

Amarillo College
Achieving the Dream Data Template Findings

Office of Institutional Research
& Institutional Effectiveness

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Methodology

The Amarillo College (AC) Vice President of Academic Affairs identified the Gatekeeper courses after reviewing student performance data for high attrition courses. The courses identified as AC's Gatekeeper courses were selected after the Office of Institutional Research and Institutional Effectiveness (OIRIE) provided a report that included the following information over a two-year span: (1) Course Name, (2) Total Enrolled, (3) Number of A-C grades, (4) % A-C grades, (5) Number of drop, fail, or withdrawals (DFW), (6) % DFW and (7) Number of students potentially impacted by interventions to the course.

OIRIE filtered the report to include courses that do not have a prerequisite, have greater than a 20% DFW rate, and have at least 100 students enrolled (in a 2 year span). Courses were separated into categories of credit and developmental education. Extracted data included both the 2008-09 and 2009-10 academic years.

After examining the approaches of several other colleges, AC chose a multi-dimensional approach in determining Gatekeeper courses with the following goals: (1) Maximum of 10 Gatekeeper courses, (2) Identification of courses where an intervention will impact the largest number of students, and (3) Courses which had the highest DFW rates and potential impact, selected from specific major areas (General Education, Allied Health or Nursing, and Industrial Transportation and Technologies). Additionally, AC plans to continue to study and track all developmental courses which is also a requirement for retaining the National Association of Development Education certification in all three developmental areas (reading, writing and mathematics).

The following table represents the courses identified as AC's Gatekeeper courses—the courses are sorted in order of the largest potential impact. Gatekeeper courses affiliated with General Education are MATH 1314, ENGL 1301, and ENGL 1302. Gatekeeper courses affiliated with Allied Health or Nursing are BIOL 2401, BIOL 2402 and HECO 1322. The only Gatekeeper course for programs in the Industrial and Transportation Technologies Division (ITT) is CETT 1409.

AMARILLO COLLEGE OFFICIAL GATEKEEPER COURSES				
Course	Total Enrolled	DFW %	Course Title	Potential Impact
MATH 1314	2278	38.28%	College Algebra	872
ENGL 1301	2285	33.33%	Comp I	761.5
BIOL 2401	974	48.77%	A & P I	475
ENGL 1302	1486	25.13%	Comp II	373.5
HECO 1322	766	39.92%	Principles of Nutrition	306
BIOL 2402	645	37.94%	A & P II	244.5
HITT 1305	634	36.39%	Med Terminology I	230.5
CETT 1409	183	27.60%	DC AC Circuits	50.5

*Data based on the average of 2008-2009 & 2009-2010 Academic Years.

Achieving the Dream Methodology

The Achieving the Dream (ATD) data template includes several key types of data: Cohort-based data, Academic year data, Developmental Education course data (Math, English, and Reading), and Gatekeeper course data.

The ATD Cohort is identified as all degree and certificate-seeking undergraduate students (full- and part-time) enrolling and attempting credits for the first-time (FTIC students) during the fall 2009 term. These FTIC students include those who were enrolled in courses which count toward a degree, diploma, certificate or other formal award. Also, this study includes those students who were enrolled in courses that are part of a career or technical education (CTE) program including those who enrolled in CTE programs via off-campus centers and/or distance learning. Students taking developmental education courses were included if the student was considered degree-seeking for the purpose of student financial aid determination. Students whose degree intent was unknown were likewise included in the cohort. However, high school students who were concurrently dually enrolled at AC were excluded.

