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EXECUTIVE SUMMARY

GENERAL EDUCATION AT BRIDGEWATER STATE COLLEGE: COMPARISONS, MODELS FOR CHANGE, ASSESSMENT INITIATIVES

General education, usually comprising between one-third to one-half of the credits earned in an undergraduate degree program, embodies what colleges and universities believe every educated person should know. General education programs are unique to each campus, the outgrowth of an institution's mission, the nature of its students and their aspirations, faculty standards of excellence, and a common consensus, often forged from spirited debate and conflict, of what knowledge and understandings will best prepare students for the future.

During the past two decades, an estimated 80-90 percent of colleges and universities have reviewed and revised their undergraduate curricula as a result of a call for improvements from within the academy as well as powerful external factors. The general education program at Bridgewater has been in place for fourteen years with only minor revisions since it was implemented in 1986. In mid-October 2000, President Adrian Tinsley appointed a three-person steering committee and commissioned this report with the following charge: (1) To review the general education program at Bridgewater and analyze the strengths and weaknesses of the existing program; (2) Compare Bridgewater's general education program to similar programs in Massachusetts state colleges, benchmark institutions, current practice in new England, and good practice nationally; (3) Review the learning outcomes expected from the Bridgewater general education program and the course-taking patterns of students to determine if patterns are consistent with learning outcomes desired; and (4) Identify models of good practice in general education, good examples of learning outcomes that reflect excellence, and best practices in assessing and documenting student learning outcomes and propose improvements.

Research for this report included reviewing scholarly research and national association reports to identify trends and best practices; interviews with faculty and administrators, at Bridgewater and elsewhere; interviews with national experts in general education; reviewing college catalogs and websites of selected colleges and universities in New England and the region to learn more about other institutions' programs; reading selected Bridgewater documents with specific references to general education; and analysis of data provided by the Bridgewater Institutional Research Office and the Dean's Office.

Based on comparisons of the Bridgewater general education program with its counterparts in Massachusetts and seven out-of state benchmark institutions and taking into account national trends, basic strengths and weaknesses of the Bridgewater program are: (1) A comprehensive distribution of courses across academic disciplines; (2) Students generally complete their general education requirements within the timeframe specified in the college catalog with minimal academic advising guidance; (3) General education goals are clearly stated in the catalog, but gaps exist and no assessment process

exists for determining if goals are being met; and (4) Faculty and administrators recognize that general education program revision is needed.

Areas of the general education program that need attention include:

1. Address gaps in content, e.g., demonstrated computer literacy, understanding of U.S. diversity, and writing intensive course.
2. There is a question as to whether the number of general education credits is too high in relation to the 120 credits required for a degree.
3. Students do not share a common course, core of courses, or set of experiences that define the undergraduate general education experience at Bridgewater. Many transfer students by-pass most, if not all, general education courses because they have transferred courses from other colleges.
4. The general education program is diffuse and lacks focus. Few connections or linkages are made between courses that could provide more coherence and meaning.
5. More flexibility is needed in meeting general education requirements, especially for transfer students. The possibility of a self-designed general education program is offered in the catalog, but no guidelines or process exist for students to take advantage of this option.
6. Except in a few majors, a senior capstone experience or seminar or a portfolio reflecting the culmination of a student's intellectual growth appears to be underutilized.
7. Courses and teaching approaches need to be reviewed to see if students are being actively engaged in class and learning how to work collaboratively and think critically.
8. The general education program needs oversight, coordination and direction through a designated administrator, faculty committee, or both. A specific committee devoted to the goals of the general education program would be helpful.

These recommendations are offered to encourage higher expectations for general education, provide greater flexibility and intellectual exploration, and provide direction for an assessment plan to be used for program improvement.

1. Update the general education program goals and tie closely to the mission of the college. Clearly articulate these in the college catalog.
2. Provide greater flexibility in meeting general education requirements.
3. Create a common experience for all students.
4. Address gaps in general education content - diversity, computer literacy, and writing intensive courses - and involve students in more active learning.
5. Strive for educational vitality and coherence in general education. Help students make connections between courses and content areas.
6. Invest institutional resources in faculty and course development for general education.

7. Provide for administrative coordination of general education and ask the faculty to appoint a committee to oversee the program.
8. Review faculty rewards and incentives for ways to recognize contributions to the general education program.
9. Develop a process for systematic, formative assessment of student learning to be used for program improvement with annual reporting of results to the All-College Committee and the Provost and Vice President for Academic Affairs.

Three models are proposed as possible frameworks for general education program revisions. Model #1 would require minimal revisions by adding a freshman seminar and senior capstone course. Model #2 would require modest changes by developing a four-year common core of study of 3-4 courses that would be organized around a theme. Model #3 requires reconceptualizing general education and reorganizing groupings for course selection based on learning goals, concepts, or subject matter, rather than by distribution across academic disciplines.

General education reform can take several years to achieve, and it would be helpful for Bridgewater to get started soon on this important work. General education is the central and largest academic program in the curriculum and deserves commitment and time to develop a coherent, intellectually challenging and vital experience that best prepares students for the future.

GENERAL EDUCATION AT BRIDGEWATER STATE COLLEGE: COMPARISONS, MODELS FOR CHANGE, ASSESSMENT INITIATIVES

Overview of General Education Reform

One of the distinguishing characteristics of American higher education is its inclusion of a general education curriculum outside the major area of specialty. Usually comprising between one-third to one-half of the credits earned in an undergraduate degree program, these general education courses embody what colleges and universities believe every educated person should know as well as those skills, understandings and intellectual capabilities that each campus wants its graduates to exemplify. General education programs are unique to each campus, the outgrowth of an institution's mission, the nature of its students and their aspirations, faculty standards of excellence, and a common consensus, often forged from spirited debate and conflict, of what knowledge and understandings will best prepare students for the future. No other area of the curriculum generates as much debate and conflict as does general education. Yet, in spite of the uniqueness of the general education program to each campus, there is remarkable agreement, reflected in general education programs on campuses across the country, of what constitutes an educated person able to lead a productive life and contribute to society.

The past two decades have witnessed a resurgence of interest in the content and quality of general education programs. This interest was sparked by a 1977 report by the Carnegie Foundation for the Advancement of Teaching in which general education was described as a "disaster area." In response to this call for action from within the academy, American colleges and universities have focused much attention on revitalizing their core curricula. The American Council on Education estimates that 80-90 percent of its member institutions reviewed and revised their undergraduate curricula during the 1980s while the Association of American Colleges & Universities (AAC&U) reports that it has worked with about 1,000 institutions in reforming their general education programs.ⁱ

In addition to calls for reform from within the academy, colleges and universities have responded to external pressures as well. An American public increasingly disenchanted with higher education has called for greater accountability and expressed dissatisfaction with what it perceives as graduates' lack of basic skills needed in the workplace. The groundswell of adults returning to college campuses since the 1950s and '60s for degrees, certificates and continuing education opportunities has confirmed futurists' projections that graduates need to be prepared to develop lifelong learning skills that enable them to develop for several professional careers over a lifetime. This adult student population has further challenged colleges and universities to question the appropriate balance of liberal arts and professional preparation courses and to sharpen their focus in answering the question "What should every educated person know?"

Many colleges and universities that responded to the call for general education reforms in the 1980s have begun to revisit their curricula in the late 1990s. New issues on the

agenda include diversity and multiculturalism, renewed emphasis on written and oral communication skills, the proper role of technology in the general education curriculum, a renewed interest in foreign languages, the importance of developing a shared common experience that draws faculty and students into closer contact, greater ease in transferring credits among colleges and universities, pedagogical approaches that actively engage students in collaborative learning, and assessment of student learning outcomes.

Assessment and accountability have become especially important topics in higher education during the last ten years. Colleges and universities are expected to demonstrate that students are making steady progress toward intended educational goals. These expectations for clearly stated goals with measurable outcomes that are assessed regularly are now formalized through the reaccreditation process, including The New England Association of Schools and Colleges (NEASC) that accredits Bridgewater State College. All of the regional accrediting agencies, and increasingly the specialized accrediting bodies, require that each college and university have clearly stated goals and objectives for general education and that learning outcomes be assessed regularly. Many campuses, in response to accrediting agency concerns, are reviewing and revising their curricula. Public higher education campuses face additional pressures from states that have mandated common core curriculum requirements (Texas and New York are two examples) or demanded closer collaboration among all levels of public higher education campuses to facilitate transferability among campuses. Rhode Island is a good example.

