



Periodic Review Report

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on Higher Education**

Date of Most Recent Decennial Evaluation Team's Visit:
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Section 1: Executive Summary

Bryn Mawr College is a small liberal arts college, which also houses a prestigious Graduate School of Arts and Sciences and Graduate School of Social Work and Social Research. Enrollment is approximately 1,300 undergraduate and 400 graduate and post-baccalaureate students. The undergraduate college admits women only, while the graduate programs admit both men and women. The College is well-known for its rigorous undergraduate and graduate education, for the commitment of its faculty to teaching as well as to scholarly research productivity, and for its historical status as the first women's institution in the United States to offer the Ph.D. degree to women.

Bryn Mawr has experienced significant changes in leadership since completing its 2010 Middle States Commission of Higher Education (MSCHE) Self-Study Report. After serving for five years, President Jane McAuliffe stepped down in June 2013 to return to her scholarly work. The College's Board of Trustees appointed Provost Kimberly Cassidy as Interim President while it conducted a search for Dr. McAuliffe's successor. Prior to assuming the position, Dr. Cassidy had served as provost for six years, and she has been a member of the faculty since 1993.

A leadership search committee, chaired by a Trustee, was formed in early Fall 2013, and included faculty, student, staff, and trustee representatives. The committee consulted extensively with students, faculty, staff, trustees, and alumnae in developing a vision for the next president. Following completion of the search process in February 2014, the Board voted unanimously to confirm Dr. Cassidy as Bryn Mawr's 9th president. During this period, Professor of Sociology Mary Osirim served as Interim Provost. In Fall 2014 members of a Provost Search Committee were elected by the faculty and submitted their recommendation in March 2015 to President Cassidy who subsequently appointed Mary Osirim as Provost for a five-year term.

In the period between Fall 2012 and Fall 2013, a number of senior administrative leaders also left the College, some for exceptional new professional opportunities and others for personal reasons. Bryn Mawr was fortunate to have senior staff members with significant institutional and professional experience to provide interim leadership of key operations. This depth of experience has provided a very stable transition and supported strong sustained progress on College business. Moving expeditiously but thoughtfully and according to the *Plan of Governance*, the College has made five senior appointments since Summer 2013 (Chief Information Officer and Director of Libraries, Chief Development Officer, Chief Enrollment Officer, Chief Financial Officer, Provost) and is currently searching for a new Chief Communications Officer. Starting in Fall 2015, a search will begin for a new Dean of the Undergraduate College. Judith Balthazar, a member of the Deans' Office since 1991, is currently serving as Interim Dean. Throughout this period of transition, the College's Board of Trustees

has contributed to stable institutional leadership, and has offered valuable guidance as the College has built a new senior administrative team.

In 2010 Bryn Mawr submitted its (MSCHE) self-study report. The evaluation team's response to the self-study was very positive. Their report had many helpful suggestions and one recommendation to create a centralized plan for the assessment of student learning outcomes. Since that time, a comprehensive approach has been developed and implemented that requires academic departments to engage in cyclical program assessment with annual activity reports on direct assessments of student learning. To connect this work to institutional goals, a new evaluation form was created to supplement the existing course evaluation form to assess explicitly student perception of the link between the course and the *Seven Goals of a Bryn Mawr Education* as originally expressed in the 2010 self-study. Data from this form is included in new Departmental and Divisional Dashboards that are used to share information from this and a variety of other sources with faculty and administrators.

In the current report, examples of the use of assessment data by faculty to improve academic programming are provided. Also described are assessment examples from several college-wide initiatives that highlight priority areas as identified in the College's strategic plan. These examples have been chosen to illustrate different moments within a given assessment cycle. They demonstrate a broad range of evaluation across course, department, and institutional levels that collectively serve to track progress towards meeting the institutional learning goals.

Bryn Mawr College has a financial profile that is very strong. In June 2014, Moody's Investors Service affirmed the rating on the College's bonds as "Aa2" and Standard and Poor's affirmed its "AA" rating, both with stable outlooks. That rating category puts Bryn Mawr College among the highest 16% of the private higher education institutions that carry public ratings.

The work to prepare the Periodic Review Report (PRR) was organized and overseen by a Steering Committee consisting of faculty, administrators, trustees, staff, and students. Appendix A lists the committee membership. In Fall of 2014 several meetings were held to organize the data collection and to outline drafts of the required sections. In January 2015 a first comprehensive draft was completed and reviewed by the steering committee and members of the Board of Trustees. In February a revised draft was then shared with campus constituencies at standing staff and faculty meetings and at the February Board of Trustees meeting. The draft was made available on a community web site that provides background on the accreditation process and the PRR. A final version of the report was presented at the April Board of Trustees meeting for approval.

Section 2: Responses to the Recommendations from Previous Evaluation

The 2010 decennial accreditation resulted in a single recommendation, divided into three parts.

The team recommends that Bryn Mawr 1) develop a comprehensive plan for coordinating the current decentralized assessment of student learning outcomes; 2) conduct direct assessments of student learning as expressed in the seven goals and in learning goals in departments and programs; and 3) communicate and use the results for improvements in teaching and learning. (p.27)

After this initial recommendation, the commission met on June 24, 2010. In response to the evaluation team's April 2010 report, the Middle States Commission on Higher Education requested a progress report from Bryn Mawr. The language of the request was as follows:

To reaffirm accreditation and to request a progress report, due by April 1, 2012, documenting (1) further implementation of an organized and sustained assessment process to evaluate and improve student learning and (2) evidence that student learning assessment information is used to improve teaching and learning (Standard 14). The Periodic Review Report is due June 1, 2015.

A progress report was submitted in 2012, addressing the above two requests. That report outlined the adoption of a centralized assessment program at the course, department, and institutional levels. The current report further updates the 2012 progress report, focusing on the three parts of the recommendation from the 2010 accreditation. An overview of the response to each part of the recommendation is provided below, and in-depth documentation is presented in Section 5. Specific examples have been chosen to illustrate how current assessment practices function in both academic and co-curricular spheres of student learning.

A. Recommendation part 1) “develop a comprehensive plan for coordinating the current decentralized assessment of student learning outcomes”

Since the 2010 review Bryn Mawr has strengthened its ability to assess the achievement of academic program learning objectives and institutional goals for student development in a centralized and coordinated manner. This section provides an overview of the approach. An Associate Provost position was created and tasked with providing guidance and oversight of academic program assessments in collaboration with the Office of Institutional Research, Planning, and Assessment.

The approach has 4 components: 1) department program reviews every 10 years; 2) annual departmental assessment activity reports submitted to the Provost's office each year; 3) annual

departmental meeting with the Associate Provost to review planned assessment activities; and 4) an annual campus event, Assessment Conversations, held each spring.

Each academic department participates in an external review of their programs every 10 years. A team of external reviewers visits the campus to meet with various constituencies. After the meetings, the team prepares a report for the Provost and department identifying areas of success and improvement. Departments write a response to the reviewers' report outlining what changes they plan to pursue based on the feedback. The Associate Provost follows up with those plans via the annual assessment activity reports that departments complete each year.

The core of this approach is the direct assessment of student learning at the department level. A new web site with campus-only access provides resources for departments to construct assessment plans (see the link Assessment guides and examples for the Bryn Mawr community at <http://www.brynmawr.edu/institutionalresearch/assessment/assessment.html>). These resources include 1) identifying a question about student learning to which they would like to know the answer; 2) the kind of data that could provide direct evidence pertinent to the question; 3) a plan to gather and analyze the data; and 4) a procedure to discuss what the data say and make appropriate changes to their programs based on what is learned. The annual assessment activity reports describe such activities and vary according to the question and where a particular department is in the cycle. This approach allows departments to do meaningful assessment projects in an annual time frame concurrent with teaching, research, and service. Because the plans are motivated by their own questions related to learning goals for students and not prescribed in a generic sense, the approach fosters assessment projects that are rich, relevant, and valuable. The assessment reports are prepared at the end of the spring term after meeting with the Associate Provost to discuss progress on the assessment projects. Each spring, in anticipation of preparing for the next steps in their projects, departments are invited to share the outcomes of their assessment activities at the Assessment Conversations series sponsored by the Provost's office.

B. Recommendation part 2) “conduct direct assessments of student learning as expressed in the seven goals and in learning goals in departments and programs”

Bryn Mawr College has conducted direct assessment on student learning in a variety of projects related to the *Seven Goals of a Bryn Mawr Education* as expressed in the 2010 MSCHE self-study. For this section two such projects are detailed, the Q Project and Writing in the Major, both directly assessing Goal #3. The Goals are to:

1. Promote a life of intense intellectual engagement, including the recognition, in theory and in practice, that we need to be acquainted with a variety of approaches to inquiry for understanding the world and our place in it.
2. Promote the ability to think critically, that is, to reflect on the presuppositions and implications of our own arguments and commitments and those of others.
3. Increase students' skills in areas that are fundamentally important to their ability to take advantage of a Bryn Mawr education and to make the best use of their knowledge in their life beyond. In particular, we want to train women who can communicate effectively and are quantitatively literate.
4. Enhance students' breadth of knowledge and their life-long capacity to learn new things on their own.
5. Give students the opportunity to acquire a certain depth of disciplinary knowledge in at least one particular area of contemporary scholarship in the arts and sciences.
6. Prepare students to be active citizens in an increasingly global context, one in which the opportunities to overcome geographical and cultural boundaries are greater than at any other time in history.
7. Educate women who are prepared to transform and improve human life in their own communities and throughout the world.

Strengthening Quantitative Skills: Q Project. *The Q Project has been chosen to illustrate a powerful combination of direct and indirect assessment of students' quantitative reasoning skills, the third of the Seven Goals of a Bryn Mawr Education. The Q Project involves a collaborative effort among faculty from a subcommittee of the Committee on the Undergraduate Curriculum, the director of the Q Center, the Offices of the Provost, Undergraduate Dean, and Institutional Research, Planning, and Assessment (Q Steering Group). This example provides a picture of the way complete assessment cycles address programmatic objectives and student learning outcomes. In turn, this leads to continuous program improvement.*

The Q project at Bryn Mawr supports the development of mathematical, logical, and statistical problem-solving skills that are required in quantitative disciplines across the Bryn Mawr curriculum. Bryn Mawr has a Quantitative and Mathematical Reasoning (QM) general degree requirement, which predates the Q Project. Students must demonstrate mastery of college-level quantitative skills or mathematical reasoning by completing at least one QM-designated course with a merit grade of 2.0 or higher. In order to identify and to assist students who may lack the skills, preparation, and confidence needed to succeed in these and other quantitatively demanding courses, the Q Project introduced a Quantitative Reasoning Placement Test (Q Test)

and a Quantitative Readiness (QR) course. Students whose Q Test and/or standardized test scores suggest that they do not yet have the quantitative readiness needed to complete the QM requirement or to succeed in quantitatively demanding introductory-level science and social science courses – now listed with the Quantitative Readiness (QR) course designation in Bryn Mawr’s catalog – must first complete a Quantitative Seminar course (informally described as the Qseminar or Qsem). The Qsem is a mathematics fundamentals course designed to strengthen quantitative skills with an emphasis on applications.

The original Qsem has now been offered seven times. It is taught in a small seminar format to increase the opportunity to nurture students who have profound gaps in their academic backgrounds, while building quantitative and collaborative skills. The core of the course is the department of Mathematics’ original Fundamentals of Mathematics course that has been expanded to include more focus on applied quantitative reasoning skills. Students are identified for placement in Qsem through both the Q Test and standardized test scores (e.g., SATM, ACTM) submitted when applying to the College. Students who place into this course must complete it in their first or second semester.

The Q Project has also introduced a physical Q Center on campus. The Q Center offers collaborative, peer-driven study sessions designed to support students and reinforce basic quantitative reasoning skills in introductory courses in the sciences and social sciences. It provides an inviting study space for all Bryn Mawr students and is open for studying 60 hours per week, with trained peer mentors (Q Mentors) available to facilitate collaborative work on basic quantitative topics during afternoon and evening hours. A typical day at the Q Center may contain a succession of students visiting individually and in pairs to discuss statistics for Psychology, algebra for Calculus, graphing for Economics, unit conversions for Geology, and other general topics related to quantitative skills needed for their college career.

The Q Project is guided by a Q Steering Group, which includes faculty members from STEM and quantitatively demanding social science departments and representatives from the offices of the Undergraduate Dean and Provost. The Office of Institutional Research, Planning, and Assessment provides support to the Steering Group. In addition, the Group regularly meets with other faculty teaching quantitatively demanding material. Through conversations with each of these parties, the Group maintains and updates a memorandum describing the skills and reasoning abilities students need both to succeed in QM courses and to process quantitative data after they graduate. This memorandum informs the content of both the Q Test and Qsem.

The Q Steering Group has established several mechanisms for iteratively assessing and improving the various elements of the Q Project. Students participating in the Qsem retake the

QTest as a post-test, the results of this direct assessment provide feedback on the gains in mathematical skills and knowledge attained by students in the Qsem. Students also complete a math attitude survey based on a similar survey from the Program for International Student Assessment (PISA) at the beginning and end of their Qsem. The Office of Institutional Research, Planning, and Assessment is also collecting data on Qsem students' subsequent progress through QM courses and quantitatively demanding majors.

Data from the PISA-type survey indicate that the Qsem is succeeding in increasing students' confidence in their mathematical abilities. Across all measures, students' ratings of their confidence in solving particular types of problems increased and their attitudes towards mathematics and their own skills were more positive on the post-assessment than on the pre-assessment. The degree of positive change varied, but averaged 0.5 on a 4-point scale. As indicated by the green arrows in Table 1 below, the degree of change was statistically significant for all measures but one ("When I solve a math problem, I feel a degree of accomplishment.").

Table 1. Math attitudes survey pre- and post-test results.

