

STUDENT DEVELOPMENT

BOARD RULE 400.0100.00

SUCCESS IN SUBSEQUENT COLLEGE LEVEL COURSE WORK

BOARD OF TRUSTEES MEETING: AUGUST 26, 2010

The goal of monitoring and assessing student success in subsequent college-level course work at Belmont Technical College is to demonstrate the effectiveness of transitional course work and to help students foster their development as lifelong learners (*Ends Policies*, Section IV, 400.0100.00 Student Development). Systematically organized monitoring procedures are being used to monitor effectiveness of the Transitional Studies Program, curriculum, instruction, and evaluation. Best practices in developmental education, are reflected and guide design and implementation of ongoing processes to improve quality in transitional studies programming overall. This report provides data on the key indicator, *Success in subsequent college-level course work*, in Table 1 for the most recent five academic years.

This report tracks final course grades of students who were enrolled in developmental math, English, and reading courses and were enrolled subsequently in college-level courses. Measurement of students' success is achieved by examining students' completion or non-completion of subsequent college-level courses. For the purposes of this report, "subsequent college-level courses" include: Composition I (ENG101), Manufacturing Math I (MAT102), Allied Health Math (MAT112), College Business Math (MAT114), Statistics I (MAT116), Technical Mathematics I (MAT121), and College Algebra (MAT131). Successful completion is defined as an end-of-quarter grade of A, B, C, or D in entry-level college course work. Analysis of data measuring students' successes systematically documents improvements and provides data for decision-making about future quality improvements.

Data

Data were gathered for individual grades received in courses and aggregated by quarter of completion. Table 1, *Success in Subsequent College Level Course Work*, displays values for students' grades that were assigned in a defined group of seven courses referred to as "subsequent college level courses." These data represent grades assigned to students across five academic years. Each year is broken down by quarter of enrollment.

Table 1, *Success in Subsequent College Level Course Work*

Year	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Number of students enrolled:	(n=1,290)	(n=1,436)	(n=1,393)	(n=1,530)	(n=1,499)
Successful completions					
Quarter of enrollment					
Summer	101	114	99	95	109
Fall	358	395	420	452	385
Winter	322	344	333	332	345
Spring	<u>240</u>	<u>219</u>	<u>235</u>	<u>300</u>	<u>284</u>
Annual completions	1,021	1,072	1,087	1,179	1,123
Non-completions					
Quarter of enrollment					
Summer	12	21	15	28	33
Fall	92	129	91	107	116
Winter	93	105	109	104	113
Spring	<u>72</u>	<u>109</u>	<u>91</u>	<u>112</u>	<u>114</u>
Annual non-completions	269	364	306	351	376
Annual percentage of completions	79%	75%	78%	77%	75%

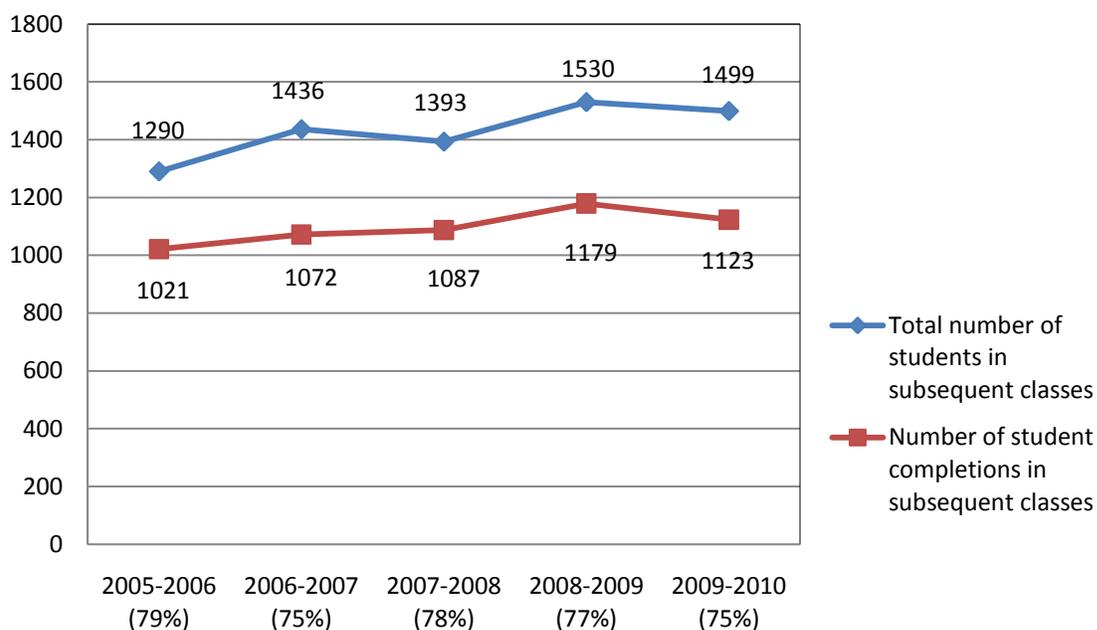
The second table, Table 2, *Rates of successful completions in subsequent courses, 2006 – 2010*, drills down to the course level for eight courses in which students frequently enrolled following completion of transitional studies courses.

