
Gen Ed Requirements Are Relevant to Subjects That Interest Me Most	13%	50%	21%	5%	12%
Gen Ed Requirements Provide Needed Information For the Workplace	6%	45%	28%		18%

*December 2007 Survey of undergraduates enrolled in the General Education course: "The Biology of Cancer and Aids" (N=423, Response rate = 89%)

Appendix B.

UMassAmherst

Research on How People Learn:
Key Principles for Curriculum Design[1]

- **Connections to Prior Learning**: New information must be meaningfully connected to previous knowledge to be remembered (previous knowledge/beliefs can enhance or impede new learning).

- **High Expectations**: Students learn more effectively when expectations for learning are placed on high but attainable levels and when these expectations are communicated clearly from the outset.

- **Focus on Deep Knowledge**: Long term learning depends on a focus on understanding concepts, disciplines, ways of knowing as opposed to a focus on facts/memorization.

- **Coherence**: Students succeed best in developing higher-order skills (critical thinking, written and oral communication, problem solving) when such skills are reinforced throughout their educational program.

- **On-going Practice**: Unpracticed skills atrophy quickly, particularly cores skills like computation and writing.

- **Synthesizing Experiences**: Students learn best when they are required to synthesize knowledge and skills learned in different places in the context of a single problem or setting.

- **Learning in Community**: People learn best in community—through discourse and interaction with others – and is facilitated by learning environments that foster these interactions.

- **Integration of Education and Experience**: Classroom learning is both augmented and reinforced by multiple opportunities to apply and transfer what is learned.

[1]Taken from Diamond (1998) & Education Commission of the States (1995) with adaptations based on Huber (2000), Gardiner (1996), Mentkowski (2000), National Research Council (1999) & (2001). (M. Stassen, UMass Amherst, Office of Academic Planning and Assessment, 2008).

Appendix C.

General Education: Delivery, Resource, and Structural Challenges
Themes from GETF Discussions and Interviews with Current and Former
General Education Council Members (Fall 2007)

GE Courses Serving Multiple Purposes	Large Classes	Communication/Public Relations
• Courses that serve both General Education students and major preparation present challenged to students and instructors: Gen Ed students can feel like second class citizens, Instructors can find it challenging pedagogically, but also has instructional benefits – allowing for student –to –student learning) • Upper-level students in introductory courses are a pedagogical challenge, especially when course is designed to help prepare first year students • What do the wide range of Gen Ed courses have in <u>common</u> for students? - What should all Gen Ed courses offer?	• Large classes make teaching for some learning objectives (e.g., writing, critical thinking,) challenging if not impossible (particularly without adequate TA support). • There is no incentive for teaching large classes and they are very time consuming to teach – particularly when trying to teach to certain Gen Ed learning objectives. • To support their development, students need some small class experiences; first-year students in particular can get lost in big classes • Administrative rewards go to offering large classes, not small	• Need a centralized source of information (website) • Lack of clarity about the purposes of Gen Ed • Lack of clarity of Gen Ed's benefits to students • Need to communicate goals and purposes of Gen Ed at course level • Faculty don't know much about Gen Ed • How do we sell Gen Ed – to students, to faculty, to advisors, to the public? • Advisors need to help communicate benefits of Gen Ed to students • How do we communicate relevance of Gen Ed to students?
Assessment	**Capacity to Meet Learning Objectives**	**Requirement Rigidity**
• What curricular and pedagogical structures will facilitate the proposed student learning objectives – what structural factors impede student development of these objectives? • Develop increasing clarity about the specifics of the learning objectives – what types of student performance provide evidence of those objectives? • It's important to develop a student learning outcomes assessment strategy (perhaps focused on Writing and Critical Thinking) to clarify extent to which the Gen Ed program is meeting goals for student learning	• How to meet Writing and Critical Thinking objectives in large classes with inadequate TA support • How to meet diversity objectives in non-diverse classrooms • No labs • Not diluting the educational experience – making it challenging	• Lack of room for students to pursue their own educational interests (e.g., take more advance course to meet designation, explore an area in depth) • Lack of new and innovative courses • Develop "themes" or strands of courses • Are there other ways for students to gain competencies/experiences besides through course taking – e.g., demonstrating competencies in portfolios, other ways?