Question	Pre-Avg.	Post-Avg.	Change	Sig.?
Scale: 1 (Not at all confident) to 4 (Very confident)				
Using a train schedule to work out how long it would take to get from one place to another.	2.70	3.29	0.59	↑
Calculating how much cheaper a phone would be after a 30% discount.	3.11	3.75	0.65	↑
Calculating how many square feet of tiles you need to cover a floor.	2.76	3.34	0.59	↑
Understanding graphs of student enrollments over a 10-year period.	2.96	3.62	0.66	↑
Solving an equation like $3x+5=17$.	3.76	3.97	0.21	↑
Finding the actual distance between two places on a map with a 1:10,000 scale.	2.14	2.95	0.81	↑
Solving an equation like $2(x+3)=(x+3)(x-3)$.	3.33	3.87	0.54	↑
Calculating the rate of change in a chemical reaction.	2.15	3.58	1.44	↑
Finding the ratio between 2 fractions.	2.47	3.57	1.11	↑
Calculating the probability of rolling 6's twice in a row with 1 six-sided die.	2.36	3.45	1.08	↑
Scale: 1 (Strongly disagree) to 4 (Strongly agree)				
When I solve a Math problem, I feel a sense of accomplishment.	3.49	3.60	0.12	
I enjoy the challenge of solving complex Math problems.	2.42	3.00	0.58	↑
I am confident that I can learn to solve new, complex Math problems.	2.97	3.34	0.37	↑
I enjoy reading about Math.	1.79	2.07	0.29	↑
I look forward to my Math classes.	2.31	2.94	0.64	↑
I do Math because I enjoy it.	1.83	2.24	0.42	↑
I am interested in the things I learn in Math.	2.46	2.84	0.38	↑
I get good marks in Math.	2.59	3.00	0.41	↑
I learn Math quickly.	2.32	2.61	0.30	↑
I have always believed that Math is one of my best subjects.	1.52	1.73	0.21	↑
In my Math class, I understand even the most difficult work.	1.75	2.21	0.46	↑
Scale: 1 (Strongly agree) to 4 (Strongly disagree)				
I am just not good at Math.	2.38	2.90	0.52	↑
I often worry that it will be difficult for me in Math classes.	1.81	2.16	0.35	↑
I get very tense when I have to do Math homework.	2.32	2.78	0.47	↑
I get very nervous doing Math problems.	2.30	2.78	0.48	↑
I feel helpless when doing a Math problem.	2.55	3.02	0.47	↑
I worry that I will get poor marks in Math.	1.98	2.49	0.51	↑

Average change = 0.5

The table above shows the average ratings (on scales 1-4) for the various items on the Qsem Math Attitudes survey. The change column presents the difference between the pre- and post-test average scores. Significant differences are represented by arrows - green arrows indicate a significant increase from pre- to post-test. As can be seen in the change column, the amount of change varied, but the average change overall was an increase of 0.5 points on the 4 point scales.

The Q Steering Group and the Office of Institutional Research, Planning, and Assessment are also conducting an ongoing longitudinal study of the QM courses that students attempt after completing their Qsem, their performance in those courses, their chosen major, and their time-to-graduation. The patterns in QM-designated course completion for a similar cohort in years prior to the launch of the Q Project will be compared to cohorts after the launch. Given that the first cohort of students took their Qsems in 2011-2012, longitudinal data is not yet available from a large enough sample to draw definitive conclusions. However, a number of observed patterns in the data collected to date have led to the revision of several elements of the Q Project.

First, it appears that Q Test and SAT/ACT scores can be used effectively to predict performance in introductory science and math courses (see Table 2 below). The Q Test was created in part because, like many of its peers, Bryn Mawr College was weighing the possibility of making the College's admissions application test-optional. Analyses show that the Q Test is approximately as predictive as the SAT and ACT. Bryn Mawr will be test-optional beginning in AY2015-2016. Given this result, the Q Steering Group has recommended to the faculty that the Q Test now be mandatory only for students who do not submit other standardized test scores when they apply for college or whose record provides ambiguous signals about their mastery of quantitative and mathematical reasoning. Any student who wishes to contest her placement based on those test scores will have the option of taking the Q Test to try to revise her placement.

Table 2. SATM, ACTM, and Q Test correlations with introductory course grade average.

Cohorts 2011-2013	SATM	ACTM	QTest
Number of students	600	224	714
Test Average	663	28	29
Intro QM Course Average	3.29	3.29	3.29
Correlation: Intro QM and Test Averages	0.46*	0.40*	0.37*
Size of Correlation	Medium	Medium	Medium

The table above shows that when looking at the relationship between test score averages (SATM, ACTM, QTest) and Intro QM Course (courses designated QM and 100 level) grade averages, all correlations are significant with medium effect sizes.

Second, preliminary analysis of the relationship between SAT, ACT, and Q Test data and students' subsequent grades in QM courses combined with anecdotal evidence from faculty teaching introductory STEM courses revealed that there were large numbers of students whose scores were not low enough to warrant placement into Qsem, but who nonetheless could benefit from some level of math fundamentals support and review to thrive in introductory STEM and social science courses to the extent that they would consider majoring in those fields. An analysis of introductory STEM grade distribution lends credence to this interpretation. Figure 1 shows the distribution of grades for students scoring in the mid-range of the Q Test. These students would not be required to take the Qsem, but nonetheless over a quarter of

them scored lower than a 3.0 in their introductory STEM courses. Many students would find such a result discouraging for pursuing a major.

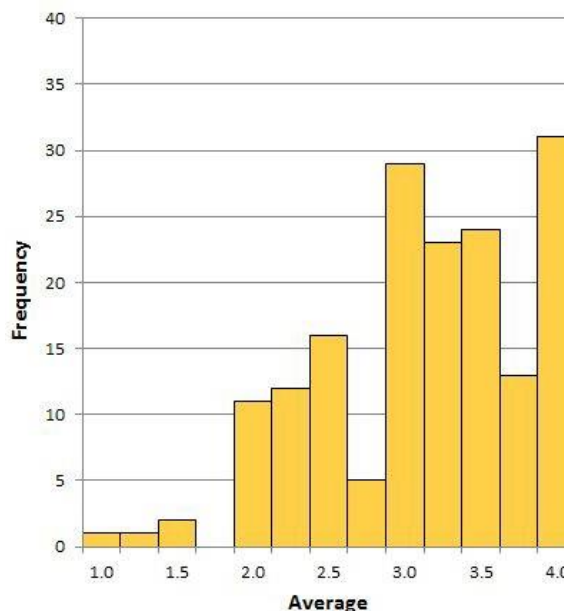
This analysis led to the following curricular pilots:

- *“Just-in-time” math fundamentals course.* A “just-in-time,” half-credit math fundamentals course (QUAN010) that students take concurrently with their introductory STEM or quantitatively demanding social science courses has been introduced. This course was developed partly in response to the

realization that the quantitative readiness and QR requirements, as initially conceived, placed mathematically underprepared students who entered college with the goal of majoring in a STEM field – such as many of the STEM Posse students – at risk for failing to complete their degrees on time. Many introductory science and math courses are taught in two-semester sequences, and Bryn Mawr College has neither the student demand nor the staffing to begin those sequences in the spring as well as in the fall. A student who must complete a Qsem before attempting the first course in one of these sequences thus falls an entire year behind her class cohort. QUAN010, launched in Spring 2013, is an intensive version of Qsem that applies fundamental concepts and skills in disciplines students have identified as desired majors, and uses problem sets from those disciplines in its curriculum. The Fall 2014 iteration of this course was offered as an alternative to the “traditional” Qsem; in this incarnation the problem sets were introduced and provided by “guest faculty” from Bryn Mawr departments of biology, chemistry, economics, and psychology.

- *Targeted Qsem.* The College is currently exploring ways to specialize Qsem further, for example, by division (Science & Mathematics, Social Science, or Arts & Humanities) and by direct participation of the Director of the Q Project in introductory Chemistry, Sociology, Mathematics, and Geology courses. Ways to assess the quantitative skills needed for those courses continue to be examined in order to align Qsem closely and efficiently with the requirements of the curriculum.

Figure 1. Distribution of average introductory STEM course grade averages for students scoring in the mid-range of the Q Test.



- Instructional Modules.* The College is currently developing online instructional modules and pedagogical training for faculty to deliver “just-in-time” support to students across a range of introductory science courses at Bryn Mawr College and beyond. Staffing and funding constraints limit the number of students that can be served through seminars like Qsem or QUAN 10. An alternative that is scalable to large numbers of students would use a blended model, in which students work independently and receive instant feedback through online modules and at regular meeting with a peer or faculty coach. In October 2014, Associate Provost and Chair of Physics, Elizabeth McCormack received a FIPSE First in the World grant to develop such an approach through online modules on fundamental mathematics skills and topics that could be maintained by the Q Center for use by faculty and students in introductory QM courses. The first goal is to build a comprehensive set of modules that address the core skills needed in the Bryn Mawr curriculum and in curricula at 12 partner colleges. The second goal is to research different blended approaches with the aim of making them available to all students who need additional review and practice in fundamental math skills. Bryn Mawr College will be piloting these modules and methods in AY2015-2016, and College partners will pilot the improved modules the following year. Annual project meetings and faculty development workshops will help partner colleges share information on approaches and practices that worked best.
- Ongoing Advising.* Preliminary longitudinal data also suggests that more can be done to help those students who have completed the Qsem to make wiser choices about their next steps. A number of students wait several semesters after completing their Qsem to take a QM course. From an assessment standpoint, it has taken longer than expected to collect informative longitudinal data, and from a curricular standpoint, these students risk letting their skills atrophy. These data also show that Qsem graduates who jump straight into the most demanding QM courses struggle and are more likely to drop or fail to earn a merit grade. Clearly the “next step” matters significantly for these students, and the Quantitative Steering Group is using the data to identify sequences of courses that provide the right mix of skill review and steady challenge, which can be shared with academic advisors. The number of courses that draw on intermediate levels of quantitative and mathematical reasoning with the QR prerequisite will be expanded. For example, in Spring 2015, two courses are being offered that are suitable for students just completing the Qsem: Mathematics in Geology and The Physics of Music, both designed to incorporate opportunities for mathematics review in the context of STEM.

Writing in the Major. *The Writing in the Major initiative has been chosen to illustrate direct assessment of student learning at the department level. This assessment directly evaluates Goal*

3 of the Seven Goals of a Bryn Mawr Education. It also provides a picture as to how the comprehensive and centralized assessment approach is currently being used by faculty members. In terms of its assessment cycle, this initiative has completed the planning phase and is presently in the data collection phase looking forward to analysis, outcomes, and revisions.

For several years, faculty members from many departments have discussed an observation that students' writing skills are not as strong as they once were. Alumnae/i report anecdotally a similar observation. This issue was taken up by the Committee on the Undergraduate Curriculum and ultimately led to a new requirement that all departments offer a course in the major to build discipline-specific writing skills. Such courses would be designated as Writing Intensive (WI) courses. The new requirement was approved by the faculty in AY 2013-2014.

The Committee on the Undergraduate Curriculum describes WI courses as those emphasizing critical thinking and writing to help students better understand discipline-specific scholarship and to practice its methods, forms, and conventions of expression. The writing assigned in WI courses is meant to be integral to the content of the course. The assigned writing aims to improve students' ability to represent and build upon material covered in the class and to engage deeply with course content.

Several learning goals of a Writing Intensive course were identified.

1. To give students instruction and practice in writing as a tool of inquiry and critical thinking. Students will further develop their abilities to use writing to create and represent knowledge, to explore and build upon ideas and concepts, and to express thought and perspective.
2. To teach students to produce clear expository writing and/or substantive, convincing arguments by generating critical questions, making claims, developing ideas through reasoning and evidence, and generating a finished product that is appropriate to the writing's purpose and audience.
3. To orient students to the practices of disciplinary writing. These courses should help students
 - to recognize discipline-specific purposes for writing, types of questions posed, and evidence considered persuasive;
 - to learn (as appropriate) to carry out discipline-based research;
 - to become familiar with the genres, structures, and language of writing characteristic of a discipline.
4. To offer students various process models for writing that they can adapt to their own habits and modes of learning

- to teach students that good writing rarely is the product of a single draft produced in one sitting and that stronger writing occurs in stages over time;
- to give students practice in typical process stages such as preliminary writing (note-taking, informal writing, outlining, mapping, etc.), drafting, revising, copy-editing;
- to offer strategies for learning to assess the strengths and weaknesses of drafts;
- to teach students to use faculty and peer feedback effectively.

In AY 2013-2014 departments were asked to describe how students could meet the writing intensive requirement in their major. Departments modified existing courses to be Writing Intensive courses, or created new ones, and developed draft syllabi for these courses. Having identified the ability to write well as an important learning goal for all students and having created a requirement that all students complete a writing intensive course in their major to help students achieve this goal, the next step for departments was to establish plans for directly assessing student writing in the major.

In AY 2013-2014, departments were asked to submit such plans as part of their Spring 2014 assessment activity reports. The plans include procedures to collect and archive student work, assessment tools (e.g., rubrics) that will be used to evaluate student writing, and mechanisms to discuss learning outcomes and make potential changes to WI-designated courses. Examples of such plans are provided in Appendix C.

This year, AY 2014-2015, departments are using their rubrics to make baseline assessments of examples of student writing in the major before the introduction of WI courses. Looking ahead, direct assessment of writing in the WI courses will be the focus of the annual assessment activity reports and the annual Assessment Conversation Series sponsored by the Provost Office in AY 2015-2016.

Several departments have already developed rubrics for evaluating students' writing. For example, in AY 2010-2011, the College's English Department initiated an assessment project directed toward assessing the sequential development of student writing in the senior capstone sequence, English 398-399. The department created a rubric and applied it to both an early career essay provided by the student as their best work to date and to the student's final senior capstone essay. An analysis of multiple examples of student work revealed two important outcomes. First, the capstone experience did positively impact two important learning objectives: skill in introducing critical questions anchored in interpretation and effectively identifying and implementing critical methodologies. Second, somewhat unexpectedly, comparatively weaker students gained more from the capstone experience than the strongest students. This was important information for the department to have as they discussed

whether all students, particularly weaker students, should participate in the senior essay. Additional details about this example of direct assessment can be found in Appendix B.

Many professional organizations also have disciplinary-specific writing assessment tools available. These have been made available for adoption or adaptation on the assessment resources website (noted above) for the community. The Writing Center on campus has provided support to departments in developing and using writing assessments.

Both the Q Project and the Writing in the Major initiatives have been guided by direct and indirect assessment of student learning and achievement. For a look at other examples, please see Section 5, Assessing Student Learning and Institutional Effectiveness.

C. Recommendation part 3) “communicate and use the results for improvements in teaching and learning”

Bryn Mawr College communicates the results of assessment activities in many ways. The Office of Institutional Research, Planning, and Assessment regularly provides reports and data summaries delineating assessment findings to interested community members in a position to make changes based on the data. A number of such reports are included in the Appendices (see Appendices D, E, F, G, H, I).

In addition to specific project data reports, the Office also compiles reports for each department on a two-year cycle. These reports, called Departmental Dashboards, include data summaries derived from institutional records as well as from student surveys (See Appendix H for an example). The Dashboards are compiled to assist departments in obtaining a snapshot of program enrollment patterns, compiled student perceptions of learning, information on student majors (e.g., incoming test score averages), majors' evaluations of their Bryn Mawr experience via responses to a number of institutional/national surveys, and data pertaining to alumnae. These data aid departments internally by creating a framework for discussing departmental decision-making and planning. Additionally, the Dashboards are used by faculty when preparing self-study documents for external reviews and for informing departmental conversations about the overall effectiveness of their programs. Section 5 further outlines the Dashboards. In addition to Departmental Dashboards, Divisional Dashboards are created using the same data on the Divisional (Humanities, Natural Sciences, Social Sciences) level. This Dashboard is used by the Provost to support similar decision-making on the institutional level (see Appendix I).