The Focus of This Report

In mid-October 2000, President Adrian Tinsley reviewed the subject of general education review and reform with Acting Vice President Larry Richards and Dean Howard London and commissioned this report. The charge was:

- To review the general education program at Bridgewater and analyze the strengths and weaknesses of the existing program;
- Compare Bridgewater's general education program to similar programs in Massachusetts state colleges, benchmark institutions, current practice in New England, and good practice nationally;
- Review the learning outcomes expected from the Bridgewater general education program and the course-taking patterns of students to determine if course-taking patterns appear to be consistent with learning outcomes desired;
- Identify models of good practice in general education, good examples of learning outcomes that reflect excellence, and best practices in assessing and documenting student learning outcomes and propose improvements.

This report will address each of these four areas.

Commissioning this report is an outgrowth of strategic planning for the future of Bridgewater. The “Vision for Bridgewater State College” draft document, September 2000, identifies the immediate need for general education review as an institutional priority. “The Board of Higher Education (BHE) Mission Implementation Plan (2000-03) for Bridgewater State College,” (p. 15) submitted to Chancellor Judy Gill in August 2000 identifies the general education program as a priority area for academic affairs. The “Academic Affairs Executive Summary and Goal Narrative, Three-Year Goals, 2001-03” sets general education and assessing learning outcomes as goals 2 and 3, respectively for the next three years. Summaries of the “Third Friday Academic Discussions” hosted by the Provost’s office during the 1999-2000 academic year involving faculty and administrators from across academic disciplines reflect thoughtful comments and creative suggestions for strengthening student learning for the six skill areas indicated for the current general education program.

The research for this report began with no preconceived ideas of what the particular strengths and weaknesses of the current program might be or whether recommendations for changes were warranted. The overall goals were to gather as much data as are available about how well the current program is meeting stated goals and to survey the existing research and national reports for trends in general education, assessment of student learning outcomes, and examples of best practices.

The research for this project involved the following: (1) a review of research, publications, and journal articles for the past five years; (2) a review of recent national association reports and regional New England reports; (3) in-person and telephone interviews with faculty and administrators at Bridgewater and elsewhere and national experts engaged in general education reforms; (4) a review of reports of faculty general education committees; (5) reviewing college catalogs of benchmark institutions to compare requirements; (6) a review of background reports and memoranda at Bridgewater; and (7) analysis of data provided by the Bridgewater Institutional Research Office and the Dean’s office.

Assessing General Education at Bridgewater State College

The current general education program has been in place for 14 years. Approved by the President in December 1985, the general education requirements were outlined in January 1986 in the document commonly referred to as “The Green Book.” These requirements are still in place and have undergone only minor revisions.

In recent years attempts to review the general education program have been initiated. A faculty committee was appointed in 1995 to study national practices in general education and offer recommendations. After two years of work, the committee could not agree on a set of recommendations and was disbanded in 1998. In 1999-2000 the Provost’s Office hosted a series of faculty and administration discussions called “Third Friday Academic Discussions” to develop performance outcomes for the six essential skills and goals of

the Bridgewater general education program. Attendance at the discussions fell off due to the lack of a new collective bargaining agreement which led to a “work to rule” situation.

The Bridgewater catalog for 2000-01 (p. 34) describes the general education program as follows:

The General Education Program is based on the premise that all educated persons, whatever their career interests, should possess the following essential academic skills:

- ability to write clearly and effectively;
- ability to listen and speak clearly and effectively;
- ability to think critically;
- ability to think quantitatively;
- ability to think creatively;
- ability to locate and process information.

The catalog goes on to identify eight areas in which “students should acquire an understanding of a significant body of factual knowledge and principles and experience . . .”: western civilization, literary analysis, philosophical/theological analysis, modes of artistic expression, physical and biological sciences, mathematics, foreign language, and non-western civilization.

General education goals are clearly stated and courses that satisfy requirements are presented concisely. Out of a total 1,555 undergraduate courses offered at Bridgewater, 154 (nearly 10 percent) are acceptable for general education. Twenty-two of these courses (just over 14 percent) have a prerequisite.

The catalog also indicates that the “opportunity exists for students to design their own General Education Requirements rather than following the requirements outlined.” (p. 34) Based on conversations with the deans at Bridgewater, it appears that students and faculty are unaware of this avenue of flexibility and no process is in place for helping students take advantage of this opportunity. The “Green Book” provides no guidelines for students who are interested in self-designing their own general education program.

One indicator of students seeking more flexibility in the general education requirements is in the number of exceptions requested from the Dean’s Office. Data indicate that from Spring 1999 to Fall 2000, 174 requests were received for waivers of requirements of which 80 were approved. Since September 2000 only 49 requests have been received. Twenty-one were approved, 20 were denied, and 8 are pending. Considering that the Fall 2000 entering class at Bridgewater was unusually large—1,939 new students (1,291 first-year students, 648 transfers)—it appears that a small percentage of students or their faculty advisers consider requesting exceptions to existing requirements. Reasons most often given for waiver requests include reconsideration of Admissions Office decisions to accept transfer credit, desire to take a general education course elsewhere, a desire to avoid certain requirements, wanting general education credit for life experience, and having taken a mid-level course in the same academic discipline elsewhere and hoping to

avoid a 100-level course. Most waiver requests are for behavioral sciences, history and non-western requirements.

Is the General Education Program Meeting Stated Goals?

To attempt to answer the question “Is the general education program meeting the six stated goals,” data provided by the Institutional Research Office were examined to determine when entering new and transfer students take six key courses: writing 1 and 2, speaking, locating and processing information, and mathematics. Transcripts of a random sample of 100 (10 percent) bachelor degree graduates in each of the last three years (1998-2000) were examined. A total of 300 student records were reviewed. Data are shown in Appendix A. In addition, data were generated re: course offerings, number of sections offered and average class size for each of the general education academic disciplines for Fall 1999 and Spring 2000.

The overwhelming majority of new students take writing, information services, and mathematics courses in their first year at Bridgewater. Writing and information resources courses must be completed by the end of the first 30 credits at Bridgewater; mathematics must be satisfied within the first 90 credits. The exception is speaking. Only 54 (31 percent) of entering freshmen complete this course by the end of their first year. Fifty-one percent completed the course by the end of the sophomore year as required in the catalog (within the first 60 credits). Eighteen percent postponed the course until their final two years at Bridgewater, beyond the 60 credit limitation.

Transfer student course-taking data indicate that the majority of students have already fulfilled requirements in writing 1 and 2 and basic mathematics and do not take these courses at Bridgewater. Less than half (45 percent) have transferred speaking credits and almost none have previously had a research and information processing course. Thus, Bridgewater has few opportunities to develop transfer students’ writing skills since they by-pass writing courses. Only 31 percent of transfer students who need to take a speaking course do so in their first year at Bridgewater. Sixty percent do not take speaking until their sophomore year or later.

Data for course offering availability for Fall 1999 indicate that 61 general education courses (35.1 percent) out of a total 174 courses were not offered. In the Spring 2000, 63 courses (36.8 percent) out of 171 general education courses were not offered. It should be noted that it is not intended that every general education course be offered every semester. Also, some courses may have been cancelled due to faculty leaves, lack of enrollments, or courses offered every other year. There are no data available, other than anecdotal information, to indicate how much exposure students have to participating in class discussions, collaborative and group work, and other forms of active learning.

Most general education requirements are taught by full time faculty. Everyone in the English department, for example, teaches introductory writing courses, usually two sections each. Full-time librarians teach most of the information research sections. Availability of general education courses does not appear to be a problem.

There have been no recent surveys of Bridgewater alumni or current students to gauge their satisfaction with their undergraduate experience nor have employers been polled for their views of the academic preparation of graduates for the world of work.

No data exists to indicate whether there is a typical course-taking pattern for first-year students, with the exception that most students take writing 1 and 2 unless they have placed out of these courses.

Transfer Student Issues

In his memorandum of October 30, 2000 Steve King, Director of Admissions, identifies a number of academic issues for incoming transfer students, including issues related to general education requirements. Comments in this section of the report draw upon his thoughtful observations. The existing foreign language and non-western requirements present few problems for incoming transfer students and are considered basic features of a liberal arts core. The following areas, however, most frequently call for new transfer students to take additional coursework:

Philosophy/Religion. Although a one-course requirement, courses in religion are not allowed to satisfy this requirement. More flexibility is needed to allow students to transfer religion courses to satisfy this requirement.

History. Students often have completed a two-semester sequence of history courses elsewhere, but only a course in U.S. History satisfies the Bridgewater requirement.

Literature. The Bridgewater requirement is for one course at the 200 level. Occasionally, transfer students complete an Introduction to Literature course beyond their English composition sequence but it does not satisfy the requirement unless it is at the 200 level.

Artistic Modes of Expression. Requirements are for two courses from the areas of art, music, theatre, or dance. Two courses from the same discipline are not permitted, nor can students use more than one studio course.

Physical and Biological Science. Two courses from different science disciplines are required at least one of which must be a laboratory science. Transfer students who may have already completed a two-course sequence in one science area are required to take another science course in a different area.