Appendix C. (continued): General Education: Delivery, Resource, and Structural Challenges

Gen Ed & Major	Incentives for Gen Ed	Department & Dean Interest/Support
- What is the relationship between the Gen Ed learning objectives and expectation within the Major? What role does the major play in facilitating these objectives? - Some students mention difficulty in making links between Gen Ed and major, others say they later saw a connection; - Some students picked up a minor or switched majors based on Gen Ed experience	- There are no structural benefits to Gen Ed. - There are no "carrots" for Gen Ed participation - For whom are the rewards – individual instructors? Departments? - What rewards are available? Do they work to promote/support Gen Ed quality? - Types of possible incentives: tenure/merit, departmental recognition, release time	- Mixed departmental commitment to offering quality General Education courses – what's in it for them? - The importance of "ownership" by Deans and Chairs (e.g., "what would it take to create a 'star' Gen Ed course in your department?") - Importance of departmental acknowledgement of contributions of Gen Ed instructors - Departments are balancing multiple needs – Gen Ed, the major, graduate courses, etc.
Quality of Course Experience	**Course Review/Monitoring**	**Gen Ed Leadership**
- It takes particular skills to teach a Gen Ed course well – and most faculty do not receive support/training to do this. - Need to have multiple instructional development opportunities for TAs and Faculty - Need to communicate purposes of Gen Ed at the course level (in syllabus, etc) – why is Gen Ed important, how this course addresses Gen Ed purposes, etc. - Provide examples/ information on how to communicate and address Gen Ed goals in courses - Need to reward and celebrate excellent General Education course experiences. - Get departments to compete to offer "star" Gen Ed experiences - What processes would help ensure quality Gen Ed course experiences? (e.g., Student Feedback, Council Role)	- Departments don't always cooperate with the Gen Ed review process - Difficulty of keeping up with demands/volume of Quinquennial reviews - Questions about the potential gap between the course as originally proposed and approved, and what is actually taught/delivered. - Tension between monitoring quality/ maintaining standards, and encouraging participation in Gen Ed instruction - Better orientation for Council members on review criteria, process, etc. - Develop clearer, more focused, evaluation criteria, expectations for courses and course proposals - The Council has no "carrots"	- There is no point person for General Education – no champion - Who is in charge of Gen Ed? There is a lack of systematic overview and monitoring of the Program. Who is responsible for Gen Ed? - There is a lack of clarity about who decides about TA support and teaching assignments --- there is a lack of consistency in decision making. - In whose interest is it to deliver the Gen Ed Program? - To what extent does a faculty member own a course? - Lack of consistency and clarity in funding – people have different goals/priorities at various levels within the system – how can Gen Ed funding support the teaching mission of <u>departments</u> and <u>institution-wide</u> educational goals?

Appendix C. (continued): General Education: Delivery, Resource, and Structural Challenges

Faculty Involvement/Interest	TA Support/Allocation	
- Important to acknowledge instructors' contributions to Gen Ed - It's time intensive to appropriately train TAs, adds to work load. - It takes time to create a good Gen Ed course, particularly when it is a large course and you are working to address a variety of Gen Ed learning objectives - Faculty need support and opportunities for development of course – release time and other support are important - It's hard for faculty to see how their course fits into the General Education Program; focus is much more on the academic department.	- There is great variability in level of TA support/availability by Gen Ed designation and School/College - There are problems with the current funding system/process – who decides what courses get TAs? What criteria are used? How are decisions connected to ensuring quality Gen Ed experiences for students and instructors? - There are few rewards for TAs teaching Gen Ed – rewards come from research assistantships - Lack of training for TAs, lack of support for faculty who work with TAs on instructional development and assessment process.	

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