ATD Cohort Demographics

(Total N= 951)

Gender	
Male	N= 399 (42%)
Female	N= 552 (58%)

Ethnicity	
White	N= 498 (52%)
Amer Indian	N= 5 (<1%)
Black	N= 72 (8%)
Asian	N= 17 (2%)
Hispanic	N= 336 (35%)
Other	N= 23 (2%)

Age	
<20	N=540 (57%)
20-24	N=200 (21%)
25 or older	N=211 (22%)

Parents Education Level	
No HS Diploma	N=158 (17%)
HS Diploma	N=233 (25%)
Some College	N=208 (22%)
College Degree	N=174 (18%)
Missing	N=178 (19%)

Campus with at least 1 Course	
Washington Campus	N=793 (83%)
Online	N=173 (18%)
West Campus	N=77 (8%)
Moore County Campus	N=56(6%)
East Campus	N=53 (6%)
Hereford Campus	N=49 (5%)

Pell Status	
Funds Awarded	517 (54.4%)
No Aid/Did Not Apply	434 (45.6%)

Hours Range in Courses on Semester Grade Report	
1 - 3	N= 52 (5.5%)
4 - 6	N= 219 (23%)
7 - 11	N= 181 (19%)
12 - 15	N= 477 (50.2%)
16 or more	N= 22 (2.3%)

Type of Major	
Academic	N= 456 (48%)
Technical	N= 140 (15%)
Tech Prep	N= 343 (36%)
Missing	N= 12 (1%)

Overall Initial Remediation Status	
No Remediation Needed	N=26 (3%)
Only MATH 0303 Needed	N=17 (2%)
Remediation Needed	N=775 (82%)
Missing	N=133 (14%)

Day or Night Attendance	
Both	N= 257 (27%)
Day	N= 496 (52%)
Night	N=144 (15%)
Missing	N=54 (6%)

ATD Data Template Findings

Gatekeeper Courses Overall

N=946 (Success =48%)

Fall-Spring Success

With the exception of three courses (MATH 1314, BIOL 2402, & HECO 1322) students were not as successful in the spring as in the fall based on success percentage rates. The most significant findings are highlighted in yellow in the chart.

<i>Course</i>	<i>Fall Pass % Rates</i>	<i>Spring Pass % Rates</i>	<i>Difference in % Rates</i>
ENGL 1301	62.5	51.2	-11.3
MATH 1314	37.9	41.7	3.8
ENGL 1302	66.7	57.4	-9.3
BIOL 2401	41.9	28.1	-13.8
HECO 1322	41.9	56.5	14.6
BIOL 2402	20	52.2	32.2
HITT 1305	60	37.9	-22.1
CETT 1409	50	37.5	-12.5

Race/Ethnicity

Most students were either White or Hispanic (86%). White and Hispanic students were more successful in these Gatekeeper courses than other ethnicity groups. However, the number of minority students, excluding Hispanics, is such a small number that it makes comparisons very difficult.

Age

More students were in the less than 20 years of age group (50%) than any other age group. However, those students in the over age 25 category were the most successful in these courses.

Gender

Most students were female (66%). Males and Females performed similarly with regard to course success.

Pell Recipients

A little over half of the students received Pell funding, but both groups had similar success rates.

ENGL 1301 (Freshman Composition I)

N=301 (Success = 58%)

This course had the highest annual and semester (Fall) success rate of all the Gatekeeper courses.

Race/Ethnicity

With the exception of the Hispanic cohort, minority student numbers were so small that comparison is limited. African American students performed more successfully in this course than in the Math and Biology courses.

Age

Most students were under the age of 20 (73%), but those over age 25 were the most successful.

Gender

Females were more successful than males in this course. The percentage of males to females was very close.

Pell Recipients

Slightly more students received Pell, but Pell-recipient students had a very similar success rate to the non-Pell students.

MATH 1314 (College Algebra)

N=229 (Success = 39%)

Race/Ethnicity

Hispanic students were more successful than White students. With the exception of the Hispanic group, very few minorities enrolled in this course.

Age

The students in the under the age of 20 group were the least successful. However, the other age groups had a very small representation.

Gender

Females were more successful than males.

Pell Recipients

Those who received Pell were more successful than those who did not receive Pell.

ENGL 1302

N=64 (Success = 58%)

Race/Ethnicity

Hispanic students were more successful than White students. With the exception of the Hispanic group, few minorities enrolled in this course.

Age

Most students were under the age of 20, but those over age 25 were the most successful. Students under the age of 20 performed more successfully than in all other Gatekeeper courses.