Behavioral Sciences & Social Sciences. Currently considered two separate areas, two courses in different areas of Behavioral Science and one course of Social Sciences are required. This is confusing for some students who transfer with credit from institutions where Social Sciences is defined more broadly to include Behavioral Science.

Mathematics. Currently this requirement can be satisfied by taking one of three courses: Math 105, 141, or 151. Some transfer students have completed more difficult courses than Math 105 but are not allowed to transfer these courses to satisfy the requirement.

These observations from the Admissions Office need to be considered, along with proposed solutions offered in King's October 30 memorandum (Appendix B). Placement testing mandated by the BHE should begin to address the math concern. Further analysis of test results of transfer students could identify areas where there needs to be closer articulation between Bridgewater and other nearby high schools, colleges, and community colleges that prepare the majority of students for transfer. It may be useful to review the math placement exam itself for appropriateness of level of questions, scoring, and standards applied for meeting the Bridgewater requirement.

Diversity

The current general education program includes a non-western requirement. This is a standard expectation of nearly all high-quality general education programs. No mention is made, however, of an expectation that students develop a better understanding and appreciation of diversity in its many forms in the American culture—race, ethnicity, gender, sexual orientation, aging. This seems to be an omission, given a close reading of other Bridgewater documents. The three-year goals for the Academic Affairs strategic plan (2001-03) refers to “The college. . . (as) an environment that embraces diversity. . . .” (p. 1) As far back as 1994, the Bridgewater Board of Trustees approved the Academic Affairs Level II Strategic Plan which included among its strategies in Goal 3 “. . . review (of) the general education program to assure appropriate inclusion of diversity issues.” (p. 4) Two other college documents, the “Strategic Plan for Racial and Ethnic Diversity” and the “Strategic Plan on Gender Issues,” both drafted in 1996 and approved in 1998 by the President, make specific references to developing modules for the freshman seminar and including critical perspectives dealing with gender, race, and diversity in the general education program. It appears that little has been done to implement these recommendations. Modules on diversity are offered in the freshman seminar. However, a small percentage of students take the seminar. No reference is made in the College catalog to a required freshman seminar for all students (although a seminar is voluntary) or to a specific diversity requirement. Thus, if exposure exists to these topics, it appears to be left to a student's fortuitous selection of courses that include these issues, rather than to a concerted college effort to ensure that all students have some exposure to multiculturalism and diversity in American society.

Issues of multiculturalism and diversity invite learning opportunities both in and outside the classroom. The Division of Student Affairs and the Office of Multicultural Affairs each initiate speakers and other campus events that make them educational partners in helping Academic Affairs reach its goal of expanding exposure to these topics in the curriculum. Also, the Asian Studies program has a speaker annually. Requesting that faculty require attendance at campus events as part of the course syllabus is one approach

that works well on many campuses. (The University of Massachusetts Dartmouth, for example, has just adopted this approach in its new general education program.) The mission statement as well as the set of student learning outcomes developed by the Division of Student Affairs in 1997 (Appendix C) identify “. . .fostering an atmosphere of cultural pluralism and human diversity. . .” on campus as one of several priorities and developing understanding and appreciation of human differences as one of four explicit learning outcomes.

Technology/Computer Literacy

The general education section of the Bridgewater catalog makes no reference to a computer literacy requirement or, as is becoming more common, to a demonstration of competency at a defined minimum level. Some colleges, such as Salem, waive this requirement by exam. Others, such as Fitchburg, expect this requirement to be defined by the major department. A spot check of several minors in the Bridgewater catalog offers no guidance on what is expected of individual majors. Interview data suggests that individual academic departments offer courses with computer literacy components or approve courses offered by other departments for major requirements, but this is not explicitly stated in the catalog. While it can be inferred from the general education requirement ML102 Locating and Processing Information (1 credit) that students will learn how to use basic computer skills for researching data bases on the Internet, there is little evidence that the college expects its incoming students or its graduates to demonstrate the most elementary basics of daily computing (word processing, email, and spread sheets). With a resource such as the J. J. Moakley Center for Technological Applications located on campus, perhaps a more explicit connection could be made between demonstrating computer literacy (however this is defined) and the general education requirements. This also would be a reflection of the mission of the college.

It is generally assumed that students will have had exposure to basic computing skills in high school or by using computers at home. Research has shown, however, that many families cannot afford home computers and that resources in many high schools are lacking. This low level of exposure to computing resources places these students at a serious disadvantage in the workplace and in higher education.

From these qualitative and quantitative data we can conclude:

1. Goals for the general education program are clearly stated, but there is little systematic assessment to determine if the program is effective.
2. While the Bridgewater general education program has many strengths, gaps exist in the current requirements, e.g., diversity, computer literacy, and a common experience for all students.

3. The large number of courses that can be used to satisfy general education requirements suggests that, in spite of stated goals, the program remains largely one of unconnected distribution requirements, with many designated courses providing a foundation for majors.

Comparison of General Education Programs at Massachusetts State Colleges

The nine Massachusetts state colleges have developed a variety of approaches to their general education programs. Table 1 on the following page provides a comparison across ten categories that are commonly used in published research studies on general education in the 1990s.ⁱⁱ The observations in this section of the report are drawn from research reported by Patricia Ford Plummer of Framingham State College in January 1999.ⁱⁱⁱ

General education programs in Massachusetts are generally organized in one of two ways: (1) goal oriented approach that provides limited course choices in specifically designated areas (Framingham and Westfield); and (2) distributive requirements with a wider array of course selections (Fitchburg, Salem, Worcester and North Adams). Bridgewater appears to be a combination of both approaches; it has clearly stated goals, but a wide array of distributed course selections. Specialty colleges Mass Art and Mass Maritime offer more limited choices. Current general education requirements differ significantly in the sciences, humanities, and social sciences. In relation to the eight other state colleges, Bridgewater has a strong liberal arts core. It is one of only two colleges that requires a foreign language (in addition to Framingham) and a course in speaking (required also at Salem). It is the only Massachusetts college with a requirement for locating and processing information.

On issues related to global awareness and diversity, three colleges (Bridgewater, Framingham, North Adams) have a non-western or cross-cultural requirement, and two colleges (Framingham, Westfield) have requirements in U.S. diversity gender, race and class. Worcester and North Adams each have a freshman experience course. Only two colleges (Mass Maritime, Salem) have a specific computer literacy requirement. Mass Maritime requires programming; Salem will waive the requirement by exam. Fitchburg expects computer literacy to be defined by major.

Other comparisons:

Writing: Six of the nine colleges require 6 credits in writing. Mass Art and Mass Maritime, the two specialty colleges, require one course.

Mathematics: Eight colleges require a minimum of 3 credits. Mass Maritime is the only college that requires more than one course. Math is optional at Mass Art. On three campuses (Worcester, Fitchburg, Salem) math and science are grouped together so that students could elect an additional math course. Westfield's additional math course may be satisfied through an applied course in economics, computer science, philosophy (logic), or geography (quantitative methods).

General Education Credit Distribution at Massachusetts State Colleges (1998-99 Catalogs)

State College Total Cr. For Grad.	Total Gen. Ed. Credits Required	Writing	Mathematics	Humanities	Fine Arts	Natural Sciences	Social Science	Foreign Languages	Speaking	Computer Literacy	Other
Bridgewater 120 credits	49-55	6	3	9	6	6 - one lab	15	6	3		Info process-1 Non-Western-3
Fitchburg 120 credits	60	6	3	9	3	9 - one lab (includes add'l math)	15	Optional in Humanities	Defined by major		Health/Fit 1-3 Liberal arts electives - 12
Framingham 128 credits	48	4	4	4	4	8 - one lab	12	4			Gender, Race & Class - 4 Non-Western Studies - 4
Mass College/Art 120 credits	42 (30 for Art Education)	3	Optional in natural sciences	3	12 (art history)	3	6				Electives - 12
Mass. Maritime 130-135 (excludes sea time)	48	3	9	12		9 - two labs	12	Optional in Humanities		3	
North Adams 120 credits	47 - 50	6	3	15		6	15	Optional in Humanities			Cross cultural - 3 Personal fitness - 1 Freshman Exp. - ?
Salem 120-127 credits	51	6	3	15	Optional in Humanities	7-15 - two labs (Inc. add'l. math & comp. sci.)	12 - 15	Optional in Humanities	3	0-3 (waived by exam)	Health - 3 Phys. Ed. - 1
Westfield 120 credits	55	6	6-8 (one course may be from applied math)	6	6	7 - one lab	12 - 15	Optional (Diversity or Humanities)			Diversity - 6 Upper level - 6
Worcester 120 credits	61	6	3	12	9	3-13 - one lab (Inc. add'l. math & comp. sci.)	15	Optional in Humanities			Health studies - 3 Freshman Exp. - 1

Source: Patricia Ford Plummer. General Education at Massachusetts State Colleges. Comparisons and Assessment Initiatives. Framingham State College, January 1999.