The Dashboards include information gathered from a new evaluation form introduced in AY 2011-2012 called “Perceptions of Learning” (See Appendix J). This form is given in conjunction with Bryn Mawr's standard teaching/course evaluation form, which is not unlike that used at

many institutions. The teaching/course evaluation form makes inquiries of the students about the instructor's performance and management of the class in the context of that course and its stated learning objectives. The new form was introduced to learn about students' experience of how the course contributes to the attainment of the *Seven Goals of a Bryn Mawr Education*. It also asks about how the course contributes to Bryn Mawr's general education requirements, which are expressed in terms of four approaches to inquiry: scientific investigation, critical interpretation, cross-cultural analysis, and inquiry into the past. (The website describing Bryn Mawr's academic requirements can be found at <https://www.brynmawr.edu/academics/academic-path/college-requirements/academic-program>.) As such, this new form provides data about the institution's broad educational goals. These data are shared with individual course faculty as well as analyzed collectively each year and reported in the Departmental and Divisional Dashboards as described above. Section 5 provides several examples of how data from this form are being used for program improvement across the institution.

From 2009 to 2014, faculty reported on assessment projects supported by a Tri-Co Teagle Grant titled *Beyond the Reaccreditation Self-Study: Bryn Mawr, Haverford, and Swarthmore Colleges collaborate to develop best practices for sustainable and effective department-level assessment*. In this project, six different Bryn Mawr departments (Economics, English, French and Francophone Studies, Geology, Psychology, and Sociology) directly assessed student learning in their academic programs and shared those results through annual written and oral reports. Information about the Teagle assessment projects conducted from 2012 to 2014 can be found in Appendix K. More information can be found at <http://www.brynmawr.edu/institutionalresearch/teagle/>

The implementation of an Assessment Conversations series was a direct outcome of the Teagle grant. Inaugurated in Spring 2014, the series brings together faculty from across the College to learn about assessment projects and outcomes. This is another important opportunity for communicating the results of assessment activities to inform faculty broadly about approaches to track and to improve student learning.

Section 3: Major Challenges and Opportunities

A. Challenges

Over the past decade, liberal arts colleges have continued to face many challenges, which were intensified by the Great Recession beginning in 2008. These colleges have been criticized by state and national governments and the popular media alike for their rapidly escalating costs of attendance, their failure to provide students with marketable skills, and their low return on

investment with many students unable to find jobs upon graduation. This situation is all the more acute for small, women's liberal arts colleges, where the pressure to enroll a class has clearly intensified in an environment where so few young women are interested in attending such schools. For example, of the approximately 1.4 million 18-year old young women in the US who will attend college in 2015, only 2% are expressly interested in attending a women's liberal arts college.

As a small women's liberal arts college, Bryn Mawr has experienced these challenges but has found ways to turn them into opportunities to advance academic excellence and enhance the institution. *The Plan for Bryn Mawr*, originally produced in 2012, was updated and refined to articulate a focused set of priorities for 2013-2015. The updated *Plan for Bryn Mawr* (See Appendix L) outlines four major priorities that speak directly to the *Seven Goals of a Bryn Mawr Education*:

1. Curricular innovation – the College has developed new interdisciplinary programs, some in collaboration with its Bi- and Tri-College partners (Haverford and Swarthmore Colleges), that expand the parameters of a liberal arts education and often provide practical experience, through field work, research, and/or internships. Some of the most exciting new programs in this regard are: the Tri-College Environmental Studies Program, the Bi-College Program in Health Studies, and Bryn Mawr's new International Studies Program. Bryn Mawr has also established a new multidisciplinary program of course clusters called "360's." These clusters most often consist of three courses taught by three different instructors around a common theme, with each cluster featuring some out-of-classroom experience and some form of outreach to the broader community. Some 360's offered most recently include: "Contemplative Traditions," "China and the Environment," Coastal Ecology," "Transforming the Legacy of Oil," and "Exhibiting Modern Art." Finally, the College has become a leader in the exploration of blended (online and face-to-face) learning in the liberal arts environment.
2. Connecting Students' Liberal Arts Education with Professional Preparedness – The Leadership, Innovation, and Liberal Arts Center (LILAC) assists students in their professional and personal development, enabling them to make a difference in the world in whatever paths they seek. This commitment starts at students' acceptance into the College and throughout their lives as alumnae/i. LILAC offers students opportunities to unite the theory and empirical research they engage in the classroom with practical work in the field, while providing multiple opportunities for development of professional leadership skills and reflection on a variety of curricular and co-curricular experiences. LILAC's many programs and workshops are designed to connect liberal arts education to professional success.

3. Advancing women in STEM—Bryn Mawr continues to strengthen its programs in science, technology and math (students can pursue degrees in engineering through a 4+1 partnership with the University of Pennsylvania and a 3+2 partnership with California Institute of Technology) and about one-third of all students graduating each year with majors in these fields. Through the renovation of the Park Science Center, the College will offer new opportunities for collaboration in teaching and research across all fields in the sciences and mathematics by creating new interdisciplinary learning spaces. In addition, Bryn Mawr now hosts a STEM Posse Program in partnership with the Posse Foundation and has recently begun a new major in Biochemistry.

4. Globalization at the College – Bryn Mawr has increased its population of international undergraduate students, introduced a new and immediately popular International Studies major, increased the number of partnerships it has with institutions abroad, and expanded the number and type of “study-abroad” experiences available to its students, including international research and internship experiences as well as semester long study-abroad programs.

Vigorous fundraising activities, healthy endowment, and partnerships with a variety of institutions have enabled Bryn Mawr to move forward in these generally challenging times for liberal arts colleges. Bryn Mawr has been strategic in the addition of new initiatives, providing faculty lines to support new programming, and maintaining competitive faculty salaries.

Within the context of the four specific priorities of *The Plan for Bryn Mawr* outlined above, the College has developed several additional new initiatives to address the *Seven Goals of a Bryn Mawr Education*. For example, to strengthen the writing skills gained by students in their first year, as discussed above, Bryn Mawr has added a new requirement to develop students’ writing skills within their majors. Each student must take a writing-intensive course in her discipline. To further enhance the communication skills of the students, the College offers resources to faculty, departments, and the student body through its public speaking initiative. This program offers instruction in practical techniques grounded in rhetoric and composition theory and provides assistance tailored to the curricular goals of specific courses and assignments. Additionally, Bryn Mawr has established itself as a national leader in “blended learning” in a liberal arts setting--the integration of online modules and materials into classes in a range of fields which often allows instructors to spend more focused time in the classroom explaining problems and working individually or in small groups with students. The inclusion of “blended learning” techniques has resulted in enhanced learning outcomes for students, particularly in STEM fields. Results for the experimental blended Biology, Chemistry, and Geology gateway courses were strong: the goal was to raise the completion with merit (grade of 2.0 or above) rate for these three courses from 83% to 90%. The goal was surpassed with an

average of 93.5% overall and 95.1% for low-income students. For more information about Blended Learning in the Liberal Arts, visit the website at <http://blendedlearning.blogs.brynmawr.edu/>

And last, but certainly not least, through the development of new programs and other partnership, Bryn Mawr has expanded the small women's college experience for students by strengthening ties with the Quaker Consortium (a consortium among Bryn Mawr, Haverford, Swarthmore, and the University of Pennsylvania). This has created a university of curricular and co-curricular opportunities including, for example, a new 4+1 Master's program with the University of Pennsylvania in several engineering fields. Such partnerships allow Bryn Mawr to expand programming in a financially strategic and sustainable way and to make coeducational learning opportunities available within women-centered education.

B. Opportunities

Informed by *The Plan for Bryn Mawr*, a number of strategic planning initiatives are underway at the College. Four areas of effort are described below. Grants and awards since 2010 that help support these activities are listed in Appendix M.

Diversity and Inclusion at Bryn Mawr College. Diversity and inclusion are central to Bryn Mawr's mission as a women's college and to the academic excellence of our institution. The College is committed to fostering equity and inclusion across all dimensions of diversity including but not limited to: race/ethnicity, social class, sexual orientation, religion, age, and national origin. While diversity and social justice have been long-standing commitments of the College, in 2004, then President Nancy Vickers instituted a distributed model for diversity leadership on campus by creating the Diversity Leadership Group and the Diversity Council, two groups that continue to promote, engage, and educate our community about the broad range of diversity issues that we experience on campus and in the broader society.

This year, Bryn Mawr has faced some challenges within our community, particularly in the areas of racial and gender identity, which led us to reaffirm, expand and enrich some of our broad institutional efforts to foster greater understanding and inclusion. President Kim Cassidy has led these efforts and created several new programs, in addition to strengthening existing ones, many of which are underway or slated to begin this year.

- The Diversity Council was rejuvenated this year with a broad-based membership of staff, faculty, and students. Members meet regularly and share information about current initiatives on their website. This year the Council is focused on developing spring semester programming and on providing recommendations for the first-year

experience, including diversity programming as part of our new students' orientation to the Bryn Mawr community.

- The Committee on Appointments, the Committee on Academic Priorities and the Provost have developed clear search procedures to diversify the faculty further, including intentional opportunity hiring of individuals from under-represented groups. One of these efforts involves our long-standing membership in the Consortium for Faculty Diversity (CFD) in Liberal Arts Colleges. The Committee on Academic Priorities has invited all departments and programs to consider their curricular needs and submit proposals to host a CFD Fellow for the coming year.
- Community education is a core element of making Bryn Mawr an inclusive community. On March 18, 2015 classes were cancelled and the entire community was invited to participate in a day of learning and working together to help us engage issues of how race shapes our lives and community and equally to help us build our skills for living in an intentionally diverse community. Participants from all constituencies of the College – students, faculty and staff – led sessions, served as panelists, and facilitated discussions. Over 800 community members participated. More information on the day of learning can be found at <https://www.brynmaur.edu/community-learning>
- The Pensby Multicultural Center presents a rich array of Diversity Conversations each year. Programs and activities facilitated by the Pensby Center address broad issues of diversity and inclusion on campus. Recent workshops have included “Privilege, Power and Difference”, “Religion on Campus?”, and “Ability, Access, and Ableism”. Through this office, the staff develops and coordinates leadership development and training programs, organizes key campus cultural events, guides student affinity groups, coordinates College programs to mentor and support students from underrepresented groups, supervises the Community Diversity Assistants, and provides informal advising to all students interested in issues of social justice and multiculturalism.
- A Bias Response Working Group has been appointed to clarify and to improve our institutional mechanisms for responding to bias or hate incidents on campus. The goal of the group is to create a clear and accessible mechanism for coordinating more effectively campus-wide responses and communications following a bias or hate incident on campus.
- The Dean's Office organized a teach-in on race in Fall 2014. Members of the community spoke about the history of race at Bryn Mawr College, race and higher education, the current repercussions of the Confederate flag in U.S. society, free speech, and well-being and accountability in a diverse community.

- The Student Curriculum Committee is partnering with the Dean's Office and the Committee on the Undergraduate Curriculum to explore models for enhanced diversity education that range from non-credit co-curricular programming to for-credit curricular coursework.
- Since 1988, Bryn Mawr has been a member of the Mellon Mays Undergraduate Fellowship Program (MMUF), which is committed to increasing the pipeline of students who pursue Ph.Ds to join the academy. Applications were accepted in February for our next cohort of Fellows.
- This year, Bryn Mawr developed a themed programming series of talks and workshops on "Dissent, Violence, Justice." Participants in this program have included scholars from our campus and beyond, including artists and journalists who have explored the reasons behind and the realities of violence and justice in societies of the Global North and South. Events in this series have included discussions of structural violence in local and global contexts, childhood trauma, and labor trafficking.
- With respect to transgender issues, the Board of Trustees recently reaffirmed our mission as a women's college at the undergraduate level and approved a recommendation from a trustee working group that the College will be open to and inclusive of all individuals who live and identify as women at the time of application including trans women and intersex individuals. The College may request additional information from any individuals whose gender identity is not clearly reflected in their application materials. The Undergraduate Admissions Committee is now working to update our Admissions Policy in light of the decision by the Board of Trustees.

Connecting the Liberal Arts to Professional and Personal Growth. The Leadership, Innovation and Liberal Arts Center (LILAC) is both a reorganization of existing programs on campus and an effort to enhance the opportunities available to further students' professional and personal development. Of utmost importance is ensuring that a rigorous liberal arts education is meaningful and relevant to whatever careers students choose to pursue, a key goal of a Bryn Mawr education. Students who graduate from Bryn Mawr are expected to make an impact in their communities and their professions. LILAC provides a space for students to recognize, to practice, and to consolidate the skills and concepts they learn inside and outside the classroom, while helping them explore and understand their values, strengths, and interests.

The Center, in its second year of existence, includes staff members who focus on leadership, civic engagement, and career and professional development. A faculty liaison, who serves a two-year term, is part of the LILAC team, and the Associate Dean, who runs the Center, reports to the Provost. The collaboration of faculty, staff, students, alumnae, and community partners is critical to the success of LILAC. LILAC also facilitates connections between current students

and Bryn Mawr's worldwide alumnae network. The creation of LILAC has increased collaboration between the offices responsible for curricular and co-curricular educational offerings as suggested in the reviewer's report of the 2010 self-study.

LILAC's mission is to prepare liberal arts students to be effective, self-aware leaders in their chosen life pursuits. The LILAC team has identified seven important developmental areas that harken back to the *Seven Goals of a Bryn Mawr Education* including: social responsibility, communication, conceptual thinking, connection, cultural competency, implementation, and reflective practice.

A sampling of the programs offered through LILAC is listed below.

- Leadership, civic engagement, and professional development through assessments (e.g., Strong, Myers-Briggs Type Inventory, Strength Finders)
- Co-curricular workshops (1-10 hours, e.g., Effective Meeting Planning, Public Speaking, Hire Me!, Resume Essentials)
- Intensive programs (10-60+ hours, e.g., Finance, Effective Grant Writing)
- Academic experiential learning courses called "Praxis" made possible through connections with community organizations
- Summer internship funding opportunities with required orientation and reflection
- Externship program to explore learning in relation to different post-graduation opportunities
- Connection to alumnae/i and opportunities to practice informational interviews through an Alumna-in-Residence program, International Skype Conversation Series, and lunch series hosted by the President
- Student leadership opportunities such as the Leadership Empowerment Advancement Program (LEAP), Career Peers Program, Leadership Assessment Center, and Student Coordinator roles
- Service learning opportunities

More information about LILAC and its programs can be found at <http://www.brynmawr.edu/LILAC/>

Advancing International Education for Women. Identified as a strategic priority in *The Plan for Bryn Mawr* and a key learning goal, international learning and engagement have moved forward on several fronts over the last few years. A series of new initiatives, some now fully adopted, some more exploratory, have taken place in tandem with a multi-year, deliberative

process of strategic planning intended to prioritize, to frame, and to build on these initiatives. The percentage of international students within the undergraduate student body also grew dramatically during this time, moving from the long-standing average of 7.5% in 2008-09 to 24.5% in Fall 2014, a development underscoring the globalized nature of higher education in the 21st century.

