

Achieving the Dream Report Series

November 25, 2008



Progress of Students who Tested into Basic Algebra II (one level below college level) in Fall 2004

This study follows students in the Fall 2004 Achieving the Dream (ATD) cohort that tested into Basic Algebra II (BA II), a developmental course one level below college level. The ATD cohort consists of first-time to the college, degree-seeking students. Therefore, external transfers to NECC are included as well as both full and part-time students.

Students were tracked for a three year period using the ATD eSTATS web-based analysis tool. The outcomes examined for this study include when students enrolled in BA II and completion rates for the course.

All results are reported by gender, race, and age.

Table 1.

Total Assessed Into BA II	Male	Female	Majority	Minority	Unknown	<20 Years	20-24	25-29	>29
636	288	348	460	146	30	421	121	37	57
	45.3%	54.7%	72.3%	23.0%	4.7%	66.2%	19.0%	5.8%	9.0%

The largest group of students assessing into BA II were female, majority, and <20 years of age. This compares favorably to the college's overall student population.

Table 2.

Total Attempted BA II in Year 1	Male	Female	Majority	Minority	Unknown	<20 Years	20-24	25-29	>29
410	188	222	301	88	21	282	76	23	29
64.5%	65.3%	63.8%	65.4%	60.3%	70.0%	67.0%	62.8%	62.2%	50.9%

In this report minority consists of American Indian, Asian, Black non-Hispanic, and Hispanic ethnicities, while majority includes White non-Hispanic ethnicity.

The Fall 2004 cohort consists of 1,305 students. These students assessed into the following levels of mathematics: 127 (9.7%) into college level; 636 (48.7%) into Basic Algebra II; 141 (10.8%) into Basic Algebra I; 80 (6.1%) into Basic Math; and 324 (24.8%) were exempt from testing. The demographics of the 636 students that assessed into BA II are displayed in **Table 1**.

These students were then tracked to see if they attempted BA II in their first year at the college. There were 410 (64.5%) students that attempted BA II in their first year (detailed in **Table 2**).

It is interesting to note that minority students and those over 29 years of age delayed taking the course more than majority students and those 29 and under. Students >29 had the lowest rate of taking the course in Year 1.

Next, the completion rate of BA II courses taken during Year 1 was measured. Completion rate is

calculated by taking the number of BA II courses *completed* with a grade of C or better (excluding C-) and dividing by the total number of BA II courses *attempted*. The overall completion rate for BA II was 57.6% (236 / 410). The number of students who completed BA II in Year 1 is displayed in **Table 3** by demographic category.

Table 3.

Total Completed BA II in Year 1	Male	Female	Majority	Minority	Unknown	<20 Years	20-24	25-29	>29
236	100	136	170	52	14	149	45	19	23
57.6%	53.2%	61.3%	56.5%	59.1%	66.7%	52.8%	59.2%	82.6%	79.3%

Students with the lowest completion rates were male, majority, and <20 years old. This is fairly consistent with all previous ATD reports on developmental course completion. It is interesting that minority students completed BA II at a higher rate than majority students. Older students completed BA II at a higher rate than younger students.

After three full years, 70.8% of the cohort had attempted BA II, compared to 64.5% after one year. This is not a large increase given the additional two years to attempt the course. The number of students that attempted BA II after three years is presented in **Table 4**.

Table 4.

Total Attempted BA II after 3 Years	Male	Female	Majority	Minority	Unknown	<20 Years	20-24	25-29	>29
450	208	242	325	102	23	302	86	28	34
70.8%	72.2%	69.5%	70.7%	69.9%	76.6%	71.7%	71.1%	75.7%	59.6%

These course attempted rates are all very similar except for the group older than 29. It is interesting that only 40 more students, or another 6% of the total cohort, attempted BA II in Years 2 and 3.

Next, the completion rate of BA II courses taken during the three year period was measured. At the end of the three year period, 294 of the 450

students that attempted BA II completed the course (see **Table 5**). The overall completion rate was 65.3%, which is only a 7.7% increase over Year 1. What is clearly evident is that students by college policy should be REQUIRED to take those courses that they assess into during the first year. Across the board, few students will take BA II in Years 2 and 3.

Table 5.

Total Completed BA II after 3 Years	Male	Female	Majority	Minority	Unknown	<20 Years	20-24	25-29	>29
294	123	171	209	66	19	186	57	24	27
65.3%	59.1%	70.7%	64.3%	64.7%	82.6%	61.6%	66.3%	85.7%	79.4%

This report is consistent with previous ATD reports indicating that the college needs to focus on young, male students, both minority and majority. It is evident that students need to take the developmental courses that they assess into as soon as possible. If the students do not take BA II in their first or second semester, they tend to delay taking it for years, a decision that will make college level work that much harder. If the student does not have the necessary foundation, how can we expect them to succeed?

After three years, the course attempted rate for BA II increased by only 6.3% from Year 1, and the course completion rate increased by only 7.7%.

We need to explain to our students that it is to their benefit to take developmental courses. We need to show them the benefit.

Interpretations of these findings as well as suggestions for further analysis are always welcome. Please direct questions and comments to Thomas Fallon, Dean of Institutional Research and Planning, via phone at 978-556-3866 or email at tfallon@necc.mass.edu.



<http://www.necc.mass.edu/irp/planning/dream.php>