Humanities: The number of credits required varies widely among the nine colleges, in part because Humanities are defined differently on each campus. Foreign language, fine arts, and speaking, separated for purposes of comparison in Table 1, are considered humanities. A minimum of one humanities course is required by each college.

Fine Arts: Four of the nine colleges (Bridgewater, Fitchburg, Framingham, Mass Art) specifically require coursework in fine arts. Bridgewater requires two courses. Mass Art requires 12 credits including a course in art history. Fine arts is included among humanities options on the other campuses.

Natural Sciences: Science requirements vary considerably among the nine colleges. Natural sciences include the physical (chemistry, physics, physical geography) and biological sciences. Math and computer science are included in this grouping for colleges with a distributive requirement. Mass Art is the only campus that does not require at least one science; it gives students a choice of math or science. One science lab is required at all campuses except North Adams; two labs are required at Mass Maritime and Salem. All but Worcester and Mass Art require a second course in physical or biological sciences.

Social Sciences: Most campuses require 4-5 courses from a broad range of offerings that also includes behavioral sciences. Mass Art and Mass Maritime have more limited offerings. At least one history course is required at all campuses (art history at Mass Art). A course in state and federal constitutions is included in general education requirements at four colleges: Bridgewater, Framingham, Mass Maritime, and Worcester. At Fitchburg the requirement is for teacher certification students only.

Foreign Language: Two colleges (Bridgewater, Framingham) require foreign language competency for all students. Both colleges waive the requirement by exam or by significant high school coursework. Foreign language is optional within humanities at the seven other colleges, although it is often required for the B.A. degree in several majors. Mass Art does not offer foreign language but accepts transfer courses for general education credit.

Speaking: Only two colleges (Bridgewater, Salem) require a speaking course. Fitchburg requires speaking competency to be defined by the major. Most colleges include speaking as an option in humanities.

It is interesting to compare the proportion of general education credits in relation to overall graduation credits required at the nine colleges. Framingham and Mass Maritime require significantly more credits for graduation than the 120 credits expected at most campuses (128 credits and 130-135 cr., respectively). These two campuses also have the lowest general education credit requirements (48 cr.), except for Mass Art (42 cr.). While frequent reference is made to Bridgewater having too many general education credits, the data indicate that it is in line with most other state colleges. Fitchburg (60 cr.) and Worcester (61 cr.) require significantly more. Westfield requires 55 cr.

In comparison with the other Massachusetts state colleges, the existing 49-55 credit requirement at Bridgewater does not appear to be too high, although some rearrangement of requirements may be needed. However, the data in Table 2 on the next page, which compares Bridgewater with out-of-state benchmark colleges and universities, suggest that the number of general education credits is high.

Comparison of Benchmark Colleges and Universities

A summary of general education program requirements for seven of the eight out-of-state colleges and universities in the same mission class with which Bridgewater compares itself is presented in Table 2 on the next page. (Millersville University did not provide information.) Information is taken from the published 2000-01 catalogs only. Colleges may have additional information not published in the catalog, which is a limitation of this comparison.

Two of the seven campuses, Oswego and Rhode Island College (RIC), are implementing new general education programs. In December 1998 New York approved new statewide general education requirements for all four-year SUNY campuses that are being implemented in the 2000-01 academic year. More descriptive details of both new programs are provided in the Table 2 footnotes.

Writing: While writing courses are the staple of nearly every general education program, four of the institutions (Buffalo, Oswego, RIC, Rowan) exemplify a national trend in requiring courses designated as writing intensive. RIC requires 16 cr., or four courses, of writing intensive courses with emphasis on critical thinking. Oswego requires five upper-level courses in Advanced Expository Writing, one of which must concentrate on oral communication skills. At Buffalo, a writing course in the English department is not required; the two writing intensive courses required may be offered in other departments. Rowan permits the writing intensive requirement to be in the major. All freshmen at Rowan must take a Rowan Seminar.

Speaking: All but two of the institutions (Buffalo, Northeastern Illinois) have requirements in speaking/oral communication. At the University of Wisconsin-Oshkosh this requirement can be waived by exam.

Computer Literacy: Four institutions (Buffalo, Northeastern Illinois, Oswego, Rowan) require a minimum level of computer competency. Oshkosh and RIC leave this as optional within the distributive requirements. Northeastern Illinois expects students to demonstrate computer/information literacy in five skill areas.

Global Awareness and Diversity: All but one of the seven benchmark institutions (Kutztown) specifically include requirements in issues related to multicultural awareness or diversity. Four of the seven (Buffalo, Oshkosh, Oswego, RIC) reflect the growing national trend to include both a requirement in understanding the many forms of diversity in the United States plus a course that focuses on a non-western culture, often in contrast

with western culture. Buffalo and Rowan permit their courses to be applied to the major. Northeastern Illinois has a requirement in “improving human relations” mandated by the state.

It is worth noting that of the seven institutions only Oswego requires more courses in the social sciences (21 cr.) than Bridgewater. This may be the result of the unique and creative components of their new curriculum. It is unclear whether some of these components fall into the more traditional categories of social sciences or humanities.

Overall Bridgewater compares favorably to the seven benchmark colleges and universities in its distribution of requirements across most disciplines. There are gaps in the Bridgewater requirements, however, in computer literacy, diversity, and writing intensive requirements.

National Trends, Models, and Best Practices

Over the last decade the AAC&U has engaged in extensive research on general education programs in colleges and universities across the United States. Data are emerging that identify national trends, the hallmarks of effective general education programs, and models and best practices on individual campuses. Increasingly, more is being written about practices for assessing student learning outcomes in general education. For anyone wishing to get a quick overview, these four reports prepared by the AAC&U are highly recommended:

- Contemporary Understandings of Liberal Education: The Academy in Transition, by Carol Geary Schneider and Robert Schoenberg;
- General Education and American Commitments: A National Report on Diversity Courses and Requirements, by Debra Humphreys;
- General Education: The Changing Agenda, by Jerry G. Gaff;
- Strong Foundations: Twelve Principles for Effective General Education Programs.^{iv}

It is clear from the research that there is no national consensus among the experts as to an ideal model for general education programs nor is there consensus as to those handful of campuses that represent “best practices” and whose programs should be replicated elsewhere. National reports as well as individual campus reports of faculty general education committees reviewed for this study, including two papers written by Bridgewater faculty several years ago, echo this observation.^v There are, however, generally agreed-upon characteristics of effective general education programs.^{vi} The literature is rich with examples of interesting programs and new multidisciplinary approaches to teaching and learning.

What is clear is that general education is idiosyncratic, with programs tailored to individual institutional needs and educational goals. Campus culture, history and politics all shape attitudes and the motivation for change. “Good general education is associated with a culture that values high expectations, recognizes diverse talents and learning styles, and emphasizes early engagement. . . .It encourages active learning and collaboration and a commitment to inquiry beyond the curriculum. . . . (and it) builds dynamic assessment and improvement into curricular processes.”^{vii}

Based on its work with nearly 1,000 colleges and universities of all types over the past decade, the AAC&U identifies 13 national trends in general education programs:

- Renewed emphasis on the liberal arts and sciences subject matter, extending into professional and pre-professional programs
- Attention to fundamental intellectual skills, such as writing, speaking, critical thinking, quantitative reasoning, computing, and foreign language proficiency
- Higher standards and strengthened core programs that are required of all students, regardless of their academic major or intended career
- Interest in interdisciplinary study and the integration of knowledge gained in various parts of the curriculum
- Commitment to the study of diversity in the U.S., incorporating new scholarship on race, gender, sexuality, class, age, and other aspects of identity
- Expansion of global studies programs, as well as the incorporation of international themes into existing general education programs
- Interest in the moral and ethical dimensions of each field of study
- Recognition that the freshman year amounts to a critical transition, and the creation of special courses and new support systems to promote greater academic success
- Attention to the senior year, when students increasingly are expected to pull together strands of learning and demonstrate their abilities to apply their knowledge
- Extension of general education into advanced study and throughout all four years of college
- Heightened interest in active, experiential, technological, and collaborative methods of learning

- New approaches to the assessment of learning outcomes, and greater use of the results to improve courses and programs
- Administrative support for faculty members to collaborate in their curricular planning, course development, and teaching of core courses^{viii}

These trends point to an emerging new concept of general education. The old concept, still in evidence at Bridgewater, equated general education with breadth and encourages sampling courses from a broad array of academic disciplines, e.g., distribution requirements. These types of programs require little administrative coordination.