The College has directed attention to its growing international student population, analyzing data to understand this growth, holding a series of student focus groups (under the auspices of the Teaching and Learning Initiative) to probe the experience of international diversity at the College, enhancing orientation activities for these students, and expanding its support for students who wish to improve their English writing skills. (See Section 5.) The data available thus far indicate that the retention and graduation rates for these students are high and that their GPAs are well above average.

In terms of curriculum, the most significant developments have been approval of an undergraduate major in International Studies in 2012 and expansion of study abroad options beyond the typical Junior Year semester(s) abroad (JYA). The new International Studies major has found a ready audience. It will graduate 20 students in May 2015 with at least that number projected to follow in May 2016. The same holds true for the new study abroad options. The College's JYA enrollments have held steady at 40% of the junior class for some time. The development of international study travel components in roughly half of the 360° clusters, as well as opening of new summer options, such as the collaboratively-taught program with Nanyang Technological University, have raised the percentage of students who study overseas to 60-70% for a typical class.

The College has been exploring various online formats for collaborative teaching with colleagues overseas, ranging from single sessions with students from women's colleges across the world, such as Lady Sri Ram in India, Ewha University in South Korea, and Effat University in Saudi Arabia, to a semester-long project in which French majors translated the online postings of rural women in the Democratic Republic of the Congo so that their stories might reach an English-speaking audience. A faculty group has also received an Alliance to Advance Liberal Arts Colleges (AALAC) grant to explore the development of entire courses taught through such international collaboration.

Co-curricular options have increased as well. The number of students receiving College funding to pursue internships, independent research, or service projects abroad has grown to over 40 each summer. The Education Program is developing a significant relationship with a community in northern Ghana that has already provided a series of deeply embedded, collaboratively developed internships and promises continued future growth. The College also used a one-

time donation to support two students in full-year post-graduation internships at international organizations concerned with women's equity and advancement. LILAC has conducted a series of career planning sessions in which current students have conversed with alumnae working overseas.

The College has also convened several gatherings focused on issues of gender equity viewed through a global perspective. The Heritage and Hope (2010) and Next Wave (2012) conferences brought a range of internationally oriented speakers to campus. Bryn Mawr has also been a founding partner in the Women in Public Service Project, a collaboration among the Sister Colleges, U.S. Department of State, and the Woodrow Wilson International Center for Scholars to increase the number of women in public service worldwide. Under this umbrella in 2013, the College hosted 42 emerging leaders from nations in transition from conflict situations for a two-week professional development institute.

As already indicated, many of these global initiatives have grown out of exploration of collaborative relationships with colleges, organizations, alumnae, and communities beyond the College. Bryn Mawr is carefully exploring a small but significant number of such partnerships, with the intention of creating international dialogue as well as platforms for mutual growth and learning. Such relationships have resulted in five recent alumnae now pursuing a Master's program at one of the top universities in China, on full fellowships, as well as a growing relationship in both environmental studies and international politics with a Welsh university.

In 2014, President Cassidy charged four International Working Groups (IWGs) with thinking about major arenas of the College's international work, assessing existing strengths and weaknesses, and proposing goals, guiding principles, vision and ideas for further programming. The IWGs met monthly and included faculty and staff. Each group took up a particular issue: Curricular Internationalization, the International Student Experience, Voices for Women's Advancement (later retitled "Gender Equity in a Global Context"), and Engaging Students Beyond Bryn Mawr. Much of the information given in this report comes from their work.

The IWGs collected information, consulted various College constituencies, and produced draft recommendations, which are in the process of being refined and integrated into a cohesive international strategy. Faculty, staff, student, alumnae/i, and trustee feedback is being incorporated. The result will provide a framework for organizing, focusing, and prioritizing Bryn Mawr's long-standing international strengths, as well as the new developments and initiatives listed above.

Bryn Mawr offers a range of international learning opportunities normally found only at institutions twice its size (with double the faculty resources). The number of languages offered, variety of international courses available, and participation rates for overseas study are high.

The International Studies (IS) major is relatively unusual for a liberal arts college (only 13.9% have graduated IS majors in 2013 according to IPEDS) and gives Bryn Mawr a distinctive position with respect to many of its peers. The increase in international students also offers a remarkable opportunity for global dialogue right on campus. This growth is shared by Bryn Mawr and its Seven Sister peers, placing nearly all in the top ten of liberal arts colleges in percentage of international students and indicating that there is growing global interest in women's colleges. These developments deserve more studied consideration and also connect to matters of gender equity in a global perspective.

There is much the College can do to build on these strengths and opportunities. The international dimensions of all disciplines and professions, not just those traditionally involved in such work, could be further explored. There is much that could be done both to normalize the increasing student diversity of the College and to use it as a source of reciprocal learning (across boundaries of all sorts).

Finally, all IWGs recognized that focusing the College's existing international strengths toward an increasingly globalized future requires attention to the supports and resources needed for such work. Some are already in place. Focused fundraising over the last four years has provided funding for the 360° program as well as the internships and other College-funded experiential learning opportunities supported by the new LILAC center. Further efforts might seek external funding for study abroad beyond JYA, new faculty and staff lines, support for strategic external partnerships, and support for faculty and staff development activities. And, whenever possible, new international work should be blended with other College initiatives and/or develop means of resource sharing with external partners.

Leveraging Technology for Teaching and Learning: Digital Bryn Mawr. The Digital Bryn Mawr Task Force, comprised of trustees, senior administrators, faculty, and staff in relevant roles, was charged by the Board of Trustees in Fall 2011 to address the following questions and to chart a course forward: How does a liberal arts institution with a commitment to small classes and active, experiential learning for its students selectively integrate digital tools and information into the curriculum? How does a small college think about supporting the complexity of a contemporary higher education Information Technology (IT) portfolio, including support for faculty and student research and the administration and planning practices of the College? In essence, the task of the group was to identify ways for enabling diverse College constituents to use contemporary tools and data to do their work, to prepare for future success, and to think critically about Bryn Mawr's relationship to an evolving digital landscape.

The Task Force identified three high-level goals: 1) enable digital fluency for students, faculty, and staff; 2) continue to develop appropriate uses of technology for the liberal arts context; and

3) experiment, assess, learn, iterate – strive to be agile. After researching trends in higher education and technology, the task force delivered its final report and recommendations in April 2014 (Appendix N).

The Task Force recommended that Bryn Mawr:

- develop a stronger core of expertise and services to enable academic technology integration across disciplines
- leverage new content management systems and social media tools to create a dynamic and engaging social media presence
- move IT infrastructure planning to the next level of maturity to ensure wise investment and capability to meet the changing needs of the College in the context of a fast-evolving technology landscape.

Specific activities emerging from these recommendations are described below in three areas of priority.

Academics – Based on its leadership in bringing together a cohort of 40 liberal arts colleges to focus on blended learning, Bryn Mawr was awarded a grant from The Andrew W. Mellon Foundation for “Developing a Liberal Arts Curriculum for the Digital Age.” Through this grant and another grant from the Mellon Foundation, which is supporting the Tri-College Digital Humanities Initiative, Bryn Mawr is funding graduates and student interns to work with faculty and staff on blended learning, academic technology, and digital scholarship projects. The steering committee associated with the grants is creating an inventory of current faculty practices in using digital tools and data, as well as developing a set of digital fluency competencies that will map to the *Seven Goals of a Bryn Mawr Education* and serve as an outline both for faculty development and creation of curricular and co-curricular learning experiences for students. As a precursor to this more holistic data gathering, a cohort of student leaders at LILAC conducted a small-scale survey of their peers to ask about digital competencies and desired learning opportunities in 2014. At the Fall 2014 President’s Advisory Council meeting, the Chief Information Officer facilitated a discussion focused on Information Services and Digital Bryn Mawr with emphasis on how to prepare students for life and work beyond Bryn Mawr.

On campus, an ePortfolio planning group, has the broad goal of supporting students’ ability to reflect on their learning and competencies gained through their curricular, co-curricular, internship, and employment experiences. Students may also use ePortfolios to showcase their capabilities to key audiences such as prospective employers and graduate or professional schools. Bryn Mawr will pilot ePortfolios during the next academic year as a partnership

involving LILAC, the Dean's Office, the Provost's Office, Information Services, and participating academic departments.

Both the Tri-College Digital Humanities steering committee and the Tri-College Libraries Digital Scholarship working group are focused on collaborative models for scaling and sustaining support for digital work in courses. They are also focused on faculty and student research at Bryn Mawr, Haverford, and Swarthmore. Through the Tri-College Libraries, Bryn Mawr hosted the Digital Preservation Workshop, in order to develop frameworks for management and preservation of the burgeoning digital assets at Bryn Mawr and across the Tri-College consortium. As part of this planning initiative, a Tri-College working group has completed a digital asset management assessment, taking stock of the repositories currently managed, and the types and quantities of data stored and stewarded in each platform, thus laying a foundation for next steps in strategic planning and pragmatic capacity planning. The faculty Committee on Libraries, Information, and Computing (CLIC) is an active partner in these initiatives, helping to identify ways to engage faculty broadly in the collective enterprise of creating new models for scholarship and education.

Digital External Relations—Bryn Mawr has implemented a new College website based on Drupal and is in the process of migrating legacy content and orienting the 100+ web stewards on campus to enable dynamic and distributed content management to meet these goals:

- Undergraduate Recruitment
- Alumnae/I Engagement
- Marketing & Communications

Foundations for Digital Bryn Mawr—The major areas of focus are staffing, broadly adaptable platforms, and infrastructure. The College has completed phase one of a Teaching, Learning, and Research (TLR) Design Initiative to ensure adequate investment appropriately positioned in the areas of instructional design, faculty development, and academic technology expertise. This investment will enable faculty, students, and staff to integrate technology in meaningful and innovative ways across the College. The steering committee catalogued current College services providing academic technology and library/research support using digital tools and information sources, reviewed service metrics from national surveys in which Bryn Mawr participates, and benchmarked staffing and services with liberal arts peer institutions. These data will inform next steps in planning and positioning the academic technology and research/library/information services teams to support Digital Bryn Mawr goals.

In terms of systems and facilities, the College completed significant deferred maintenance on core components of its infrastructure over the past two years, including a storage area network, virtual server environment, and a nearly ubiquitous wireless project for the campus.

Information Services is planning toward next-generation collaboration, communication, and file sharing tools. It continues annually to make significant classroom technology upgrades following a regular refresh cycle and has just completed the process of converting the traditional analog slide library into a digital design and collaboration space in Carpenter Library for students and faculty to work with staff support on individual and group projects involving data and digital media. The department is also in the design phase of science library enhancements associated with the Park Science Center renovation and early planning phases for an upcoming Canaday Library renovation. Bryn Mawr has launched a campus-wide Information Stewardship Council with representatives from all academic and administrative areas of the College, including faculty and student representatives and members designated by senior administrative staff.

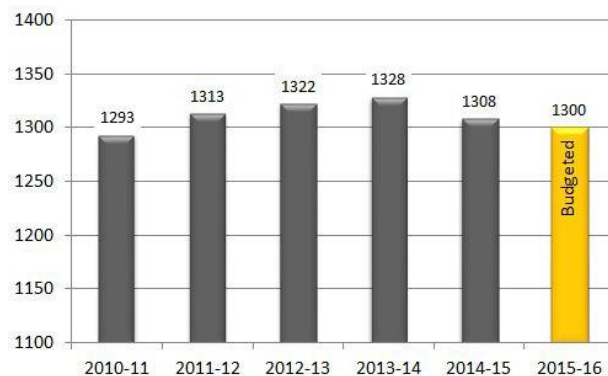
Section 4: Enrollment and Finance Trends and Projections

A. Enrollment Trends and Projections

This section of the report describes enrollment and finance projections for the next five years. Bryn Mawr College has a record of consistently meeting enrollment and finance targets to support its institutional mission. The consistency of these targets guides our planning and prioritization of effort as well as our budgeting.

Current Enrollment. As with many private colleges and universities, enrollment is a vital component in meeting financial goals to support institutional operations. Historical enrollment trends at Bryn Mawr College demonstrate sound institutional planning, while maintaining the size and academic excellence expected of the student body. Since Fall 2010, the overall undergraduate enrollment has ranged from 1,293 to 1,328 students (see Figure 2). The variance in undergraduate

Figure 2. Historic and projected undergraduate enrollment.



enrollment is minimal and not attributable to any institutional variables. During the same time period the overall incoming undergraduate class has remained relatively constant, ranging from 351 to 369 students (see Figure 3).

Since 2010, the overall graduate enrollment has ranged from 472 to 401 students (see Figure 4). During the same time period the overall incoming graduate class has declined. Changes in graduate enrollment can be attributed to the strategic discontinuation of several graduate level academic programs. Complete undergraduate and graduate enrollment information is located in Appendix O. Complete undergraduate admissions information can be found in Appendix P. Complete graduate admissions information is in Appendix Q. This appendix also provides detail of programs that are no longer accepting applications.

Future Enrollment. During the 2014-15 academic year, Bryn Mawr College initiated a strategic planning process within the enrollment division but with wider campus and board consultation regarding its future enrollment efforts. The plan will provide clarity regarding the goals and expectations for future enrollment related initiatives and will be anchored by four institutional objectives: academic excellence, student diversity, student retention, and financial strength. Included below is a working model for expected undergraduate enrollment for the next five years based on previous years' cohort numbers. This model is dynamic and can change based on actual numbers of incoming students and students who are studying abroad. The anticipated undergraduate enrollment target is 1,300 students. A similar consistency is expected in the graduate enrollment targets. This consistency is tied to net tuition the College can expect each year. To help in this expectation, an enrollment model has been created using past data about Fall and Spring enrollment to create Average Yearly FTE. Data on transfers and study abroad

Figure 3. Historic and incoming undergraduate class size.

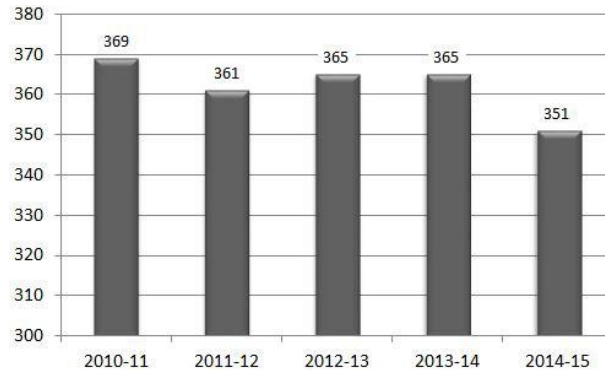
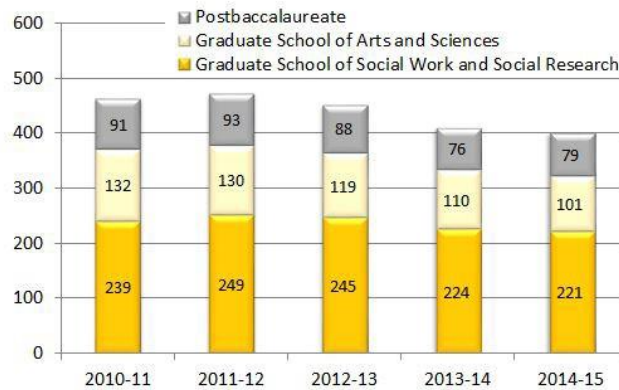


Figure 4. Historic graduate class sizes.



also inform this model. An output of the model can be seen in Table 3 below. Further discussion of how enrollment is tied to net tuition and planning can be found in the following section.

