

**AGENDA ITEM C3: STUDENT DEVELOPMENT**  
**BOARD RULE 400.0100.00**  
**ASSESSMENT STUDIES OF ENGLISH AND MATHEMATICS**  
**BOARD OF TRUSTEES MEETING: JULY 28, 2011**

Coursework in English and mathematics constitute central general-education requirements and learning outcomes at Belmont, supporting both technical and transfer programs. The English and math programs must adhere to standards required by the Transfer Assurance Guides and the Ohio Transfer Module, as well as standards set in the workplace. This report provides an assessment of student success in the English and math courses at Belmont.

**Data and Analysis**

The data reviewed for this report present success and non-success percentages by course for 2010/2011. English courses are presented in Chart 1 and mathematics courses in Chart 2. *Success* has been defined for this report as earned grades of “C-” or better. *Non-success* includes grade categories of “D+” and lower and includes grades of “W” indicating that the students withdrew from the courses.

Charts 1 and 2 compare percentages of successful and non-successful course completions for English and mathematics courses in the most recent academic year, 2010/2011. Chart 1, *Success/non-success in English courses, 2010/2011* and Chart 2, *Success/non-success in mathematics courses, 2010/2011* show distributions by categories labeled, *success* and *non-success*. In both of these charts, data are arranged by course, such as “ENG 101” and “MAT 227.” The dark blue bar on the left in each pair measures successful completions; the light blue bar on the right in each pair measures non-successful completions.

Chart 1, *Success/non-success in English courses, 2010/2011*

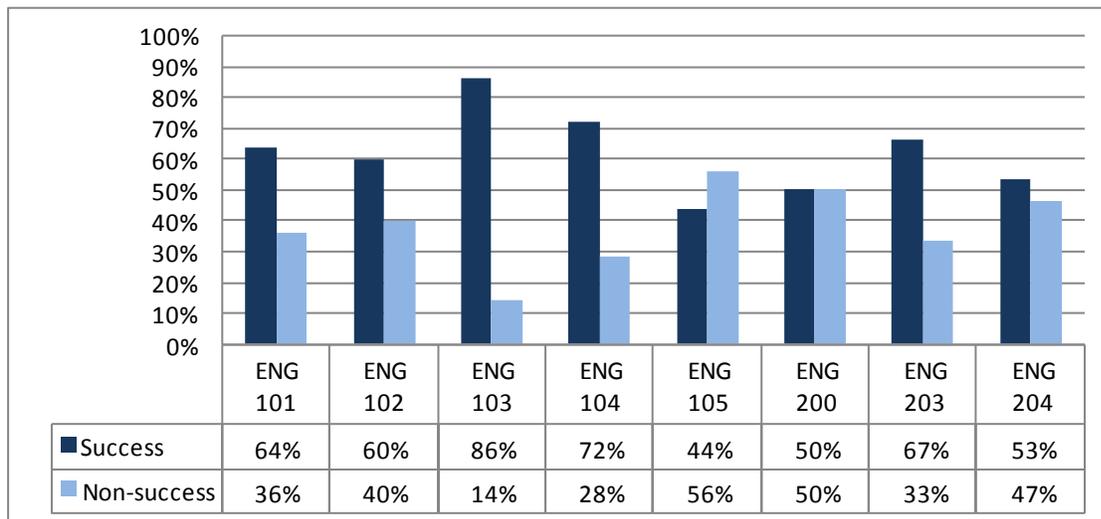
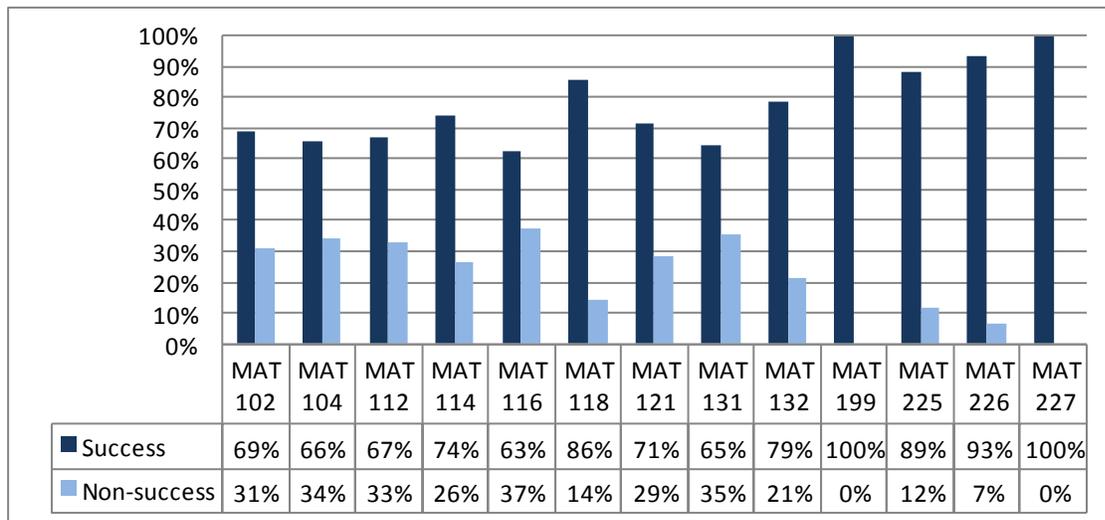