The new concept emerging from faculty conversations concludes that general education needs more rigor to help students face the demands in their lifetimes. A great deal of coordination is required to create more coherent programs. Many colleges have created new administrative positions to see that this is achieved. Faculty have concluded that students should:

- receive a generous orientation to the intellectual expectations, curricular rationale, and learning resources of the institution;
- acquire specific skills of thought and expression, such as critical thinking and writing, that should be learned “across the curriculum” and imbedded within several courses;
- learn about another culture and the diversity that exists within our own culture in terms of gender, race, ethnic background, class, age, and religion;
- integrate ideas from across disciplines to illuminate interdisciplinary themes, issues, or social problems;
- study some subjects—beyond their majors—at advanced, not just introductory, levels;
- have an opportunity near the end of their course of study to pull together their learning in a senior seminar or project; and
- experience a coherent course of study, one that is more than the sum of its parts.^{ix}

As institutions have struggled to reform their general education programs, a number of common themes and strategies have emerged in the newly-designed programs: (1) Freshman seminars are gaining popularity and seem to lead to greater student satisfaction, achievement and retention; (2) Writing across the curriculum has been one of the most successful of reforms; and (3) Courses and sequences focused on international cultures and U.S. cultural diversity are increasing. Evidence is starting to accumulate that changes in general education have led to increased quality and coherence

and have had a positive impact on the sense of community, faculty renewal, and institutional identity.^x

Trends in educational reform also are becoming more focused on areas beyond content. General education and the academic major are becoming more closely linked. More attention is being given to how learning takes place and effective active learning approaches—service learning, internships, collaborative group projects, case studies, and learning communities. More sophisticated expectations have developed of what it means to be computer literate. New program initiatives are being evaluated not only on their effectiveness (student achievement and retention) but also on their efficiency (cost in relation to achieving stated goals). There is greater acknowledgment that curricular change requires substantial investment in on-going faculty and course development. Administrative structures are being put into place on a growing number of campuses to coordinate general education programs and help them achieve their goal of more coherence. Often, they are supported by an institution-wide general education committee composed of faculty representatives and, frequently, students. Assessment is now a key part of general education reform and a requirement by all regional accrediting bodies. Finally, there is a growing recognition of the importance of collaboration in bringing about constructive change—between faculty and administrators at the campus level, and between campus presidents and state legislators who are traveling on a separate but parallel track to improve accountability.

Assessing General Education Programs and Student Learning Outcomes

Assessment within the general education program serves two basic and mutually reinforcing purposes: to improve teaching and learning, and to promote greater external accountability. Programs are assessed for quality and coherence and to identify areas where changes and improvements are needed. Individual courses are evaluated to see if they are meeting stated goals and making contributions to student learning. Student learning outcomes are assessed in the classroom and in the co-curriculum to determine if personal and intellectual growth is taking place at the levels defined. Does college make a difference and, if so, how much value is being added and in which areas? And most recently, external agencies such as BHE are mandating entry assessments of general education skills as a diagnostic tool for placing students at the appropriate entry level work and to reorder academic priorities so that educational quality is based on what and how much students learn. With the national trend toward linking general education to the major, program review within each academic department becomes an important building block in reinforcing and validating learning that occurs in the general education program.

The “Third Friday Academic Discussions” hosted by the Bridgewater Provost’s office in 1999-2000 engaged faculty and administrators in a comprehensive look at learning outcomes assessment in its many dimensions—writing, critical and creative thinking, quantitative thinking, locating and processing information, and listening and speaking clearly and effectively—and identified where more work is needed to move forward.

Keeping these discussions alive would continue to focus faculty and administrators' attention on the imperative for change and how to go about it, and it would provide a natural avenue for strengthening a sense of campus community among faculty and administrators.

Truman State University (MO), the University of Colorado at Boulder, and Alverno College (WI) are three examples of institutions that have taken seriously the challenge to use assessment results to strengthen the quality of the undergraduate experience and the entire institution.

Experts in assessment agree upon two things: (1) There must be an institution-wide commitment to assessment for improving quality; and (2) Assessment must be systematic and sustained; it cannot be sporadic and be effective. Accrediting agencies are now looking for evidence of this commitment and sustained effort.

Accrediting Agency Observations on Assessment

Celia Lopez, associate director of the Commission on Institutions of Higher Education of the North Central Association in Chicago and an expert in assessing learning outcomes, recently reported on her research of visiting team reports of 130 institutions accredited by North Central from January 1995 to December 1997. Some of her findings are summarized here:

- Documentation of assessment program implementation is essential—explicit objectives for student learning, publicly stated and linked to specific, direct measures; Assessment Committee meeting minutes; how assessment results are used for feedback; and documentation of changes made as a result of the feedback;
- Both quantitative and qualitative measures are acceptable;
- Almost every institution is using some kind of survey that probes student, alumni, or employer attitudes about the general education program and undergraduate experience. Over-reliance on surveys, however, can be problematic.
- While some institutions have chosen commercially produced, standardized exams because they are nationally normed and affordable, it is wise to keep in mind the limitations of these tests. Some institutions have chosen to administer pre- and post-tests of certain standardized tests with positive results to demonstrate value-added gains in student learning. Some faculty have developed their own tests because they want more accurate information about their students' knowledge and abilities. Some campuses use a combination of commercially available and locally designed tests.
- Portfolios are increasingly used as a means of assessing student learning across the core or distributive requirements.

Lopez cites examples of good assessment practices at four very different types of institutions. The University of Wisconsin-Stevens Point (Masters I) is most applicable to Bridgewater. Faculty have identified 14 “skills and knowledges” that provide the foundation of the general education program and they expect students to learn to apply all of them. Data from both standardized and locally-developed measures are collected and annual reports sent to the Faculty Senate and chief academic officer to be used as the basis for academic policy reforms.^{xi}

Collaboration with Community Colleges

As more states move in the direction of statewide general education requirements and systematic assessment, two- and four-year public institutions are expected to work together collaboratively in identifying learning competencies and determining appropriate assessment tools. Arizona, with the second largest community college system in the U.S., has developed articulation agreements for the applicability of transfer credits between the three state universities and the community colleges as well as agreed upon a common structure for a general education core curriculum. In California, a statewide committee composed of community colleges, UC, and CSU faculty designed and implemented a common transfer curriculum that is accepted by all public universities and satisfies 75 percent of the state general education requirements. In Minnesota, which has undergone fiscal constraints in recent years, the four-year universities decided to focus on quality and cap enrollments, relying more on community colleges to provide undergraduates with a high quality general education. As a result, three systems of higher education and the technical colleges have worked together to develop a transfer curriculum that is far more than articulation agreements. What has emerged is a course of study collaboratively designed and implemented by groups of faculty from all disciplines and campuses. New York and Illinois offer additional examples of states with effective articulation agreements in place. South Dakota, Tennessee, and Arkansas offer examples of states that have system-wide assessment.

Massachusetts appears to be moving in this direction with mandated entrance assessment exams. The Board of Higher Education has created a system-wide task force to study exit assessment. Faculty and administrators at two- and four-year colleges must work together in developing a plan and community colleges will need to be actively involved in helping their students develop the proficiencies required at four-year colleges. When Bridgewater begins its campus-wide conversation about general education reforms, it would be collegial to include faculty representatives of nearby community colleges in the discussions. Such coordination requires enormous insight, negotiating skill, and good will. Yet, as larger numbers of students move from one institution to another, it makes sense educationally to design a coherent, purposeful and rigorous general education curriculum that involves more than one campus.

Mission and Goals

For an institution to move decisively towards outcomes assessment, each department or program needs to have a clear sense of its mission and goals. These should be clearly

articulated in the college catalog and other key publications. Once these are established, appropriate assessment activities become more apparent. The Pennsylvania State University, University of Massachusetts Boston, and SUNY-Oswego provide three excellent examples of thoughtful, forward-thinking mission statements and general education program goals (Appendix D).

Interesting Examples of Assessment

Examples of assessment strategies abound. In addition to those already mentioned, these are some interesting examples from the literature:

- Interviews, focus groups or surveys of current students, alumni and employers;
- Faculty oversight groups with continuing responsibility for questions about teaching and learning. Faculty committees at American and Miami Universities collect and review course syllabi for all general education offerings to monitor drift from original intentions. Arizona State University has initiated a six-year study of a representative sample of 1,000 students to focus on the in- and out-of-class effects of general education courses. Data are being collected using focus groups, telephone and mail surveys, interviews, and transcript analysis.
- Student-conducted research, often as part of formal coursework, into the effectiveness of general education programs. At Susquehanna University, for example, 13 students enrolled in a Core Evaluation Class read literature on general education and documents at their own institution, divided into four teams to examine different aspects of the core, collected syllabi, and interviewed faculty. They reported their findings to the curriculum committee. At Union College, 25 student volunteers participated in a project to assess general education. They met for dinner weekly to discuss the purpose of general education and conducted interviews with students, faculty and administrators. The following term they presented their findings through reports, panels and papers.
- Involvement of Student Affairs staff in long-term data collection and analysis, especially on the effectiveness of the co-curriculum.
- Senior capstone courses, college-wide or in the major, with a major project that promotes self-reflection, active learning, and making connections and recognizing relationships;
- Student focus groups and evaluations to determine the effectiveness of the general education program or specific courses within it, note consistencies and discrepancies between what faculty think they teach and what students say they learn, and try to close the gap. The University of Hartford, University of Kansas, American University, Temple University, Southeast Missouri State, San Jose State University, and Miami University are testing this approach to program improvement.