Table 3. Undergraduate enrollment model.

Enrollment Model Report 4/04/2014 (study abroad estimate update)																	Enrollment data updated April 4, 2014	
<i>Bold figures are actual; italicized figures are projected / estimated. Spring headcounts 2007 and prior are end-of-term, 2008 and later are March 1 census-based. Projections based only on census-based data. Headcount-based FTE projections are derived from average historical errors relative to the actual year-end financial FTE for prior years.</i>																		
Academic Year	Enrollment @ census				Academic Year	Entering students						Off-Campus Study				Full-Yr OCS		
	Fall (10/1)		Spring (3/1)			Fall beds needed*	Yearly Average		Fall		Spring		Fall		Spring			
	FT	PT	FT	PT			FT+33PT	FT only	Reg.	Trns	McBrd	NonDg	Trns	NonDg	#		Rate	#
1995-96	1114	63	1039	67		1098	1077	341	1	8	3	0	3	-	-	-	-	-
1996-97	1175	68	1124	50		1169	1150	360	1	16	3	0	0	-	-	-	-	-
1997-98	1178	62	1132	51		1174	1155	341	1	9	2	0	1	-	-	-	-	-
1998-99	1198	55	1119	55		1177	1159	344	2	1	2	0	1	-	-	-	-	-
1999-00	1184	56	1125	51		1172	1155	319	3	3	3	0	1	-	-	-	-	-
2000-01	1234	55	1161	41	1230	1214	1198	358	1	1	2	0	0	49	17%	80	25%	24
2001-02	1228	47	1138	60	1217	1201	1183	338	14	5	4	0	3	75	27%	80	29%	33
2002-03	1185	51	1116	65	1124	1170	1151	306	12	2	6	1	1	56	19%	79	28%	32
2003-04	1211	31	1127	44	1166	1182	1169	352	11	4	2	3	0	58	19%	88	30%	33
2004-05	1226	31	1174	43	1188	1212	1200	356	12	7	3	0	1	63	24%	70	26%	22
2005-06	1235	22	1149	47	1193	1204	1192	354	5	5	6	1	0	64	21%	83	27%	16
2006-07	1276	23	1194	44	1223	1246	1235	358	9	6	4	1	0	60	19%	87	28%	17
2007-08	1267	20	1242	20	1210	1261	1255	352	6	5	2	4	0	78	23%	52	16%	10
2008-09	1266	21	1244	25	1222	1263	1255	366	7	4	3	2	1	77	24%	60	21%	10
2009-10	1283	24	1259	23	1227	1279	1271	362	10	5	5	6	0	82	25%	60	20%	10
2010-11	1283	10	1270	19	1218	1281	1277	369	5	4	4	5	0	88	28%	51	17%	6
2011-12	1289	24	1250	30	1228	1279	1270	361	12	5	0	2	0	66	21%	58	19%	11
2012-13	1309	13	1296	22	1228	1308	1303	365	12	10	0	6	0	80	24%	52	17%	11
2013-14	1315	13	1313	17	1227	1319	1314	365	12	8	4	5	0	75	24%	44	17%	5
2014-15	1291	17	1304	17	1189	1303	1298	351	6	4	3	0	0	72	23%	33	11%	9
2015-16	1309	15	1271	21	1219	1296	1290	369	9	5.4	1.2	4.6	0.0	79	24%	54	17%	8
2016-17	1318	16	1279	21	1227	1305	1299	369	10	5.7	1.0	4.5	0.0	79	24%	54	17%	9
2017-18	1316	15	1276	20	1224	1302	1296	369	10	5.8	1.2	5.0	0.0	79	24%	54	17%	8
2018-19	1314	15	1274	19	1223	1300	1294	369	9	5.0	1.5	4.8	0.0	79	24%	54	17%	8
2019-20	1312	16	1273	20	1221	1299	1293	369	9	4.4	1.0	4.7	0.0	79	24%	54	17%	8

Notes: Budget FTE figures are taken from from *Office of Finance* 5-year budget model updated 5/15/2012
 Full-year off-campus study is included in both the fall and spring off-campus study counts
 *Fall beds based on on-campus enrollment, excluding McBrides. Projections based on most recent 3-year trailing average on-campus rate.

B. Finance Trends and Projections

Due to the diligence of the faculty, administration, and the Board of Trustees and the generosity of its supporters among myriad factors, Bryn Mawr College has a financial profile that is quite strong nationally, especially among institutions of its size. The College’s financial and managerial strengths are reflected in the current ratings of its unenhanced debt. As recently as June 2014, Moody’s Investors Service affirmed the College’s “Aa2” rating and Standard and Poor’s affirmed its “AA” rating, both with stable outlooks. That rating category puts Bryn Mawr College among the highest 16% of the private higher education institutions that carry public ratings. The most recent rating reports published by both Moody’s and S&P have been included in Appendix R and S.

The most recent three years of audited financial statements, associated letter of management, and data provided to the Integrated Postsecondary Education Data System (IPEDS) are also included. As a supplement to these standardized reports, the College's finance team develops customized, supplemental reports to share with the senior administration and the Board. These reports are intended to give more detailed or targeted insights, to elicit questions or concerns, and to ensure a thorough shared understanding of the financial implications of various operational decisions. Among these internally created reports is the Annual Financial Summary report, which has been provided in Appendix T. More recently, the College developed a report that benchmarks some key financial ratios against selected peers and national medians; a copy of this report has also been provided in Appendix U. These reports are samples of the types of reporting used to track and measure the impacts of various decisions that have been made or conditions that have occurred, helping to inform future planning processes.

Strengths. As you will see when reviewing the financial statements, the College has posted a positive operating margin in all but one of the last five years. This is a result of the cooperation of the entire community to budget prudently, taking into account potential market volatility (e.g., in energy and health care costs), and then to respect those spending allocations while still delivering a top-quality education for students, including vibrant co-curricular and extra-curricular programming and other support.

Even more than its operating results, one of the College's key financial strengths is its endowment. The estimated market value of the College's endowment as of December 31, 2014 was \$844 million. In either absolute terms or particularly as measured on a per-student basis or as compared to the amount of the annual operating expenditures or its debt, the endowment is significant, providing both stability and flexibility for the College. The College draws an amount from the endowment for spending every year that by policy is between 4.5% and 5.5% of the three-year average of its market value to help ensure that the endowment is able to support future generations of students into perpetuity. In Fiscal Year 2013-14, its actual draw rate was approximately 4.9% of the market value as of the start of the fiscal year. The annual draw from the endowment represented 30% of the College's operating revenues in Fiscal Year 2013-14. Although the current size of the endowment is in part a result of the investment returns over time, contributions from generous and supportive donors are vital to future growth. The College is currently in the midst of planning a comprehensive fundraising campaign that, if successful, will benefit the endowment and subsequently the College's future operations.

The College has been diligent in its maintenance of its facilities and attentive to renovations and repair. The College is currently undertaking a reconstruction and expansion of one of its student residential facilities, and planning is underway for a major renovation of its primary science-oriented academic building. Although there are other desirable renovation projects,

the physical plant is in relatively good condition, and over the years the College has not increased the square footage per student which has helped control expense growth. For a more detailed summary of campus building projects, see section 6.

Challenges. Although the College financially is in a position of relative strength, of course it also is cognizant of the many challenges it faces, most of which are relatively common to the higher education sector generally.

Notably, net tuition revenue for the College had been stagnant from fiscal year 2008-09 through 2012-13. That being said, there was growth reflected in the results for fiscal year 2013-14 of over 7%, and at this point there is modest growth of over 3% projected for fiscal year 2014-15. Although the number of applicants grew over that period of time, slight shifts in the profile of the applicant pool toward more financial need and the College's commitments to meeting full financial need, to accessibility, and to creating an intellectually curious and vibrant class each year has led to an increased investment in financial aid. The compound annual growth rate in financial aid over the past five completed fiscal years is approximately 8.5%. The College recently hired a new Chief Enrollment Officer after a national search and, in consultation with a sub-committee of the Board of Trustees, programmatic changes are being implemented and more are being planned to help ensure that the more recent trend of modest growth in net tuition revenue continues.

Even with modest growth in net tuition revenue, there is pressure for expense growth at a rate in excess of expected revenue growth. In the budgeting process, there is continuous and tremendous effort spent to contain expense growth. The College's annual budget process includes participation and discussion among many different campus constituencies. In late fall, the various units are tasked with reviewing their operations and considering their goals and plans for the coming fiscal year. Each year, they are specifically asked to evaluate existing programs, procedures, and functions to identify any that should be considered for change, reduction, or even elimination. They are also asked to identify any initiatives that might require incremental new budget allocations. Each division then submits a list of the proposed changes which are reviewed and consolidated by the Finance team. The list of proposed changes is then reviewed collectively by the President, a College budget committee, and senior administrators during a series of discussions. The approach is intended to highlight transparency to the community and to ensure a budgeting process that reflects institutional priorities. See section 6 for more details.

In July 2014, the College issued approximately \$33 million of additional debt for various building projects on campus. Currently it has approximately \$127.5 million outstanding. The structure of that debt is conservative; it is in the form of traditional, fixed-rate, tax-exempt bonds. There are

no derivatives and no variable rate, tax, or bank risk in the portfolio. To take advantage of the lower interest rates on the shorter end of the yield curve, though, the College does have two substantial bullet maturities—one scheduled for payment in fiscal year 2019-20 and one in fiscal year 2022-23. The College expects that in advance of those payment dates, it will re-finance that debt. It will be subject to some market risk at that point, but it is manageable given the College's assets and operations.

Projections: Five-Year Budget Model. The College maintains a comprehensive five-year budget model - a copy of which is included in Appendix V. It is a valuable day-to-day tool for the administration, and it is reviewed and evaluated by the Finance Committee of the Board of Trustees at every meeting.

The model is used to measure the immediate and longer-term financial impact of potential initiatives and changes to budget assumptions. A sensitivity analysis of key revenue and expense assumptions is performed regularly.

The College's five-year budget model explicitly reflects the strategic plan, including the initiatives of *The Plan for Bryn Mawr*. The model allocates resources for the implementation of the *Plan*. It also assumes incremental fundraising to support those strategic initiatives as a result of a comprehensive campaign. It assumes an average of \$7.5 million/year of incremental contributions to the endowment as well as some one-time gifts and grants. Fundraising success since the initiation of the quiet phase of the comprehensive campaign supports the reasonableness of the assumptions.

The College decided to begin implementing some of the initiatives of *The Plan for Bryn Mawr* before permanent funding had been obtained because of their importance in recruiting and retaining students. The Board of Trustees authorized additional endowment spending of up to \$10 million temporarily to fund campaign costs and the *Plan* initiatives until permanent funding could be obtained. However, to date only \$850,000 of additional endowment spending has been utilized to fund *Plan* initiatives and Campaign expenses; the remainder of the expenses of the Campaign and *Plan* initiatives were funded within the normal operating budget resources.

The five-year model also reflects the College's continued support of financial aid for its students. It assumes continued growth in the amount of aid provided such that the undergraduate tuition discount rate grows from its current approximately 47% to over 53% by fiscal year 2018-19.

There are modest increases assumed for tuition, room, and board rates and similar rates of increase for compensation and investment in facilities, but there is very little general expense growth budgeted.

Section 5: Assessing Student Learning and Institutional Effectiveness

Since 2009, Bryn Mawr, along with Haverford and Swarthmore Colleges, has been involved in two rounds of a Tri-College Teagle Foundation-funded Systematic Improvement project titled *Beyond the Reaccreditation Self-Study: Bryn Mawr, Haverford, and Swarthmore Colleges* collaborate to develop best practices for sustainable and effective department-level assessment. Each round lasted three years and involved three different academic departments from each College. The aim of the project was to support these departments in assessing key institutional learning goals as they pertained to the academic department. In all, 18 different departments, 6 from each College, assessed one aspect of student learning. At Bryn Mawr Round 1 included the departments of English, Geology and Sociology, and Round 2 included the departments of French, Psychology, and Economics. The final report describing Round 2 of the Teagle Foundation grant can be found in Appendix K.

During the course of the project, outcomes revealed a growing acceptance of the role of assessment in each College's general activities. Lessons learned from the Teagle Foundation-funded study were shared and put to use in creating new assessment approaches for different curricular innovations at Bryn Mawr. One of the most important lessons that emerged from the study showed that a supportive institutional framework is critical for the success of sustained and meaningful assessment. As a result, this comprehensive approach, described in Section 3, is now part of the College's regular assessment practice and has led to a dramatic increase in the participation of faculty in assessment activities. Since the initiation of this program in 2010, the number of departments submitting assessment activity reports has increased from ~60% to 100%. This Section provides several examples of campus assessment activities in various phases of an assessment cycle that provide evidence of the evolving assessment culture at Bryn Mawr.

A. Assessing Student Learning and Engagement

Quantitative Skills in Psychology. *The Assessment of quantitative skills in Psychology has been chosen to illustrate direct assessment of student learning born out of the Tri-Co collaborative assessment project. Although this project has just completed its piloting phase, curricular changes have already been made to address the retention of quantitative skills necessary to success in psychological fields that are introduced early in the curriculum.*

Through a series of meetings, faculty members of the Psychology Department identified the principle student learning goals of the major. They are listed below.

1. Students should develop a conceptual map of the field.
2. Students should enhance their ability to evaluate theory and evidence critically as it is presented in the literature.

3. Students should learn to marshal evidence and an argument in both written and oral form.
4. Students should engage in progressively more complex activities involving the collection, analysis, and interpretation of data.
5. Students should practice relating psychological theory and research to individual, group, organizational and public problems.

After deliberation, the department chose to directly assess one goal at a time and began with #4. They outlined a series of objectives that flowed from the learning goal.

1. Understand the use of correlational and experimental evidence and the scientific method, including the conditions required for causal interpretation.
2. Learn how to design research (e.g., choose a sample, develop procedures, choose measures) in ways appropriate to the questions being asked.
3. Learn how to apply basic principles of exploratory data analysis, to develop the ability to know what statistical analyses are relevant to the questions at hand.
4. Learn to read and interpret tables and figures (e.g., seeing patterns that exist in the data).
5. Apply a general understanding of the logic of statistical inference, of major statistical techniques, of the concepts involved in interpreting the outcome of statistical analysis, and of the limitations of statistical analysis to evaluate evidence.