Chart 2, *Success/non-success in mathematics courses, 2010/2011*



Charts 1 and 2 represent course success/non-success rates for English and mathematics courses during the 2010/2011 academic year. Overall, there were 2,305 enrollments in English courses, and the overall success rate in the 8 courses shown in Chart 1 was 61.9%. During the same time period, there were 1,228 enrollments in 13 math courses, and the overall success rate was 78.5%. The bar graph demonstrates visually both the relative percent of successful completions across the various courses and the difficulties that many students have with achieving success across the English and math general-education sequences.

To interpret these data accurately, several underlying factors are taken into account. In an open-enrollment environment, English and mathematics courses test students' preparation for college work, functioning historically as a screening mechanism, to qualify those students capable of college-level study. Inevitably some students do not succeed in spite of preliminary course work in developmental education classes. English and math courses necessarily involve challenging content and learning methods, including critical thinking, which best equips our students for success in their degree programs, transfer situations, and future employment. Instructors are faced with the need to maintain course standards, while helping at-risk students succeed in a relatively short time period.

In addition, some grading peculiarities influence the rates adversely. The scores include grades of "W," which can result from an informed decision that may have a positive impact on the student's overall success in college. Or, students often disappear without withdrawing from their general-education course, which results in an "F" that does not reflect on the quality of the course, since those students have not attempted to complete the work. Students who do complete the courses often have absences, many times combined with lack of submission of their work. Students may thus encounter penalty situations that reduce the final grade. Plagiarism and/or cheating also can lead to reduced or "F" grades, again having no relationship to the quality of the course.

The charts also reveal interesting differences in success rates across the spectrum of courses. For example, the success percentages in ENG103 and 104 are higher, because the content of these courses requires application of skills learned earlier in the English sequence. Students generally demonstrate increased awareness of their responsibilities and the abilities that have been developed through their work in ENG101 and 102. The real-world projects in these

courses also contribute to success. The literature courses are consistently challenging for BTC students. The dilemma of maintaining course transfer quality while rendering the content more accessible is solvable for many students enrolled, but for others success is still elusive as they continue to struggle with lack of preparation, resistance to critical thinking, and insufficient attention to the requirements of attendance and class participation.

Across the math course sequence, non-success rates are highest in the courses specific to the technical programs. It is notable that most of those succeeding in MAT 116 (Statistics I) do well in MAT 118 (Statistics II). The data also suggest that once students have survived the rigors of algebra and trigonometry, those progressing to the calculus sequence demonstrate a very high success rate, 100% in MAT 227 (Calculus III). Those who succeed in the gate-keeper courses also tend to succeed in the more complex courses.