Gender

Males were more successful than females in this course. The percentage of males to females was similar, but there were slightly more females.

Pell Recipients

In this course, the non-Pell students were almost twice as successful as the Pell students (79%:42%).

BIOL 2401

N=100 (Success =34%)

This course had the lowest annual success rate of all the Gatekeeper courses.

Race/Ethnicity

White and Hispanic students performed similarly. Only 1/6th of Black students were successful.

Age

Students under the age of 20 performed similarly to the 20-24 year old group and both group percentage rates were lower than the over the age of 25 group. The 20-24 year old and over 25 years of age groups had smaller representation.

Gender

Males were more successful than females.

Pell Recipients

Slightly more students received Pell. In this course, the non-Pell students were almost twice as successful as the Pell students (46%:26%).

HECO 1322 (Principles of Nutrition)

N= 108 (Success=48%)

Race/Ethnicity

Hispanic students were more successful in this course, but they had smaller numbers than Whites. The other minority groups were too small for valid comparisons.

Age

The under the age of 20 group performed similarly to the 20-24 year old group and both performed lower than the over 25 group. The 20-24 year old and over 25 years of age groups had a smaller representation.

Gender

Females were much more successful than males and males had a much smaller representation.

Pell Recipients

Slightly more Pell recipient students enrolled in this course and the Pell students were more successful than the non-Pell students.

BIOL 2402 (Anatomy and Physiology II)

N=43 (Success = 37%)

This course had the lowest semester (Fall) success rate of all the Gatekeeper courses.

Race/Ethnicity

Hispanic students were more successful in this course than all other ethnicity groups. The numbers of Hispanic and White students were nearly equal. The other minority groups were too small for valid comparisons.

Age

The under 20 years of age group performed more successfully than the 20-24 years of age group, but had a lower success percentage than the over 25 years of age group. The 20-24 years of age and over 25 years of age groups had a smaller representation.

Gender

Males were much more successful than females (75%:29%); however, males had a much smaller representation.

Pell Recipients

Slightly more students were non-Pell recipients. In this course, the Pell students were slightly more successful than the non-Pell students.

HITT 1305 (Medical Terminology)

N= 69 (Success = 51%)

Race/Ethnicity

White, Hispanic and Black students performed similarly in this class. The numbers of Black and other minority groups were significantly smaller than the Hispanic and White groups.

Age

The under 20 years of age group performed more successfully than the 20-24 years of age group, but less successfully than the over 25 years of age group. The 20-24 years of age and over 25 years of age groups had a smaller representation.

Gender

Males were more successful than females; males had a much smaller representation.

Pell Recipients

Slightly more students received Pell. In this course, the non-Pell students were slightly more successful than the Pell students.

CETT 1409 (DC/AC Circuits)

N=30 (Success=47%)

Race/Ethnicity

Hispanic students were more successful in this course than the other ethnicity groups. Whites represented 70% of this class. The other minority groups were too small for valid comparisons.

Age

The over the 25 years of age group performed more successfully than the other age groups. The 20-24 years of age group was the least successful group in this course.

Gender

There was no female representation in this class for the 2009-2010 Academic Year.

Pell Recipients

In this course, the Pell students were much more successful than the non-Pell students.

Developmental Courses Overall

N= 1542 (51% Success Rate)

Fall – Spring Success

With the exception of the last sequential developmental reading course (RDNG 0331) and the last sequential developmental math course (Math 0303), students were not as successful in the spring as in the Fall based on success percentage rates. By percentage, 6 of 8 classes were more likely to have successful students in the fall than spring. The largest deficits were found in Math 0301 and RDNG 0321 (highlighted in yellow below).

<i>Course</i>	<i>Fall Pass % Rates</i>	<i>Spring Pass % Rates</i>	<i>Difference in % Rates</i>
ENGL 0301	52.5	44.1	-8.4
ENGL 0302	50	45.7	-4.3
MATH 0301	58	29.5	-28.5
MATH 0302	55.8	46.6	-9.2
MATH 0303	43.3	51.4	8.1
RDNG 0301	35.6	23.1	-12.5
RDNG 0321	60.3	43.8	-16.5
RDNG 0331	50.7	54.1	3.4

Race/Ethnicity

Whites and Hispanics have the highest numbers of students and also the highest success rates. Minority (non-Hispanic) numbers and success rates were low.