After articulating these objectives, the department mapped the objectives to the existing courses and the requirements, identifying places in the curriculum where the objectives could be realized. They then created an assessment instrument to measure the key methodological and statistical skills and knowledge expressed in objectives 1-5. Questions for the assessment were adapted from several sources including an instrument that the Psychology Department at Haverford had already successfully piloted for a similar project, elements from the Psychology GRE Subject test (used with permission from ETS), and adaptations of additional items that were taken from textbooks designed to teach research methodology. The resulting instrument consists of 27 multiple choice items.

The instrument was piloted for scope and appropriateness in the Spring of 2014 with a group of juniors and seniors in the major. These students had previously been exposed to the material outlined in the objectives while taking Introductory Psychology and Experimental Methods and Statistics in their first semesters as a major. After taking the instrument, students were asked for feedback on the clarity of the questions, the content of the questions, and their overall

preparedness for such an assessment. Several notable trends were evident in their responses. Most students found the items clear and thought the content and length of the assessment was appropriate. They found the questions challenging but not impossible and noted how important the content was. A number noted concerns about forgetting some content from their previous training. Most students expressed a strong desire to improve their mastery on the kind of skills and knowledge being assessed. A number of students indicated a desire to focus on these questions in a more sustained way outside of the initial major courses, Introductory Psychology and Experimental Methods and Statistics.

The pilot data and student feedback were presented and discussed at department meetings. These discussions prompted reflection about the best way to strengthen the skills contained in these objectives. The data from the pilot suggest that retention is indeed a challenge if students do not have repeated chances to encounter and work on these skills. Therefore, an important outcome has been a recognition that these quantitative skills must be reinforced throughout the curriculum.

In response to the pilot, the Department has made a number of changes in its curriculum.

1. Some teaching resources from the introductory level that were committed to laboratory experiences have been reallocated and additional ones added to substantially increase laboratory experiences at the intermediate level in the curriculum. Introductory Psychology has also augmented its focus on basic methodological and statistical knowledge.
2. Half-unit laboratory experiences focused on data collection, research design and statistical analysis in the area of specialization of the faculty member teaching the class have been inaugurated. These laboratory classes are for students at the 200 level of their major and are capped at 15 participants so students can have carefully supervised, hands-on experience learning and applying these important skills. Students will be required to take two of these laboratory classes.
3. The faculty has also begun to discuss the idea of identifying assignments that could be adapted for use across a number of courses that might reinforce quantitative skills. These discussions are ongoing.

Along with these curricular changes, the department began formal implementation of the assessment instrument in the Fall of 2014. Students are now “pre-tested” as they begin the major, specifically during the first few weeks of the Experimental Methods and Statistics Class. The same students are then “post-tested” in the Spring of their Senior year using the same assessment at both times. As this pre- and post-test direct assessment data become available,

the Psychology Department will continue its discussions about additional curricular changes that may need to occur. For a full report on this project, see Appendix W.

Cross-disciplinary 360°s. *The 360° program has been chosen to illustrate indirect assessment of students' learning at the institutional level and the program's effectiveness. While individual courses have departmental learning objectives that are directly assessed, this discussion focuses on the link between student learning across courses and institutional goals. This example illustrates how collaborative program assessment can maximize the value of innovative curricular structures.*

Situated within Bryn Mawr's tradition of interdisciplinary scholarship and teaching, the 360° program offers innovative course clusters designed to promote interactive educational experiences for students and faculty alike. This program builds on the College's commitment to academic excellence that goes beyond the traditional walls of the classroom. Within a single semester or across contiguous ones, 360° courses connect students and faculty in shared classroom activities, as well as scholarship and research outside the classroom, often involving travel abroad, fieldwork, or community service, which are integrated with the coursework.

The 360° model is iterative by design: each individual course influences the others within the same cluster to allow learning to occur both incrementally and cumulatively. This learning process occurs not just within each individual cluster of courses, but also from cluster to cluster. Each set of 360°s has impacted the way members of the College community think about and implement the program as a whole.

A faculty-led steering committee for the program has developed a supplemental evaluation form for students to assess the effectiveness of the cluster. Additionally, the 360° program coordinator interviews all participating faculty at the end of each course as part of the assessment process.

Appendix D includes a report compiled using data from student evaluations of the 360° clusters in which they participated. These evaluations were completed at the end of each semester and cover nine clusters across three semesters. Students reported high agreement with several of the statements about the programs' goals. For example, they especially valued the 360° program's commitment to enhancing a liberal arts education by including out-of-classroom experiences, the opportunity to learn in an international context, and making interdisciplinary connections among clustered courses.

The 360° program's structure not only promotes close working relationships between faculty and students, but also encourages further development in personal scholarship. By giving faculty the opportunity to narrow the focus of a syllabus or case studies, within or adjacent to

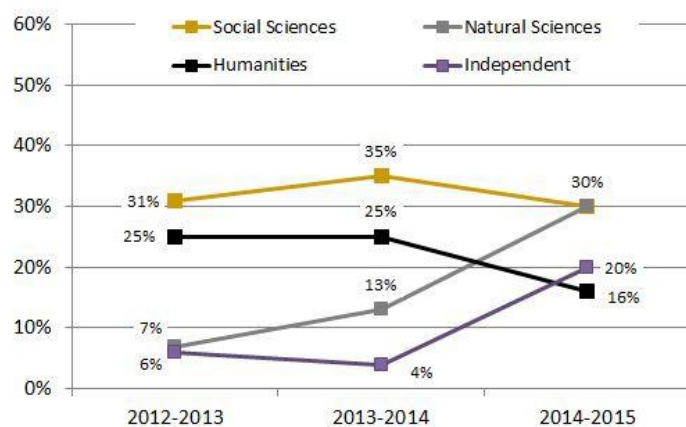
their areas of expertise, the 360° program encourages faculty to leverage colleagues in new ways and allows scholarship to take new directions. In the recent “China and the Environment” cluster, a faculty member was able to include students in meetings across China related to a forthcoming book, the focus of which was shifted as a result of insights from the integrated curriculum.

Also, as a direct result of the nontraditional classroom elements of the 360° program, students have the opportunity to consider a variety of applications for their academic work. Reflecting on their experiences, students reported that relationships developed over the course of the year with collaborators had a direct effect on their approach to post-graduate planning and summer internship interest. In a recent cluster titled *Modern Art in Exhibition* students worked with faculty, museum professionals, designers, and development officers to produce an art exhibit and accompanying catalog for a collection of significant works on loan to the College.

In considering which students are able to take advantage of this opportunity, logistical challenges often become the highest barrier to entry. For students, some logistical challenges include choosing between taking a 360° and making progress in their major requirements, and for faculty, having departmental flexibility and time for faculty collaborations. Additionally, as student participants indicate interest via written application (no additional interview process currently exists), strong writers are more likely to be selected. In the coming years, the goal is to clarify the structural framework of the program and to expand offerings to impact a broader range of students.

One curricular change that has already been made is to offer more 360° clusters involving topics in the Natural Sciences. In spite of making up approximately 30% of all declared majors at the College, Natural Science majors have been particularly underrepresented among students taking a 360°. In response, efforts were made to recruit faculty in the Natural Sciences to participate in creating 360° clusters. As a result, from Spring of 2013 to Spring of 2014, participation of Natural Science majors has increased from 0% to 14% (see Figure 5).

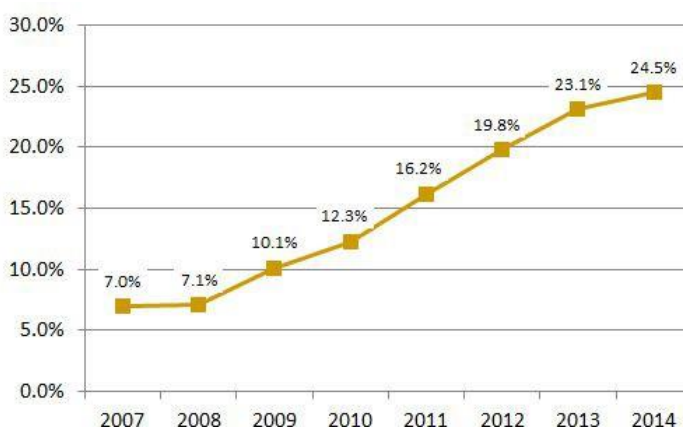
Figure 5. Percentage of students taking 360° clusters by declared major.



Multilingual Student Writing and Instruction. This example has been chosen to illustrate direct assessment of student communication skills in the context of the changing student demographics at the College. It illustrates a complete assessment cycle with a need being identified, an intervention being planned and implemented, and the efficacy of the intervention being measured and discussed for further improvement.

The recent growth in the percentage of international students within the undergraduate student body (see Figure 6) has resulted in a need to address broadly varying levels of student preparation for academic writing in English. To identify first-year students in need of instruction, the Director of Multilingual Writing reviews the admissions essays, SAT essays, and TOEFL subtest scores of all incoming international students. The Director of the Writing Center does the same with the files of domestic students who indicate English is not their primary language. The goal is to intervene as soon as possible with students who may benefit from one of our two writing courses for multilingual writers.

Figure 6. Non-Resident Alien enrollment as % of all full-time students.



In Fall 2012, a diagnostic assessment was added to facilitate these placement recommendations. During International Student Orientation week, international students who have lived only or primarily in non-English speaking environments are required to write an academic essay. A few US citizens (those who have only or for many years lived in other countries and whose admission materials indicate weak English language skills) are invited, but not required to sit for the diagnostic. These essays are read by four members of the Writing Program faculty. Based on holistic evaluation and consensus of the faculty, students are advised to take a full-unit writing course (English 126), a half-unit course (English 127), or no ESL writing course during the first semester. During the first weeks of classes, professors teaching the Emily Balch Seminars, the writing seminar taken by all first-year students, communicate concerns about any students who are struggling with writing. These students meet for consultation with the Director of Multilingual Writing, and then may be advised to enroll in English 126 or 127 or to work with a Writing Center tutor or writing partner.

Feedback from faculty, including those teaching the Emily Balch Seminars, coupled with concerns expressed by the honor boards of both Bryn Mawr and Haverford during AY 2013-2014, revealed another related need to provide more comprehensive instruction in proper use

of source material. A pre-test and post-test assessment was instituted for students in English 126 and 127, and instructional time on this topic was increased. The assessment tools require students to compose and document a summary, a paraphrase, and a paragraph that includes a properly integrated quotation. Student responses were graded based on the inclusion of particular elements. (For example the paraphrase received one point for maintaining the original author’s intent, one point for proper citation, and one point for not using the original author’s phrasing, structure, or sentence order.)

Results, as can be seen in Table 4, show an increase in skill level across all four sections of the course. The most growth was achieved in the full unit sections taught by the experienced instructor who had designed the course and the assessment. The relatively modest improvement in the other sections indicates the need for more training and supervision of instructors and the benefit of a full unit course.

Table 4. Results of pre- and post-test assessment.

Fall Unit	Pre-test	Post-test
Section 1	42%	84%
Section 2	52%	91%
Section 3	60%	70%
Half Unit	56%	69%
Total Average	52%	81%

Student Advising Pilot. *The Student Advising Pilot example has been chosen to illustrate direct assessment of an initiative that was born of an assessment activity, NSSE Data on student engagement. This example illustrates the centralized approach that the College has adopted for assessment. It also exemplifies a cycle of assessment that indicated no impact, thus impelling the community to look at other potential solutions.*

The First Year Student Advising Pilot Program was initiated to improve the academic experience for first- and second-year students. Additionally, findings from the National Survey of Student Engagement (NSSE), a survey administered to first-year and graduating senior

Table 5. NSSE 2009 First Year and Senior students’ responses regarding student-faculty engagement.

	% rating 6 or 7 on a 1-7 scale	
	First-Years	Seniors
Quality of relationships with faculty members	55%	59%
	% rating "Often" or "Very Often"	
	First-Years	Seniors
Talked about career plans with faculty member or adviser	17%	43%
Discussed ideas from readings or classes with faculty members outside of class	16%	50%
Received prompt written or oral feedback from faculty on academic performance	65%	75%
Worked with faculty members on activities other than coursework (e.g., committees, student life activities)	11%	29%

students at Bryn Mawr every other year, suggested that faculty-student engagement could be improved (See Table 5). In an effort to improve first-year students’ experience (as measured by retention and academic success in the first two years) while strengthening student connections with faculty, the Provost and Dean of Studies jointly created the program in 2010.

Within the Advising Pilot Program, faculty advisers were assigned to ¼ to ⅓ of the entering class. Depending on the year, students were chosen in different ways (both targeted and random assignment). This faculty pilot program complemented an already successful advising system provided by the deans, who have historically served as principal advisers for all first- and second-year students.

Over the first three years of the program, it was carefully monitored, evaluated, and revised. Faculty volunteers received stipends for working with five advisees through the middle of the sophomore year and for providing substantial feedback and advice to the administrators. The program reached its most robust level in its third year, with 25 faculty and two staff members serving as advisers and almost 33% of students in the Class of 2014 participating in the program.

A series of analyses undertaken by the Office of Institutional Research, Planning, and Assessment revealed that, despite these efforts, the program made no significant improvements in retention or academic success as indicated by GPA. A

Table 6. Comparison of First Year student outcomes between Regular Advising and Advising Pilot students.

	FYGPA			Retention		
	Regular Advising	Advising Pilot	Overall	Regular Advising	Advising Pilot	Overall
2010	3.39*	3.24*	3.35	90.7%	86.5%	89.7%
2011	3.36	3.37	3.37	90.2%	90.5%	90.3%
2012	3.30	3.36	3.32	90.2%	91.5%	90.7%
2013	3.39	3.41	3.40	90.0%	93.6%	91.2%

**indicates statistically significant difference*

A snapshot of these results is displayed in Table 6 and a full summary can be found in Appendix E.

Over the past two years, the Advising Pilot Program has been under review by the Committee on the Undergraduate Curriculum. This spring, the decision was made to discontinue the program and to consider alternative ways to improve first-year student experience.

An update on the NSSE data from 2014 shows an increase in students' connection with faculty (See Table 7). Although welcome, this improvement is unlikely connected to the Advising Pilot Program given that all students, not just those participating in the

Table 7. Comparison of NSSE 2009 to 2014 data from First Year and Senior students regarding student-faculty engagement.