- A peer review process, developed at Grand Valley State University (MI), involves a cycle of faculty discussions about the seven categories of their general education curriculum providing a forum for cross-disciplinary conversations about teaching approaches, tests used, and assignments, as well as for socializing and strengthening community.
- Informal discussion groups, retreats and workshops along the lines created at the University of Idaho for faculty teaching in the general education core to talk about the intellectual content of core courses and rethink course offerings; new faculty and members of the General Education Committee have been invited to attend. The strength of these discussions is their informality.^{xiii}

General Education at Bridgewater: Strengths and Weaknesses

Previous sections of this report discussed comparisons of the Bridgewater general education program with its counterparts in Massachusetts and seven out-of-state benchmark institutions and detailed national trends in general education reforms across the U.S. Taking all of this into account, basic strengths of the Bridgewater program are:

1. The distribution across academic disciplines is strong, including specific foreign language and speaking requirements and a minimal (1 cr.) requirement in locating and processing information.
2. Students are, for the most part, completing their distributive requirements within the expected timeframe despite a minimum of academic advising guidance.
3. Goals for the general education program are clearly stated in the college catalog. The caveats, however, are that no assessment mechanism exists for determining if goals are being met and there are a number of gaps.
4. Faculty and administrators at Bridgewater recognize that it is time to review the general education program, close some of the gaps, develop outcomes assessment plans, provide more student flexibility and seamlessness in transferring courses, and revitalize both the course content and teaching pedagogy.

There are a number of areas in which the Bridgewater general education program needs attention. Gaps in content areas related to understanding U.S. diversity, demonstrated computer literacy, and writing intensive courses were discussed earlier in this report. Also, there is a question as to whether the number of general education credits is too high in relation to the 120 credits required for a degree; or can this be overcome by providing more flexibility in allowing some courses to double- or triple-count to meet more than one requirement? (The University of Massachusetts Boston is taking this approach for the middle phase of its program.) Other areas for consideration include:

1. Students do not share a common course, core of courses, or set of experiences that define their undergraduate experience or the Bridgewater general education program. Most distributive requirements are selected from a wide array of disconnected offerings. The overwhelming majority of transfer students by-pass these courses, having already fulfilled the general education requirements. An interdisciplinary Freshman Seminar (ID 101) is offered, but it is voluntary.
2. In relation to #1, the general education program is diffuse. It lacks focus. Due to the large number of undergraduate courses that can fulfill general education requirements, students are left to choose from a large academic buffet, rather than grapple with intellectual issues and concepts that are connected to one another across the general education curriculum and the major.
3. Provide for more flexibility in meeting requirements, especially for transfer students. While the current catalog offers the opportunity for students to design their own general education requirements, few take advantage of this option.
4. Except in a few majors, e.g., education, a senior capstone experience or seminar or a portfolio reflecting the culmination of a student's intellectual growth appears to be underutilized. Such a requirement would give students the chance to tie everything together and allow faculty to assess depth and breadth of a student's learning.
5. Pedagogically speaking, courses and teaching approaches need to be reviewed to see if students are being actively engaged in learning. Are they learning how to work collaboratively in groups as well as individually? Are they given opportunities to develop human relations skills? Are they expected to think critically and explore new intellectual terrain?
6. The general education program needs oversight, coordination and direction through a designated administrator, faculty committee, or both. A specific committee devoted to the goals of the general education program would be helpful, especially for reviewing proposals for new general education courses.

Recommendations

These recommendations attempt to offer a clear direction for providing higher expectations for general education, greater flexibility, encouraging intellectual exploration, and developing an assessment plan that is used for program improvement.

1. Develop updated comprehensive goals for the general education program that are tied to the mission of the college. Clearly articulate these in the college catalog. Make explicit in the goals that the co-curriculum and the curriculum each play a role in student learning and are linked. Invite community college representatives to participate in discussions.

2. Provide for greater flexibility in meeting general education requirements. This could be achieved several ways.
 - allow some courses to double- or triple-count toward degree requirements;
 - develop 2-3 specified tracks with a limited number of general education courses, with one track for transfer students needs;
 - redesign the program to focus on fulfilling specified skills and learning outcomes, rather than on completing course distributions.

3. Create a common experience for all students, including transfer students.

This could take the form of a required freshman/Bridgewater Seminar, a small core of required, linked or sequenced interdisciplinary courses, or a grouping of themed courses. Classes should be small (~15 students) and give students an opportunity to get to know faculty. This would create a fresh new approach to undergraduate education at Bridgewater that would provide opportunities for community outreach, press releases, outreach to guidance counselors, and visibility for the college.

4. Address gaps in content, especially diversity, computer literacy, writing intensive courses, and involve students in more active learning. Possible approaches:
 - Add 1-2 courses without increasing the total general education credits through a modest reduction (3 cr.) in fine arts to 3 cr., or a one-course reduction in a combined behavioral and social sciences area from 15 cr. to 12 cr.;
 - Integrate content areas through a freshman seminar and four years of specified, existing undergraduate courses;
 - Add a college-wide senior capstone course, project, or portfolio requirement for all majors;
5. Strive for educational vitality and coherence in general education. Help students make the connections. Consider these means of achieving coherence:
 - Integrated content: all students study exactly the same core courses (Brooklyn College, St. John's are examples)
 - Interdisciplinary courses with knowledge or a theme presented through multiple perspectives (University of Hartford)
 - Senior capstone seminars or projects that give students opportunities to pull together information and skills learned while exploring a topic of universal significance; or integrate liberal education with professional training
 - Skills: emphasize the acquisition of certain intellectual and communication skills across courses in the general education curriculum.
 - Personal development: focus on the development of personal qualities in students, including interpersonal and valuing skills.
 - Closely link the curriculum and co-curriculum and ask faculty to incorporate into course syllabi an expectation that students participate in, and reflect on, their co-curricular experiences
 - Emphasize student engagement in active learning;^{xiii}

6. Set aside institutional resources earmarked for general education for on-going investment in faculty and courses.
7. Provide for administrative coordination of general education and ask the faculty to appoint a committee to oversee the program, establish guidelines for general education courses, and ensure that the program is meeting stated goals.
8. Review the faculty reward and incentives structure for ways to recognize contributions to the general education program.
9. Develop a process for systematic, formative assessment of student learning to be used for program improvement, with annual reporting of results to the All-College Committee and the Provost and Vice President for Academic Affairs.
(Appendix E)

Looking Ahead: Three General Education Models to Consider

Every campus is unique in the design of its general education program. There is no one “correct” program design. The key is to select from among the many strategies those that achieve coherence, are purposeful, and meet objectives for Bridgewater students. The following three examples illustrate frameworks for programs that would require minimal, modest, and considerable changes in the existing requirements.

Model 1: Minimum Changes

Add freshman seminar and senior capstone courses. Designate specific courses, some of which may be linked, to be writing intensive or involve active learning.

- Retain most of current general education distributive requirements; reduce by 3-6 cr;
- Create freshman/Bridgewater Seminar required of all students, small (15-20 students), focused on a theme related to U.S. diversity, social issues, and writing intensive with a group project;
- Build into some or all course syllabi participation in designated campus activities that contribute to personal and intellectual growth, working closely with Student Affairs, Office of Minority Affairs, student government, and clubs and organizations;
- Offer non-credit modules in basic computing skills (word processing, email, internet access, spread sheets) for students who do not demonstrate competency and expect each department to define specific computer skills for the major and incorporate into courses;
- Designate selected courses in the general education program to incorporate discussion, collaborative projects and teamwork, service learning, and other active learning approaches;

- Add an all-college senior capstone course, project or portfolio in which a student is expected to pull together and connect learning and experience related to a specific topic and which faculty can use for assessment;

Notes: The All-University Curriculum at the University of Hartford utilizes interdisciplinary courses that emphasize the connectedness of knowledge by presenting multiple perspectives on issues, concepts, texts, or real world problems, such as “Hunger: Problems of Scarcity and Choice.” The University of Massachusetts Boston, which has used Portland State University as a model for reforming its general education program, now requires a freshman seminar of all students in the first phase of its requirements. Among Bridgewater’s peer institutions, freshman seminars are required at Worcester, North Adams, and Rowan University. The “Framework for General Education at Penn State University,” (Appendix F) provides a visually coherent way of thinking about Model 1 above, although a senior capstone course is not required.

