COLLEGE OF MARIN

Student Performance in Accelerated versus Regular English

In Spring 2013, College of Marin implemented ENGL120AC, an accelerated English course that combines ENGL098 and ENGL120 content in order to help students more quickly move through the developmental course sequence and subsequently succeed in college level English. This study describes students who enrolled in ENGL120AC in each of four semesters, compares their characteristics and progress in the course to students in ENGL098 and ENGL120, and examines the success of ENGL120 and ENGL120AC students in ENGL150—college-level English.

Main Findings
ENGL120AC students earn higher grades and pass and success rates in the course than do students in ENGL120 and ENGL098. ENGL120AC students in this study who subsequently enrolled in ENGL150 experienced similar or slightly less success in that course than students who had completed ENGL120. However, the ENGL150 finding was not statistically significant so may not be evident with future students. Replicating this study with future English courses will help clarify this finding.

How many students completed ENGL120AC and what was their performance?

The dataset included four semesters of ENGL120AC course work: Spring 2013, Fall 2013, Spring 2014, and Fall 2014. During this period, a total of 207 students took the course and received a letter grade. Eleven students took ENGL120AC twice.

The average grade point received was 2.56. The overall pass rate, or proportion of "D-"or higher grades for the four semesters combined was 81.2%. Over the same period, 72.9% of students successfully completed the course with "C" or higher grade (See Table 1).

Table 1: ENGL120AC Enrollment and Performance

	Spring 2013	Fall 2013	Spring 2014	Fall 2015	Grand Total
Number of Students	42	53	50	73	218
Avg. Numeric Grade	2.01	2.61	2.76	2.70	2.56
Success Rate (C or higher)	61.9%	67.9%	78.0%	79.5%	72.9%
Pass Rate (D- or higher)	73.8%	77.4%	86.0%	84.9%	81.2%

As shown in Table 2, during the first semester that ENGL 120AC was offered, the average grade and progress rates were substantially lower than in subsequent semesters. While improvements are often seen subsequent to the first implementation of any new program, examining the grade patterns for each semester shows that the number of FW grades in the first offering of the course (Spring 2013) lowered the average GPA. An FW grade earns 0 points, while a W grade has no impact on points. In the Spring

2013 120AC course, there were substantially more FW than W grades. This pattern reversed in subsequent semesters (See Grade Distribution graph below).

Grade Distribution in ENGL120AC by Term

Pass or Fail	Grade	Grade Points	2012-13 Spring Semester	2013-14 Fall Semester	2013-14 Spring Semester	2014-15 Fall Semester
Pass	A	4.00	7	7	5	9
	A-	3.70	2	8	10	8
	B+	3.30		6	3	10
	B	3.00	3	3	11	6
	B-	2.70	4	6	3	8
	C+	2.30	1	1	3	3
	C	2.00	7	4	4	12
	D	1.00	5	3	4	4
	D-	0.70		2		
	P	Null	2	1		2
Fail	F	0.00	2	3	2	2
	FW	0.00	7	2	1	2
	NP	Null			1	
	W	Null	2	7	3	7

0 5 10 15 | 0 5 10 15 | 0 5 10 15 | 0 5 10 15
Number of Re.. | Number of Re.. | Number of Re.. | Number of Re..

Note:
FW= Withdrawn without permission & without having achieved a final passing grade
W= Withdrew (after last day to drop)

Were there any differences in ENGL120AC performance based on demographic characteristics of the students?

Table 2 shows the descriptive data for various student subgroups' enrollment and performance in ENGL120AC. Independent sample t-test and ANOVA were conducted to examine the differences in average grade between subgroups. Chi-square was used to test the differences in pass and success rates.

Female students had a higher average grade (M=2.91, SD=1.06) than male students (M=2.17, SD=1.34), t(173)=4.20, p<0.001 and higher success and pass rates (statistically significant at or below 0.05 levels). There were no statistically significant differences in average grades or pass and success rates between white and other students, students whose parents earned a college degree or higher and students whose parents had less education, and the enrollment status subgroups. Although the descriptive data in Table 2 show differences between some of these groups, the lack of statistical significance means this difference could have occurred by chance and may or may not be evident in comparisons of these groups in future English courses.

Table 2: ENGL120AC Performance for Various Student Subgroups

	Number of Students	Avg. Numeric Grade	Success Rate	Pass Rate
Female	112	2.91	80.0%	87.8%
Male	94	2.16	64.7%	73.5%
Unknown	1	3.00	100.0%	100.0%
White	30	2.88	83.9%	87.1%
Other	178	2.50	71.1%	80.2%
A - Asian	16	2.80	75.0%	100.0%
B- Black or African American	16	2.57	70.6%	82.4%
H - Hispanic/Latino	66	2.45	70.0%	78.6%
P - Native Hawaiian or Pacific Islander	1	3.70	100.0%	100.0%
T - Two or More Races	3	2.00	75.0%	75.0%
W - White	40	2.66	78.0%	82.9%
X - Unreported or Unknown	68	2.56	72.5%	78.3%
Continuing Student and Returning	144	2.53	73.3%	80.7%
First-Time Student	50	2.54	68.0%	82.0%
First-Time Transfer Student	17	2.83	82.4%	82.4%
Not Applicable	1	3.70	100.0%	100.0%
MENG Placement Score*				
Not Available	27	2.51	75.9%	79.3%
1200	6	2.40	66.7%	83.3%
1300	60	2.54	72.6%	83.9%
1400	43	2.56	74.5%	80.9%
1450	54	2.61	71.9%	78.9%
1500	11	3.12	81.8%	81.8%
4200	4	1.58	50.0%	75.0%
4400	2	2.50	50.0%	100.0%
Parents' Education				
College Degree or Higher	29	2.81	86.2%	89.7%
Other	178	2.52	70.9%	79.9%

* For students who took the MENG test multiple times, the maximum test score was used for the analysis.