	% rating 6 or 7 on a 1-7 scale			
	First-Years		Seniors	
	2009	2014	2009	2014
Quality of relationships with faculty members	55%	62%	59%	71%
	% rating "Often" or "Very Often"			
	First-Years		Seniors	
	2009	2014	2009	2014
Talked about career plans with faculty member or adviser	17%	21%	43%	48%
Discussed ideas from readings or classes with faculty members outside of class	16%	31%	50%	47%
Received prompt written or oral feedback from faculty on academic performance	65%	73%	75%	75%
Worked with faculty members on activities other than coursework (e.g., committees, student life activities)	11%	15%	29%	31%

Advising Pilot, reported increased engagement.

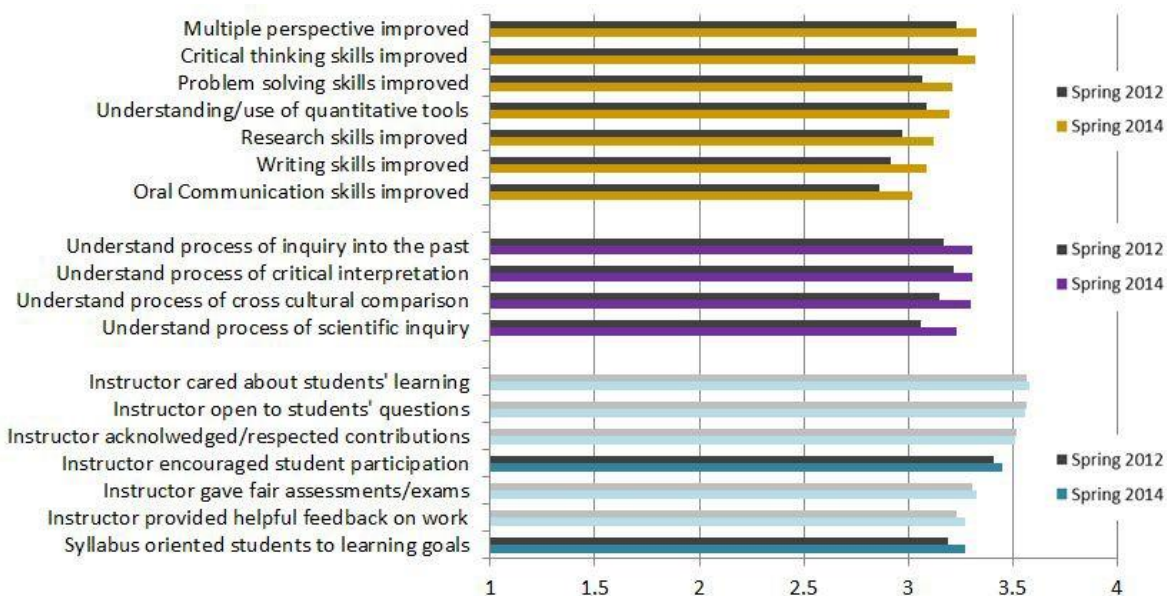
B. Assessing Institutional Effectiveness

Supplemental Course Evaluation. *The Supplemental Course Evaluation form is an important new tool for Bryn Mawr’s comprehensive and centralized assessment approach. While indirect, the form allows for the collection of important information regarding the connections between student learning as defined by course goals and the institution’s learning goals.*

The Perceptions of Learning form is completed by students alongside the standard teaching evaluation form for each of their courses at the end of every semester. The new form was designed with broad institutional learning goals in mind. In particular, the form assesses student perceptions of the effectiveness of a course in achieving the seven institutional learning goals and addressing the four approaches to inquiry: scientific investigation, critical interpretation, cross-cultural analysis, inquiry into the past. (The website describing Bryn Mawr’s academic requirements can be found at <https://www.brynmawr.edu/academics/academic-path/college-requirements/academic-program>.)

Furthermore, items assessing each course’s syllabus and instructor are included in this survey. Each student is asked to rate their level of agreement on a scale of 1 (Strongly Disagree) to 4 (Strongly Agree) with statements pertaining to each of the above areas. As can be seen in the report included in Appendix F and in Figure 7 below, the resulting analysis completed by the Office of Institutional Research, Planning, and Assessment showed positive findings. In a

Figure 7. Average rating on all items in the Perceptions of Learning Survey. Significant differences are shown in bolder colors.



comparison between student ratings from Spring 2012 to Spring 2014, all items addressing course implementation of the seven learning goals and four approaches to inquiry resulted in significantly higher scores (i.e., greater agreement) in Spring 2014. This suggests that, across time, students have observed improvement in the use of these goals and approaches in their courses.

Moreover, though many of the items relating to instructor engagement did not show significant differences over time, average ratings of instructor engagement were on the high end of the scale. These results suggest stability over time - students felt positively toward instructor engagement in Spring 2012 and again in Spring 2014. Overall, the results suggest that the institution has shown significant improvement in regards to implementing the goals and approaches introduced in 2011 (see Figure 7 below). The Perceptions of Learning survey has successfully captured this improvement and will continue to be implemented in future semesters.

In addition to the report attached in Appendix F, the Perceptions of Learning data have been included in a number of other resources for administration and faculty. Summaries of the data were incorporated in both the Division Dashboard and Program Dashboards as will be discussed below. Additionally, the data have been utilized in decision-making processes. For example, the report presented in Appendix G was created for the Curriculum Committee during the evaluation of the Student Advising Pilot Program. The original impetus for the creation of the Student Advising Pilot Program stemmed from results regarding student/faculty engagement as reported by students on the National Survey of Student Engagement (NSSE). Using the Perceptions of Learning data, the Office of Institutional Research, Planning, and Assessment was able to provide a fuller picture of student assessment of faculty engagement beyond what was presented in the NSSE results. This comparison has given the Curriculum Committee a more comprehensive understanding of the student/faculty dynamic at Bryn Mawr and, in turn, allowed for more informed decision-making regarding the future of the Student Advising Pilot Program.

Data from the Perceptions of Learning form will continue to be valuable in assessment of and decision-making about student learning moving forward. In order to access the data more easily (currently collected in paper form), the Curriculum Committee will be considering a proposal this spring to move the form online. This change to the data collection would allow for more expedient data analysis/summarizing.

Department and Division Dashboards. *The Department and Division Dashboards have been included here to illustrate one way summaries of assessment data, in this case aggregated at the Departmental and Divisional levels, are shared with faculty and administrators.*

An example of a typical Department Dashboard, which is provided on a two-year cycle, can be found in Appendix H. Through the use of these Dashboards, departments are able to obtain a snapshot of their program and, in turn, are aided in their benchmarking, decision-making, and planning.

Included in the Department Dashboards are longitudinal data, comparisons of the department to the department's division and the institution as a whole, and comparisons of Bryn Mawr College to the COFHE peer groups. This information allows departments to understand the current state of their program, as well as the program across time and within a larger context (i.e., division, institution). Data for these reports are derived from institutional records as well as responses from institutional/national surveys of Bryn Mawr College students.

In addition to the Dashboards given to each department, the Office of Institutional Research, Planning, and Assessment has constructed a divisional version of the Dashboard. This Dashboard, as can be seen in Appendix I, provides similar information as the abovementioned Program Dashboards but on a broader scale. To construct this data, each department was grouped into one of three divisions - Social Sciences, Natural Sciences, and Humanities. Aggregate data for each division as well as the institution are presented in summary form. This Dashboard is made available to the Provost and to other senior administrative staff in an effort to provide a snapshot of the College as a whole.

Note: Due to the sensitive nature of some of these data, the two attached Appendices (Hand I) have been de-identified of all specific departmental and divisional information.

Right-Sizing Graduate Education. *The project to assess the role of graduate education at Bryn Mawr grew directly out of the Board of Trustees Task Force on Balancing the College's Mission and Resources. This work illustrates the way in which assessment can inform strategic planning at the highest institutional level.*

The 2010 Middle States Self-Study Report (2010 MS report) included a section on Graduate Education which described the conclusions and recommendations decided by the Task Force on Balancing the College's Mission and Resources. This section included details of the Board's April 2008 endorsement of these recommendations that moved the College toward a renewed commitment to graduate education as provided by two graduate schools: the Graduate School of Arts and Sciences (GSAS) and the Graduate School of Social Work and Social Research (GSSWSR). The 2010 MS report directed graduate programs to set and achieve a set of benchmark goals, to restructure significantly the administration as well as the student services operations, and to enhance the relationship between the two graduate schools. In order to achieve a suitable balance of resources between graduate and undergraduate programs in line with the College's core mission, there was a decrease in the overall size of the graduate

enterprise through targeted reductions in both the number of graduate programs, numbers of students admitted, and faculty FTE committed to graduate education. Presented here are updates on the process by which the graduate programs attained the mandated benchmark goals and of the restructured administration and student services operations.

Attaining a Distinctive Blend of Undergraduate and Graduate Education. Each GSAS program and the GSSWSR were assessed with respect to the following general criteria in addition to criteria specific to their programs: 1) the distinctive and distinguished characteristics of the program including the quality of admitted students and reputation of the programs; 2) the integration of graduate programs with the undergraduate College (vertical and horizontal integration) and 3) financial sustainability. The three-year process to implement these benchmarks in all graduate programs ended with a review of each program in Spring 2011 culminating in these decisions:

- A second doctoral program was closed. The Psychology Department had successfully revised and downsized its curriculum and met criteria 1 and 2 listed above; given the high costs associated with the graduate program (criteria 3), however, the decision was made to cease admission of new students into the Ph.D. program. The graduate program in Russian had already been terminated at the conclusion of the 2008 Task Force Review. The review in Spring 2011 also discontinued the free-standing MA program in French (students may continue to enroll in the AB/MA program in French and Francophone Studies).
- The GSSWSR successfully met all three criteria, including a major revision of their curriculum to focus on the biopsychosocial conditions affecting children and families. Additionally, in order to meet criteria 3, one of financial sustainability, the GSSWSR reduced their tenured/tenure-track faculty from 13 to 10 plus the Dean. To achieve the reduction while retaining its professional standards and reputation for small faculty-student ratios, the GSSWSR decided to eliminate several courses and the Master of Law and Social Policy degree program. In 2012, without increasing funding or faculty numbers, the School launched its MSS-MPH dual degree program with Thomas Jefferson University, devised for current students and alumni (up to 5 years post-graduation). A recently revised agreement now includes a partial scholarship from Jefferson for GSSWSR applicants. In accordance with the mandate for greater integration of GSSWSR faculty within the College, the number of faculty that are either teaching or co-teaching both undergraduate and GSAS students has doubled. The GSSWSR is especially proud that it has remained fiscally solvent with a budget surplus for the past 4 years.
- The Graduate Group (GG) programs (Classics, Classical and Near Eastern Archaeology and History of Art) met most of the criteria for continuation and were

commended as distinctive and distinguished programs with national and international reputations. The Graduate Group was tasked to address three remaining concerns prior to May 2012. The concerns were: 1) to define clear and binding progress criteria for each year in the program for the purpose of monitoring more closely the time to degree; 2) to plan the nature of the next three hires in the Graduate Group, where these must meet the needs of the undergraduate program in History of Art; 3) to plan how the undergraduate curricula in the departments of Archaeology and Classics would accommodate both the reduced FTE and the increased focus on graduate teaching. These were addressed during 2011-12, with particular effort towards devising a strategic plan to address the loss of faculty FTE.

- The Graduate Group in Science and Mathematics (GGSM) programs (Chemistry, Mathematics and Physics) did not meet a sufficient number of the criteria and were charged with another three-year review period for 2011-14, this time in a process constructed collaboratively between each program and the President, the Provost, and the Committee on Academic Priorities. The GGSM programs were instructed to determine their own path to accomplish goals including: (1) to create distinctive and distinguished programs; (2) to develop a higher profile; (3) to attract a robust applicant pool and improve the quality of the admitted students; (4) to achieve quality outcomes; and (5) to identify a peer cohort of graduate programs. President Kimberly Cassidy and Interim Provost Mary Osirim reviewed the final reports submitted in March 2014 and determined that the three programs would continue. In President Cassidy's view the three programs had made a "tremendous effort" during 2011-2014 in all categories and had made significant progress toward their goals. In the specific case of Physics, however, because their report was slightly less conclusive, the Department was asked to report again to the President and the Board at the April meeting in 2015.
- Free-standing MA programs are now limited to Bryn Mawr undergraduates who apply and are accepted into a combined AB/MA program. With the idea that AB/MA programs are useful for undergraduate recruiting, two new programs are in development: 1) Museum Studies, in which the graduate curriculum in the History of Art department offers programmatic structure and 2) an AB/MSS program which is currently in a pilot phase between the Department of Sociology and GSSWSR.

Future Assessment of Graduate Education. Since 2010, eight GSAS programs have had doctoral students but only six programs will continue to admit PhD applicants and these have discontinued admitting free-standing MA students. Following the final report on the graduate program, the Dean established a regularized reporting by all Arts and Sciences graduate departments where formal reports will be due from each program on a 3-year cycle,

supplemented by annual informal reporting to the Dean. These reports will be used to verify that the benchmarks achieved as a result of the review process are being maintained.

Assessment in the GSSWSR continued in Fall 2013 with preparations for its own professional reaccreditation (self-study due August 2015). As part of this process, it created a Centennial and Comprehensive Campaign Committee to begin identifying 'wish lists' of all GSSWSR stakeholders. With the discontinuation of the MLSP degree, a "Social Work and the Law" certificate program was developed to ensure that students were still provided the core content about legal processes. In early Spring 2014, the School began a strategic planning process to determine staffing and curricular needs, to inform the expertise needed in filling two new faculty vacancies due to unanticipated retirements. This planning produced revision to the School's vision, mission, and overarching goals, and is expressed in a new mission statement: The GSSWSR aspires to promote social justice and wellbeing through a variety of trans-disciplinary approaches to scholarship and practice appropriate to the complexity of social work and social welfare in the United States and internationally.

Administrative Changes since 2010.

- A consequence of establishing a single Faculty in 2008 was to change the structure of Graduate Council expanding its jurisdiction to cover all graduate programs at the College. Its membership now includes representation from the GSSWSR, one faculty member and two student representatives from the M.S.S. and Ph.D. graduate associations of the GSSWSR.
- Graduate Council (GC) is a body that is charged with overseeing policy within the graduate schools. Both schools have revised their Faculty Rules since 2010 and these revisions were discussed and refined in GC. Since GC regularly brings together student representatives from each graduate school, it is also a forum for hearing student concerns that can be addressed by faculty from both schools. Student bodies at GSAS and GSSWSR each have their own student governing body, but continue to find ways to work together as a graduate community, following the Task Force recommendation to build a community of graduate students. Special efforts have succeeded to increase participation of GSSWSR students at events on the main campus to strengthen the graduate community across both schools.
- A new Student Services Organization was created and began operations in Summer 2010 to realize efficiencies and improvements by combining student services operations across the two graduate schools and the Undergraduate College in such areas as recruitment, admissions, financial aid, registration, enrollment, student employment and career services. While a significant learning curve was experienced by administrative staff learning how to work with the combined operation structure, this

organizational structure is improving and is an evolving process. The new Chief Enrollment Officer is reevaluating the Admissions office structure, and, in particular, how it can better serve the graduate programs. Online application review was implemented for all programs in Fall 2014.