Model 2: Modest Changes

Develop a four-year common core program of study (3-4 courses), organized around a theme, e.g., “Freedom and Responsibility.” Make connections among the courses. Retain most of existing distributive requirements.

- Design interdisciplinary courses so that faculty can work in a structured way on active learning issues such as writing across the curriculum, collaborative learning, speaking and discussion;
- Core courses would be required of all students;
- Reduce existing general education requirements by 3-6 cr. to allow for adding these new courses, or include new courses as part of distribution requirements in the humanities, social sciences, and the sciences, if appropriate;
- Coordinate campus speakers and programs with Offices of Student Affairs and Minority Affairs to complement and enrich the theme of common core courses;

Notes: Fairleigh Dickenson and Brooklyn College exemplify this model. Some universities have created special colleges, such as Miami University’s Western College, so that common core programs can develop in a protected environment. Variations of this approach: Tufts University has created the Center for Interdisciplinary Studies as a home for developing interdisciplinary minors. The University of Toledo has created a Humanities Institute to strengthen the humanities foundation of secondary school teachers. A four-course sequence of three courses in the junior year and a senior or final year capstone course are required.

A modified version of Model 2 above would create a two-tiered distributive model similar to the general education program developed at San Jose State University (SJSU), which has a diverse student body, many commuters and students who work, and many transfer students who have already completed state-mandated general education requirements. More than 150 certified courses meet strict criteria, require significant

writing, and address issues of race, class, and gender when appropriate. Most traditional breadth and skills areas are included in a 39 cr. foundation and articulates directly with two statewide transfer programs. All students are required to complete an integrated 12 cr. program of advanced, interdisciplinary, issues-oriented courses. Thus, SJSU provides flexibility in the lower division curriculum and strictly controls upper division requirements.

Model 3: Reconceptualizing General Education

Reconceptualize general education and reorganize groupings for course selection based on learning goals, concept areas, or subject matter. Consider combining core courses and distributive requirements grouped by subject matter, rather than by academic departments.

- One example of this model is the new 36-credit general education program at the University of Massachusetts Dartmouth. The program is divided into two skills areas and four overall content areas:

Skills:	Writing and Oral Communication
	Information and Computer Literacy
Content:	Cultural and Artistic Literacy
	Ethics and Social Responsibility
	Global Awareness and Diversity
	Mathematics, Natural Sciences and Technology

- SUNY-Oswego's new general education program (60 cr.) is organized as follows:

Basic Skills	0-9 cr.
Foreign Language Requirement	0-6 cr.
Knowledge Foundations Requirements	12-21 cr.
American and Western Heritage	6 cr.
Human Diversity	6 cr.
Intellectual Issues	6 cr.
Advanced Expository Writing	5 courses

Conclusion

A new framework for general education need not represent a major overhaul of what students learn. Many key elements of content are already in place, even though gaps exist and more explicit connections need to be made. What is needed is a rethinking of the philosophical and intellectual underpinnings of the general education program to provide a rationale and context for designing a new program that exists alongside the major. While it is a daunting task to undertake general education reform, the best time to start is now since the project can take several years. A respected senior faculty colleague once remarked that “we make haste slowly.” These are wise words.

As research and documentation on general education reforms begin to proliferate, creative and rich models are emerging to stimulate ideas about what is both desirable and practicable. Janice Green, an experienced administrator and expert in general education, has developed a very useful set of guidelines for reviewing, evaluating, developing, and implementing general education with an emphasis on faculty-administration consensus building.^{xiv} Revitalizing General Education in A Time of Scarcity, a resource mentioned earlier in this report, provides numerous examples of general education programs and brief descriptions of the review processes that generated the reforms. AAC&U national reports of the past decade offer hundreds of creative and practical examples of general education reforms from campuses across the country. And, increasingly, web sites are springing up designed for specific aspects of general education reform.

Two final thoughts, one for faculty and one for administrators, are drawn from the 1999 AAC&U report, General Education: The Changing Agenda.^{xv} For faculty: “General education must be recognized as the central and largest academic program, worthy of the time and attention of senior and full-time faculty.” (p. 12) And for administrators:

Unless an institution can see its way clear to make . . . a commitment to ongoing (faculty and course) development, it would be well advised not to consider a major change in general education. (p. 9)

NOTES

¹ Gaff, Jerry. 1999. General Education: The Changing Agenda. Washington, D.C.: Association of American Colleges and Universities, p. 1.

¹ Gaff, Jerry G. 1991. New Life for the College Curriculum. San Francisco: Jossey-Bass Publishers.

¹ Plummer, Patricia Ford. January 1999. "General Education at Massachusetts State Colleges: Comparisons and Assessment Initiatives." Framingham State College. Prepared while a Fellow, Massachusetts Higher Education Executive Leadership Institute.

¹ These publications can be obtained by contacting the AAC&U Publications Office, 1818 R. St., N.W., Washington, D.C. 20009. 1-800-297-3775; or by email: pub_desk@aacu.nw.dc.us.

¹ For a comprehensive and recent discussion of assumptions and issues to be addressed at Bridgewater State College in developing and structuring a general education program, see "A Position Paper on General Education" authored by John W. Bardo and W. Clark Hendley, undated. The eleven-page discussion draft, "Goals for General Education: A Precis," (no author indicated), December 4, 1996, lays out educational goals for general education and proposes a model for general education requirements and means of satisfying them.

¹ For recent research on how general education programs have been developed and implemented on college and university campuses in New England and across the country, see: Revitalizing General Education in A Time of Scarcity: A Navigational Chart for Administrators and Faculty, by Sandra L. Kanter, Zelda F. Gamson and Howard B. London. 1997. Needham Heights, MA: Allyn and Bacon. (Howard London is Dean of the School of Arts and Sciences at Bridgewater.) The book presents research findings from telephone interviews with senior academic officers at 71 colleges and universities. Fifteen campuses were visited and brief portraits are presented of their general education implementation processes. All but three of the campuses visited are in New England.

¹ Pennsylvania State University. 1998. Report of the Special Committee on General Education. University Park, PA. Retrieved November 29, 2000 from the World Wide Web <http://www.psu.edu/ufs/geic.html>.

¹ Gaff, Jerry G. 1999. General Education: The Changing Agenda. Washington, D.C.: Association of American Colleges and Universities, pp. 1-2.

¹ Strong Foundations: Twelve Principles for Effective General Education Programs. 1994. Washington, D.C.: The Association of American Colleges. Pp. iii-iv.

¹ Ibid., pp. vii-viii.

¹ Lopez, Celia L. Summer 1998. "Assessment of Student Learning," Liberal Education, Vol. , No. . pp. 36-43. For an additional discussion of regional accrediting body expectations, see this article, also by C. Lopez: "General Education: Regional Accreditation Standards and Expectations," Liberal Education, Vol. 85, No. 3. Summer 1999, pp. 46-51.

¹ A more thorough discussion of these approaches is provided in: Strong Foundations: Twelve Principles for Effective General Education Programs. 1994. Washington, D.C.: The Association of American Colleges.

¹ For a more complete discussion of coherence in general education programs, see Strong Foundations, noted above, pp. 12-17.

¹ Green, Janice S. Spring 2000. "Reviewing and Renewing General Education: A Practical Guide," Working Paper #24. Boston, MA: New England Resource Center *for* Higher Education, University of Massachusetts Boston, Graduate College of Education.

¹ Gaff, Jerry G. 1999. General Education: The Changing Agenda. Washington, D.C.: Association of American Colleges and Universities.

APPENDIX D

SAMPLE MISSION STATEMENTS & PROGRAM GOALS FOR GENERAL EDUCATION

Penn State University, the University of Massachusetts Boston, and the State University of New York at Oswego offer three excellent examples of clearly stated mission statements and program goals for general education.

Penn State University:

The General Education program at Penn State reflects a deep conviction by leaders in all professions that successful, satisfying lives require a wide range of skills and knowledge.

General education encompasses the breadth of knowledge involving the major intellectual and aesthetic skills and achievements of humanity. This must include understanding and appreciation of the pluralistic nature of knowledge epitomized by the natural sciences, quantitative skills, social and behavioral sciences, humanities, and arts. To achieve and share such an understanding and appreciation, skills in self-expression, quantitative analysis, information literacy, and collaborative interaction are necessary. General education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. General education, in essence, aims to cultivate a knowledgeable, informed, literate human being.