### ***Conclusions/Recommendations:***

To address success rates, there are a number of measures already initiated and others that need further study and implementation:

- The implementation of the new Master Syllabus in the winter of 2009 was a step towards securing uniform standards. The current submission to OBR of converted syllabi for semester conversion now provides opportunity for full **review of the general-education syllabi** with attention to the complete inclusion of course objectives, learning outcomes, and descriptions of strategies to enhance success. This work is in progress and includes strategies such as incentives to attend classes, to complete assignments, to maintain academic integrity, and to participate in active learning.
- Belmont's Strategic Plan includes significant promise, including a commitment to the development of program-level workshops in teaching methods and content specific to programs and individual courses. The Strategic Plan also proposes an ongoing **formal mentoring program** for all new faculty members. The new mentoring model will build on the guidelines and resource materials already available for adjunct instructors in the English program.
- **Stabilization** of the full-time faculty teaching English and mathematics classes is important to student success. The hiring of a fifth full-time instructor in English and a fourth in math will benefit student success.
- Students need to be better informed about the demands of the courses. The new vision for the first-year experience should promote **greater student awareness** of the demands of college and a student's role in assuming responsibility for academic success. The re-design of the Student Learning and Success course and its mandatory implementation with semester conversion should augment student awareness. We will need to continue efforts to advise students accurately, including expanding guidance concerning registration into online courses.
- **Tutoring services** in writing continue to improve, with the encouragement of more student responsibility in the revision process. Mandatory tutoring in some courses has proven beneficial. The e-tutoring program has been a step towards greater access to tutoring services.

Action plans:

- We need to take **assessment of the English and mathematics** courses to a higher level and measure learning directly. To formulate another assessment plan, we need to define accurate course goals and measurable learning outcomes. The English courses have defined goals and learning outcomes. For math, the conversion of syllabi to semester format is currently providing opportunity to define better the course goals and measurable learning outcomes.
- We still need to develop appropriate **assessment rubrics** in both English and math and establish benchmarks for achievement. The goal is to establish course assessment specific to the general-education courses. When gathering data about the success rates of students, we need to ask more complex questions about why students are not successful. We need to determine the underlying causes, which are highly complex and diverse.
- **Assessing the success of online courses** is important to understanding overall success rates. It would be helpful to obtain data about the success rates in online course sections, separate from overall course success rates. The goal at Belmont has been to continue expanding online course offerings, but we need to ensure that the best practices are implemented in all new course developments.
- Continuing efforts to **improve the delivery of transitional studies courses** are instrumental to improvement of success rates in college-level English and math. The continuing redesign of transitional studies courses will better prepare students to enter their college-level courses and succeed.
- A **uniform rubric** for evaluation of Writing Across the Curriculum assignments, required in all classes, is being investigated by the Curriculum Team. More emphasis on the importance of writing, reading, and math skills across the technical programs will result from the uniformity in evaluation. This is important since the semester conversion process has resulted in the reduction of English courses required across some programs. The review of programs for semester conversion has permitted reflection on writing opportunities within the programs, with some program chairs committing to increased writing within technical courses.
- We need to continue to find ways to make difficult course material more accessible and workable for the students, without resorting to grade inflation. We need to place the emphasis even more firmly on student engagement in our courses, to require the students to assume more responsibility for their learning in the English and math course sequences. Setting higher standards is mandatory, but standards must be coupled with **improved teaching strategies** to support student success.
- We need to continue to promote uniformity in adjunct instruction (and grading) across the English and math course sections. The sheer volume of numbers of course sections, due to increased enrollment over the last two years, is a considerable challenge to the maintenance of “course identity” across all sections. The biggest current challenge is **improvement to the consistency** of good teaching and adherence to course content across all course sections.