Leadership, Innovation, and the Liberal Arts Center (LILAC). *The Leadership, Innovation, and the Liberal Arts Center, begun in 2012-2013, provides dramatic evidence of a new culture of assessment on campus. The assessment strategies for each of LILAC's programs are fully integrated with program development. It also provides a unique structural innovation linking curricular and co-curricular learning objectives.*

The mission of LILAC aligns directly with the *Seven Goals of a Bryn Mawr Education* as identified in the MSCHE 2010 Self Study Report. Appendix X is a report drafted by the Center Director that provides an in-depth description of the assessment of institutional effectiveness of LILAC programs and initiatives. LILAC has a variety of ongoing assessments primarily through the creation of internal survey assessments focused on programmatic goals and external consultation on departmental structure. Highlights of the assessments include:

1. *Improvements to the Praxis Program* – The Praxis program regularly collects survey data from participating students and field supervisors at community-based organizations. Both in the middle and at the end of each semester, students complete short surveys about their experiences with the Praxis Program. Praxis field coordinators compile data for each course and produce a comprehensive assessment, which informs subsequent iterations of that course.
2. *Re-imagining the structure and goals of the Career and Professional Development Office* – In October, 2011, Bryn Mawr College and Haverford College hired Sheila Curran, Managing Partner of the Curran Consulting Group, to conduct an external review of the Bi-College Career Development Office (Bi-Co CDO). Curran Consulting made the following recommendations:
 - Restructure careers offices in both colleges, encouraging a strategic, innovative approach
 - Institute a cooperative arrangement between Bryn Mawr and Haverford to share resources and opportunities. Expand this arrangement to Swarthmore and the University of Pennsylvania as appropriate
 - Develop a holistic approach to professional preparation, involving faculty, advisors, alumni and CDO
 - Clarify organizational goals, accountability and metrics for success

3. *Redesigned scope and approach to the post-graduation Destinations Survey* – The 2014 graduating class participated in a Destination Survey, a new system for collecting information about immediate plans after graduation. By linking the survey completion with seniors' cap and gown pick up, 98% of seniors responded to the Destination Survey. Having such a large sample size and increased reliability will be critical in building and analyzing a cumulative destination data set in the future. The goal is to continue to build the data set with future classes so data trends across class years can be analyzed.
4. *Consolidation and systematic quality management of LILAC Summer funded internships* – The students receiving LILAC summer funding participated in an orientation where they completed the Strength Finders assessment tool developed by Gallup and set learning goals at the start of the internship experience. Students completed a mid-summer reflection report electronically through Moodle. The students' final projects consisted of asking their supervisors to complete an evaluation form and to create powerpoint presentations. The presentations were compiled into a book that all students received. The book was also distributed campus-wide. Additionally, students presented at campus wide event on parents' weekend. Finally, students were asked to complete a 2-3 page final reflection. A final evaluation survey will be sent to funded students as well.
5. *Expansion and focus of LILAC workshop, intensives, and alumnae programs* – Any programs offered through LILAC, whether through Civic Engagement or Career and Professional Development, require students to complete a registration form and an evaluation at the end of the program. The registration asks students to answer in 50 words or less what they hope to learn from the program. This allows LILAC to incorporate students' expectations into the programs. All participants are asked for their student ID as well so that links can be made between data from other programs. Additionally, after each program, students complete an evaluation with a standard set of questions.
6. *Development of a new Leadership Assessment Center* – LILAC will launch a Leadership Assessment Center with a pilot in Spring 2015 and a full launch planned for AY 2015-2016. The Center will include a simulated work day where students participate in tasks and receive feedback and mentoring from alumnae, faculty, and staff. Students of all majors and class years will be encouraged to apply with preference given to sophomores and juniors. The "class" size will remain intentionally small to ensure personalized attention as well as allow for the use of a variety of individual and collaborative work activities and self-assessment opportunities. The students will receive extensive feedback and create an individualized plan for personal development and training that connects to their educational plan going forward. The data collected

from this pilot program will help inform the areas where workshops, intensives, and alumnae programs can be developed. The assessment that takes place during the simulation will be directly tied to LILAC's seven competency areas.

7. *Project to map LILAC competencies to the academic curriculum*—In the context of the Civic Learning and Democratic Action Collaborative created through the Association of American Colleges and Universities (AAC&U), Bryn Mawr College plans to create a survey to measure how the LILAC competencies are embedded in departmental learning goals/outcomes across campus. In Fall 2014 the Leadership, Innovation, and Liberal Arts Center (LILAC) shared newly developed competencies with the campus community. This survey will help document how academic courses as well as co-curricular programs across campus contribute to the development of effective and engaged citizens on and off campus.

LILAC's impact on student development at the College has been and will continue to be extensive. For more details please see Appendix X.

Section 6: Linked Institutional Planning and Budgeting Processes

A. Strategic Planning

On the recommendation of a Board of Trustees' Task Force on Balancing the College's Mission and Resources, Bryn Mawr created a committee of three trustees, three senior administrative staff, and three faculty leaders to continue to scan changes and challenges in higher education, especially those facing selective liberal arts colleges; to explore "out of the box" ideas; and to examine in depth issues of particular importance to the College and its future. Launched in 2010 and titled the Thinking Forward Group (recently renamed the Strategic Advisory Group), this committee reports annually to the Board of Trustees and provides the Board with valuable research on critical topics (e.g., opportunities and risks of becoming coeducational). The work of both the Thinking Forward Group and subsequent planning activities described below were informed by robust research and analysis carried out by the Director of Institutional Research.

The Group's work also served as a catalyst for development of the College's strategic vision in 2011-2012. Preliminary ideas generated by the Thinking Forward Group and refined by the President's senior staff (direct reports to the President) were brought to the Board of Trustees in September 2011 for initial discussion in a workshop setting. All members of the campus community (faculty, students, staff) were invited to participate in similar workshop discussions in November 2011. President Jane McAuliffe and her senior staff then spent the first half of 2012 prioritizing and refining key components of a strategic vision; the Board and the Faculty

were updated periodically throughout this process. The Board of Trustees reviewed the draft of *The Plan for Bryn Mawr* at its June 2012 retreat, and endorsed the final version at its October 2012 meeting (see Appendix L).

In developing a strategic vision rather than a traditional strategic plan, the College sought to avoid the pitfalls of a traditional strategic plan. The latter ordinarily articulates specific initiatives to be carried out within a five-year timeframe. Yet such specifics often are modified or dropped in the latter years of strategic plans in response to the rapidly changing environment of higher education. Bryn Mawr chose instead to map broad commitments, recognizing that it would then set shorter term focused priorities that would advance its strategic vision.

Following the presidential transition, then Interim President Cassidy identified key priorities for 2013-2015 (see Appendix L). These four priorities focus on advancing innovative curricular initiatives that had been successfully piloted in the preceding two years; building an innovative center to enable students to build stronger connections between their liberal arts education and professional career options (LILAC); launching a multiphase renovation of the College's Park Science Center; and refining Bryn Mawr's vision for global engagement and preparation.

B. Annual Budget Process

Since Fall 2013, the College has engaged in a budgeting process that is informed by the College's strategic plan and its four priorities for 2013-2015. President Cassidy asks each member of the Senior Staff to develop a list of budget requests to be considered for the upcoming fiscal year. In order to be considered in the budget process, each item submitted must align with the priorities of the strategic plan or meet one of three additional criteria – have a positive impact on the revenue stream; increase or enhance student satisfaction; or address core operations and foundational investments. These criteria ensure that changes in spending align with institutional planning and sustainability, as compared to flat, across-the-board budget increases. In preparing and submitting their lists, Senior Staff are required to identify the item or initiative, estimate its cost (both one-time and ongoing), and describe the priorities/criteria it supports.

In a meeting of the entire Senior Staff, individual administrators present their budget requests and answer questions about their submission. Over the course of several subsequent meetings, the Senior Staff review and prioritize the requests to determine which budget increase items merit funding. Total allocations do not exceed the total budget increase available. This process, first employed for FY15, was deemed productive and is currently underway for FY16. For FY16 it has been expanded to include the participation of the College Budget Committee whose input will be added to that of the Senior Staff.

The Finance team continuously refines the budget model, ensuring it is current and reflects any significant deviation in actuals, such as with enrollments or financial aid, as compared to the budget for the then-current fiscal year. The key forward-looking assumptions are also reviewed to ensure that they are still reasonable and prudent. The Finance team also prepares reports for the senior administration so that they can see the financial trends in their respective units and how they compare to last year's performance for the same time period. Ultimately, the budget model calculates how much money is available to spend for the following fiscal year, which is incremental to the current-year departmental budgeted expense allocations.

Other members of the community are also involved in the budget process. The College has a Budget Committee comprised of representatives of the Faculty Committee on Academic Priorities (CAP), the Committee on Faculty Welfare, and representatives of the Staff Association and student Self Government Association, among others. That group meets periodically throughout the year to review the current set of assumptions and to elicit feedback and advice from the group that can be incorporated into the budget model.

Finally, the Board of Trustees, particularly the Finance Committee, is integrally involved. After reviewing the operating performance for the prior year, the Finance Committee analyzes options with regard to the proposed rates of increase in tuition, room and board and discusses expectations for the freshman class, including size and level of aid. In the spring, the administration presents a budget to the Board for review. The Board approves a budget in a format that shows the primary areas of expenditures.

The budget always contains a contingency amount to protect the College from unanticipated developments, specifically with regard to enrollment expectations. There is also a very limited amount of funds within the budget that can be allocated during the year at the discretion of the President.

Open meetings at which the key budget considerations are presented are hosted for the general faculty, staff and student bodies. These sessions help move the entire community toward a common understanding of resource availability and constraints and provide an opportunity for all to be involved in discussions regarding allocation prioritization.

C. Campus Master Plan: Capital Projects

Park Science Center Renovation. This project combines a significant amount of deferred maintenance with the creation of improved and more efficient spaces for laboratories, offices, classrooms and other academic activities. The objectives of the project are to:

- make efficient use of spaces and renovation dollars by creating shared and flexible teaching spaces while attending to classroom size and space needs and appropriate mixes of technology and formats.
- create recognizable “wow factors” that reflect the College’s strong commitment to science and math education. Enhance entrance spaces, showcase research and active learning spaces, and create gathering spaces for students and faculty to display their work, and improve the aesthetics and functionality of corridors.
- re-imagine and create a “science library” of the future (e.g., “a knowledge commons”).
- create research spaces that maximize faculty and student research productivity and interaction, including promoting interdisciplinarity, and when possible, shared equipment spaces that protect investments and promote sharing of resources and techniques to promote collaboration and efficiency.
- prepare for future growth by considering future or current additions in the design and making spaces flexible to allow for repurposing.

The first phase of the project is estimated to cost \$17 million. The College is currently in the planning phase for this project and construction is expected to begin in Summer 2016. There will be one or two additional phases with an expected additional cost of \$20 to \$25 million. The primary sources of funding for the Park Science Building renovation project will be campaign gifts, proceeds from a 2014 bond issue, and unspent Replacements and Renewals funds from the College’s operating budget.

Canaday Library Improvements. This project provides for improvements to three floors of the building, and accessibility and life safety improvements. The main floor of Canaday Library will be renovated to provide a vibrant space that can be configured to provide learning and teaching spaces that a 21st century library requires including:

- Flexible, open, welcoming, and technology-rich workspaces for students in individual and group work settings available 24/7.
- Areas of quiet study space
- Improved technology access within Canaday
- Proper storage facilities in Canaday for rare books and manuscripts, art and artifacts
- Gallery space in support of Museum Studies and the already vibrant exhibition program

- Office and consultation spaces to bring library and IT services staff together in the building, along with allied academic resource staff as appropriate, to enable educational and scholarly activities for students and faculty.

At this time there is no schedule for this project. The cost of the project is estimated to be between \$6 and \$8 million and will be funded with gifts.

Thomas Hall Renovation. This project is mostly a maintenance project that includes masonry restoration; a new roof for the Great Hall; repair of the leaded glass windows in the Great Hall; exterior door and window replacements; building repointing and cosmetic improvements to portions of the building interior.

At this time, there is no schedule for this project. The cost of the project is estimated to be between \$6 and \$7 million and will be funded with gifts and the College's Replacements and Renewals budget.

Dormitory Renovation and Addition. One of Bryn Mawr's residence halls was closed at the end of the Spring 2013 for renovation work that included extensive asbestos remediation. The project has included the demolition of two sections of the building and renovation of the third. The remaining section is three stories and is being renovated to contain the Perry House Program (explained below), including a multi-purpose room with capacity for about 50 students and a demonstration kitchen. It will also include a mix of single and double rooms with a total of 29 beds. The demolished sections are being replaced by new construction. This new residence will contain 101 single rooms. The Perry House section will be connected to the new facility on the second and third stories in order to make the building completely accessible since the elevator will be in the addition.

Perry House was a residence purchased by the College about 50 years ago and, in the 1970's, became the Black Student Cultural Center and a residence hall with a capacity to house seven students. Students living in Perry House are members of three cultural organizations on campus: Sisterhood, BACaSO (Bryn Mawr African and Caribbean Students Organization), and Mujeres.

There were three primary goals for the dormitory renovation project when it was approved by the Board of Trustees:

- Embrace and embody the Perry House Program
- Efficiently replace student housing in the new dormitory through renovation and/or new construction
- Maximize the number of residential spaces with mostly single rooms in order to reduce student housing density on campus

During project planning a fourth goal was added – to create a special outdoor space for students in the courtyard.

The project received final approval by the Lower Merion Township Commissioners in January 2014. A contractor was selected in June 2014 and construction began in July 2014. The project is scheduled to be completed in August 2015 and is projected to be on budget.

The total project budget is \$18.3 million: \$17.8 million for the dormitory renovation and new construction and \$.5 million for the dining hall. The funding breakdown can be seen in Table 8.

Table 8. New dormitory project funding.

2012 Bond Issue	\$1,500,000
2014 Bond Issue	\$10,900,000
R & R Budget	\$5,400,000
Dining Services Reserve Fund	\$500,000
Total	\$18,300,000

D. Campaign Funding Model

A model is being developed to ensure that the amount needed to fund the initiatives of the strategic plan is clearly understood in the campaign planning process. Only a portion of the funds raised in a campaign will fund new programs. Some of the amount raised will be in the form of deferred gifts that will not be realized for a number of years. Also, a portion of the money raised is already included in the operating budget and cannot be spent for new programs. This amount includes the Bryn Mawr Fund and other gifts designated for the operating budget, an amount of endowment gifts that is expected to be raised in non-campaign years and funds raised to cover the costs of administering the campaign. In addition, a portion of the funds raised in a campaign will support building and other capital projects and programs that are not included in the strategic plan.