An effective general education program enables students to:

- a. acquire knowledge through critical information gathering—including reading, listening, computer-assisted searching, and scientific experimentation and observation;
- b. analyze and evaluate, where appropriate in a quantitative manner, the acquired knowledge;
- c. integrate knowledge from a variety of sources and fields;
- d. make critical judgments in a logical and rational manner;
- e. develop the skills to maintain health, and understand the factors that impinge upon it;
- f. communicate effectively, both in writing and orally, and using the accepted methods for presentation, organization and debate particular to their disciplines;
- g. proceed independently and in collaboration with others in seeking and sharing knowledge;
- h. gain understanding of international interdependence and cultural diversity, and develop consideration for values, lifestyles, and traditions that may differ from their own;
- i. comprehend the role of aesthetic and creative activities expressing both imagination and experience.

University of Massachusetts Boston:

The purpose of the General Education Program at the University of Massachusetts Boston is to facilitate the acquisition of the knowledge, capabilities, and attitudes which will help students form a foundation for lifelong learning. As a result of our program, our students should graduate with the capacity and propensity to:

1. Engage in critical reading and analysis;
2. Speak, listen and write effectively;
3. Reason logically and quantitatively;
4. Use technology to further learning;
5. Work independently and collaboratively;
6. Explore the principal approaches to knowledge;
7. Understand and respect human diversity;
8. Learn in depth.

SUNY-Oswego:

The general education program is designed to introduce students to a range of disciplines; enable them to think critically, solve problems, and increase their knowledge of the world and of themselves; and help them grow and mature as learners. Specifically, students are expected to develop:

- Effective skills in writing, research, and oral communication;
- Computer literacy
- Analytical and critical inquiry skills;
- An understanding of the methods and findings of disciplines in the natural sciences, and social and behavioral sciences;
- Knowledge of the conventions and methods of a discipline in the humanities;
- Understanding of one form of artistic expression and the creative process associated with it;
- Basic proficiency in a foreign language;
- Competence in quantitative reasoning skills;
- Knowledge of the history of the United States, Western Civilization, and at least one non-western civilization;
- Understanding of diversity and its consequences in the United States;
- Experience in synthesizing different perspectives and modes of analysis to generate insights into complex issues.

APPENDIX E

ASSESSMENT PLAN: KEY ELEMENTS

Key elements of any assessment plan, along the lines recommended by assessment expert, Celia Lopez, are indicated below. These elements must be in place, regardless of the specific design of the general education program.

1. Explicitly stated, and measurable learning objectives derived from broad program goals.
2. Collect data using a systematic, ongoing process.
3. Both quantitative and qualitative measures.
4. An Assessment Committee, appointed to determine how information will be collected and interpreted.
5. Documentation of implementation of the assessment plan and evidence that data are being used to improve the program and student learning.
6. Incorporate BHE mandated testing into the assessment plan.

Framework for General Education at Penn State University

	Bacc. Prog.	Assoc. Prog.		
<p>ACTIVE LEARNING ELEMENTS</p> <p>Three or more of the following are to be integrated into courses offered in the knowledge domains:</p> <ul style="list-style-type: none"> • active use of writing, speaking and other forms of self-expression • opportunity for information gathering, synthesis and analysis in solving problems (including the use of library, electronic/computer and other resources and quantitative reasoning and interpretation, as applicable) • engagement in collaborative learning and teamwork • application of intercultural and international competence • dialogue pertaining to social behavior, community and scholarly conduct 			<hr/> FIRST YEAR SEMINAR 1 cr. (min)** <hr/>	
	SKILLS			
	Communication (Writing, Speaking)	9	3	
	Quantification	6	3	
	Total	15	6	
	KNOWLEDGE DOMAINS (Distribution Requirement)			<hr/> INTERCULTURAL & INTERNATIONAL COMPETENCE 3 cr.** <hr/>
	Health Sciences	3		
	Sciences	9	3	
	Arts	6*	3	
	Humanities	6*	3	
	Social & Behavioral Sciences	6*	3	
	Select from A/H/S		3	
	Total	30	15	<hr/> STUDY IN A FOREIGN/SECOND LANGUAGE 3 cr.*** <hr/>

* Baccalaureate degree candidates may develop a sequence of 9 credits in either the arts, humanities or social sciences by substituting 3 credits from one of the other two areas not in their major field of study.

** Students are advised that certain first-year seminars and courses developing intercultural and international competence may also be approved as meeting skill or domain knowledge (distribution) requirements of general education.

*** Baccalaureate degree candidates may substitute 3 credits of study in a foreign/second language at the third semester level for 3 credits in any of the other categories of general education. However, students may not combine the options identified by "*" and "***" to eliminate any area of domain knowledge entirely.

Additional Notes:

- The general education curriculum is intended to help students explore and integrate information beyond the specific focuses of their majors. Students whose academic majors are in the areas of natural sciences, arts, humanities and social and behavioral sciences may not meet the general education program components by taking courses in the department or program *identical* to that of the academic major.

- Students are advised that the REQUIREMENTS OF THE MAJOR of certain baccalaureate degree programs include courses that are approved for the general education curriculum. In those cases, appropriate choice of general education courses will also satisfy the REQUIREMENTS FOR THE MAJOR. (However, when a course is used to satisfy more than one requirement, the credits earned in the course may be counted only once.)
- In some instances, the REQUIREMENTS OF THE MAJOR or other BACCALAUREATE DEGREE REQUIREMENTS (e.g., the Bachelor of Arts Degree Requirements) also stipulate course work above and beyond the general education requirements in some categories.

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Notes

- ⁱ Gaff, Jerry. 1999. General Education: The Changing Agenda. Washington, D.C.: Association of American Colleges and Universities, p. 1.
- ⁱⁱ Gaff, Jerry G. 1991. New Life for the College Curriculum. San Francisco: Jossey-Bass Publishers.
- ⁱⁱⁱ Plummer, Patricia Ford. January 1999. "General Education at Massachusetts State Colleges: Comparisons and Assessment Initiatives." Framingham State College. Prepared while a Fellow, Massachusetts Higher Education Executive Leadership Institute.
- ^{iv} These publications can be obtained by contacting the AAC&U Publications Office, 1818 R. St., N.W., Washington, D.C. 20009. 1-800-297-3775; or by email: pub_desk@aacu.nw.dc.us.
- ^v For a comprehensive and recent discussion of assumptions and issues to be addressed at Bridgewater State College in developing and structuring a general education program, see "A Position Paper on General Education" authored by John W. Bardo and W. Clark Hendley, undated. The eleven-page discussion draft, "Goals for General Education: A Precis," (no author indicated), December 4, 1996, lays out educational goals for general education and proposes a model for general education requirements and means of satisfying them.
- ^{vi} For recent research on how general education programs have been developed and implemented on college and university campuses in New England and across the country, see: Revitalizing General Education in A Time of Scarcity: A Navigational Chart for Administrators and Faculty, by Sandra L. Kanter, Zelda F. Gamson and Howard B. London. 1997. Needham Heights, MA: Allyn and Bacon. (Howard London is Dean of the School of Arts and Sciences at Bridgewater.) The book presents research findings from telephone interviews with senior academic officers at 71 colleges and universities. Fifteen campuses were visited and brief portraits are presented of their general education implementation processes. All but three of the campuses visited are in New England.
- ^{vii} Pennsylvania State University. 1998. Report of the Special Committee on General Education. University Park, PA. Retrieved November 29, 2000 from the World Wide Web <http://www.psu.edu/ufs/geic.html>.
- ^{viii} Gaff, Jerry G. 1999. General Education: The Changing Agenda. Washington, D.C.: Association of American Colleges and Universities, pp. 1-2.
- ^{ix} Strong Foundations: Twelve Principles for Effective General Education Programs. 1994. Washington, D.C.: The Association of American Colleges. Pp. iii-iv.
- ^x Ibid., pp. vii-viii.

^{xi} Lopez, Celia L. Summer 1998. "Assessment of Student Learning," Liberal Education, Vol. , No. . pp. 36-43. For an additional discussion of regional accrediting body expectations, see this article, also by C. Lopez: "General Education: Regional Accreditation Standards and Expectations," Liberal Education, Vol. 85, No. 3. Summer 1999, pp. 46-51.

^{xii} A more thorough discussion of these approaches is provided in: Strong Foundations: Twelve Principles for Effective General Education Programs. 1994. Washington, D.C.: The Association of American Colleges.

^{xiii} For a more complete discussion of coherence in general education programs, see Strong Foundations, noted above, pp. 12-17.

^{xiv} Green, Janice S. Spring 2000. "Reviewing and Renewing General Education: A Practical Guide," Working Paper #24. Boston, MA: New England Resource Center *for* Higher Education, University of Massachusetts Boston, Graduate College of Education.

^{xv} Gaff, Jerry G. 1999. General Education: The Changing Agenda. Washington, D.C.: Association of American Colleges and Universities.