Table 2, *Rates of successful completions in subsequent courses, 2006 – 2010*

Academic year→	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Subsequent course↓					
ENG101, “Composition”	79.30%	75.50%	76.70%	75.30%	73.47%
MAT102, “Manufacturing Math I”	87.00%	73.10%	85.70%	81.30%	63.76%
MAT112, “Allied Health Math”	81.10%	75.50%	74.90%	71.50%	71.49%
MAT114, “College Business Math”	68.00%	68.20%	73.40%	75.90%	78.40%
MAT116, “Statistics I”	78.90%	70.80%	66.20%	64.70%	73.88%
MAT121, “Technical Mathematics I”	88.90%	100%	80.00%	100%	97.05%
MAT131, “College Algebra”	81.40%	66.20%	75.50%	81.40%	83.33%

Chart 1, *Completion rates in subsequent college-level courses, 2006 through 2010* displays trends over the most recent five academic years. The blue line in this completion rate chart shows the number of enrollments in subsequent classes. Below the blue line is a red line representing the number of successful completions in the seven courses designated as *subsequent college level courses*. Percentages of successful completions are displayed in parentheses under the academic year labels (e.g. 2009-2010 (75%)). The successful completion rate has varied from a high of 79 percent for the 2005-2006 academic year to a low of 75 percent for academic years 2006-2007 and 2009-2010. The percent of successful completions for the most recent year, 2009-2010, is 75 percent.

Chart 1, *Completion rates in subsequent college-level courses, 2006 through 2010*



Analysis

Data in Table 1 and Chart 1 reveal that annually, the number of students completing subsequent college-level courses increased steadily from 2005 through 2009. Both the number of students and the number of successful completions of courses have increased during that period. Academic year 2009-2010 mirrors academic year 2006-2007 in the number of successful completions and shows an increase in the number of students enrolled in subsequent college-level classes for four of the five most recent academic years. (The exception to increased numbers of students enrolled in subsequent college level courses is the 2008-2009 academic year.) An increase in successful completions and total enrollment from 2005-2006 to the 2009-2010 school year is reflected in Table 1 and Chart 1. In 2005-2006, 1,290 students enrolled in college-level courses after successfully completing transitional studies courses. For those enrollments, there were 1,021 successful completions. For the 2009-2010 academic year, there were 1,499 enrollments by students who had first completed transitional studies courses; during the same year, there were 1,123 successful completions. Thus, there were more successful completions in 2009-2010 than there were successful and unsuccessful completions combined for 2005-2006.

Table 2, *Rates of successful completions in subsequent courses, 2006 through 2010*, suggests that annually, the percent of successful completions in subsequent college-level courses for students who began their program with transitional studies courses has fluctuated within a range between 75 percent and 79 percent over the last five years. Further analysis at the individual course level reveals that completions in College Business Math and College Algebra have increased steadily over the last five years. In the Technical Mathematics I course, the percent of successful completions increased from 2005-2006 to 2006-2007 and again from 2007-2008 to 2009-2010. The percent of successful completions for Statistics I decreased from 2005-2006 to 2007-2008 and then showed an increase from 2008-2009 to 2009-2010. The percent of successful completions in composition classes has decreased slightly over the past five years, and the percent of successful completions in Manufacturing Math I and Allied Health Math also has decreased.

Conclusions/Recommendations

Data for success in subsequent college-level courses for those students who initially tested into transitional studies classes suggest that the College remains on a positive course. While it may appear that success rates in only three courses, College Business Math, College Algebra, and Statistics I, reflect a positive trend, in fact success rates for the remainder of the subsequent college level courses reflect measures that have been implemented to help Belmont students achieve success in their chosen certificate or degree programs. Specifically, the following strategies that have been implemented in the past several years, and these strategies have, most likely, affected the success rates in Composition I, Manufacturing Math I, and Allied Health Math.

- An increased focus on the negative results of grade inflation and the implementation of a standard syllabus.
- An increased focus on high expectations and rigor have been implemented.

In addition, strategies that have been previously implemented are considered best practices and are expected to have a positive impact on future success rates. Best practices include the following strategies:

- Implementation of action plans
- Teaching, tutoring, and other academic support provided by transitional studies faculty members

- Individualized academic support, to include tutoring, provided by the Student Success Center staff members
- Evaluation of success initiatives
- Supplemental Instruction for several transitional studies courses and college-level math courses
- Learning teams in transitional studies courses
- Informal, professional development support and collaboration among transitional studies instructors
- Utilization of the National Association of Developmental Education *Self-Evaluation Guide* for planning, implementation, and assessment of programs and practices in the Student Success Center and the Transitional Studies Program.

Continued evaluation over a several year period will help administrators, faculty, and staff make informed, data-driven decisions regarding the effectiveness of all strategies listed above. A more systematic approach has been taken to evaluation of student success at Belmont Technical College over the last three years. The implementation of evaluation strategies to improve outcomes is an important aspect of the college's AQIP projects. Initiatives such as the First Year Experience, PSY104 ("Student Learning and Success"), academic alerts, and supplemental instruction are being evaluated regularly by the faculty, staff, and administrators who have content knowledge in these areas.

Looking toward the future, efforts continue to be made to help more students be successful and to help students be more successful. Toward this end, Belmont Technical College encourages or sponsors a great number of college-wide initiatives including: participation by students, faculty and staff in local workshops; faculty and staff participation in regional and national workshops and conferences, collaboration and continued professional growth among full-time and part-time faculty, and collaboration among faculty and staff. These initiatives—and more—tie together the college's efforts to implement continuous quality improvements and to foster success for all students.

Targets for Improvement:

Based upon the data discussion, data analysis, and conclusions presented, the following targets for improvement are slated for Academic year 2010-2011. Improvements will be achieved through strategies, based upon best practices in developmental education, outlined above.

Improvement targets are as follows:

1. Increase the number of student completions in subsequent, college-level classes from 75% to 79%
2. Increase the percent of successful completions in ENG101 from 73.47% to 79.50%.
3. Increase the percent of successful completions in Manufacturing Math I from 63.76% to 86.00%.