Age

25 years of age and older had a much higher success rates than the other two age groups.

Gender

Overall, more females enrolled in developmental courses and were more successful than males (10% higher success rates).

Pell Recipients

Overall, the Pell and Non-Pell groups had similar success rates but the Pell group outnumbered the non-Pell nearly 2:1.

ENGL 0301 (Basic Grammar and Writing I)

N= 114 (50% success)

Race/Ethnicity

White students, followed closely by Hispanic students were the most successful in this course.

Age

The 25 years of age and older group were the most successful group by a large gap.

Gender

Females were more successful than males.

Pell Recipients

Non-Pell students were slightly more successful than Pell students.

ENGL 0302 (Basic Grammar and Writing II)

N=162 (48% success)

Race/Ethnicity

White students, followed closely by Hispanic students were the most successful in this course.

However, a low number of minority (non-Hispanic) students were enrolled in this course.

Age

The 25 years of age and older group was the most successful. The less than 20 years of age group was the least successful.

Gender

Females were more successful than males.

Pell Recipients

Pell students were slightly more successful than non-Pell students.

MATH 0301 (Basic Mathematics)

N=356 (55% success)

Race/Ethnicity

White students, followed closely by Hispanic students, were the most successful in this course.

However, a low number of minority (non-Hispanic) students were enrolled in this course.

Age

The 25 years of age and older group was the most successful. The less than 20 years of age group was the least successful.

Gender

Females were more successful than males (12%).

Pell Recipients

Pell students were slightly more successful than non-Pell students.

MATH 0302 (Beginning Algebra)

N=354 (51% success)

Race/Ethnicity

Hispanic students were more successful than all other ethnic groups in this course (9% higher success rates than White students). A low number of minority (non-Hispanic) students enrolled.

Age

The less than 20 years of age group was the most successful group in this course. This is the only developmental course where the less than 20 years of age group outperformed the other age groups.

Gender

Females were more successful than males (11%).

Pell Recipients

No difference in Pell and Non-Pell students for this course.

MATH 0303 (Intermediate Algebra)

N=171 (49% success)

Race/Ethnicity

Hispanic students were more successful than all other ethnic groups in this course (13% higher success rates than White students). A low number of minority (non-Hispanic) students enrolled.

Age

The 25 years of age and older group was the most successful. The 20-24 years of age group was the least successful age group.

Gender

Females were more successful than males (7%).

Pell Recipients

Non-Pell students were more successful (6%).

RDNG 0301 (Basic Reading)

N=72 (33% success)

This course had the lowest annual and semester (Spring) success rates of all developmental courses.

Race/Ethnicity

White students were the most successful in this course. A low number of minority (non-Hispanic) students enrolled.

Age

The 20-24 years of age group was the most successful age group in this course.

Gender

Males were slightly more successful than females.

Pell Recipients

Non-Pell students were more successful in this course (10%).

RDNG 0321 (Reading Techniques I)

N=110 (56% success)

This course had the highest annual and semester (Fall) success rates of all developmental courses.

Race/Ethnicity

Hispanic students were more successful than all other ethnic groups in this course (17% higher success rates than White students). A low number of minority (non-Hispanic) students enrolled.

Age

The 25 years of age and older group was the most successful. The 20-24 years of age group was the least successful.

Gender

Females were quite a bit more successful than males (12%).

Pell Recipients

Pell students were slightly more successful than Non-Pell students.

RDNG 0331 (Reading Techniques II)

N=203 (52% success)

Race/Ethnicity

Hispanic and White students were the most successful group. A low number of minority (non-Hispanic) students enrolled.

Age

The 25 years of age and older group was the most successful. The 20-24 years of age group was the least successful.

Gender

Females were much more successful than males (20%).

Pell Recipients

Non-Pell students were more successful than Non-Pell students (5%).