Were there any differences in ENGL120AC performance based on students' preparation?

Pearson correlation was performed to analyze the relationship between English Placement Level (MENG) and average grade points in ENGL120AC. A very weak and not statistically significant

correlation was found between the MENG score and grade points (See Table 3). Likely this is due to the restricted range of the MENG test scores and may be expected if the scores are placing students into the appropriate level of English. However, according to the Testing Office, scores in the 1400-1500 range place students into the English classes that are the subject of this study, but many ENGL120AC students' MENG scores were lower (See Table 2). In addition, six students' MENG values were far above 1500. These were considered outliers and were therefore excluded from the analysis. Consequently, questions remain about placement practice into ENGL120AC and its effect on student progress and outcomes.

Table 3: Correlations Between Average Grade and MENG Level in ENGL120AC

		Grade Points	MENG
Grade Points	Pearson Correlation	1	.079
	Sig. (2-tailed)		.320
	N	193	161
MENG	Pearson Correlation	.079	1
	Sig. (2-tailed)	.320	
	N	161	183

Was there a difference in grades of students in ENGL120AC compared to ENGL120?

The difference in average grade points earned in these two courses was examined using independent samples t-test. The data were aggregated for the four semesters, Spring 2013 to Fall 2014. Students who completed ENGL120AC earned a higher average grade (M=**2.56**, SD=1.25) than students in ENGL120 (M=**2.10**, SD=1.48), t(356)=4.26, p<0.001 (See Table 4).

Table 4: Comparison Between ENGL120AC and ENGL120

	ENGL120				ENGL120AC			
	Number of Students	Avg. Numeric Grade	Success Rate (C or higher)	Pass Rate (D- or higher)	Number of Students	Avg. Numeric Grade	Success Rate (C or higher)	Pass Rate (D- or higher)
Spring 2013	206	1.92	57.8%	60.7%	42	2.01	61.9%	73.8%
Fall 2013	231	2.13	58.9%	65.8%	53	2.61	67.9%	77.4%
Spring 2014	209	2.16	58.9%	62.7%	50	2.76	78.0%	86.0%
Fall 2014	212	2.22	54.7%	59.9%	73	2.70	79.5%	84.9%
Grand Total	784	2.10	57.6%	62.4%	207	2.56	72.9%	81.2%

Was there a difference in grades of students in ENGL120AC compared to ENGL098?

There was also a significant difference in the average grade between ENGL120AC (M=**2.56**, SD=1.25) and ENGL098 (M=**2.14**, SD=1.41), t(428)=3.65, p<0.001 (See Table 5). Note that ENGL098 A and B were excluded from this analysis due to their small sample sizes and were not combined with 098 since they do not include all of the same course content.

Table 5: Comparison Between ENGL120AC and ENGL098

	ENGL098				ENGL120AC			
	Number of Students	Avg Numeric Grade	Success Rate (C or higher)	Pass Rate (D- or higher)	Number of Students	Avg Numeric Grade	Success Rate (C or higher)	Pass Rate (D- or higher)
Spring 2013	110	1.82	48.2%	55.5%	42	2.01	61.9%	73.8%
Fall 2013	142	2.18	62.0%	72.5%	53	2.61	67.9%	77.4%
Spring 2014	130	2.01	53.1%	59.2%	50	2.76	78.0%	86.0%
Fall 2015	125	2.48	64.8%	66.4%	73	2.70	79.5%	84.9%
Grand Total	469	2.14	57.4%	63.9%	207	2.56	72.9%	81.2%

How did students who completed accelerated ENGL120AC do in ENGL150 compared to students who completed ENGL120?

To answer this question, students' performance in ENGL150 was analyzed. The comparison groups included students who successfully completed ENGL120AC versus those who successfully completed ENGL120 in prior semesters before taking ENGL150. The performance measures included a numeric grade received in the course, pass rate (proportion of D- or higher grades) and success rate (proportion of C or higher grades). An independent t-test was performed to analyze the difference in numeric grade between these two groups of students, and chi-square was used to test the differences in pass and success rates.

Sample
A total of 1,105 students took ENGL150 during the period from Fall 2013 through Fall 2014 semesters. Overall, about 64% of students were successful in the course receiving a grade of C or higher. The average grade received in the course was 2.70 (See Table 6).

Table 6: ENGL150 Enrollment and Performance

	Fall 2013	Spring 2014	Fall 2015	Grand Total
Number of Students	402	360	343	1,105
Avg. Numeric Grade	2.85	2.53	2.68	2.70
Success Rate (C or higher)	71.1%	63.9%	56.6%	64.3%
Pass Rate (D- or higher)	75.9%	68.3%	62.1%	69.1%

Of all students who took ENGL150 during this time period, 383 students were identified as having successfully completed ENGL120 in the semesters in this study before taking ENGL150. There were 84 students who successfully completed the accelerated ENGL before taking ENGL150. (See Appendix A for ENGL150 grade distribution by prior English course taken and semester.)

Findings

On average, ENGL120AC students received 2.55 grade points in ENLG150, which was lower than the average grade points received by ENGL120 students (2.64). However, based on the t-test, this difference was not statistically significant (ENGL120 M=2.64, SD=1.23 vs. ENGL120AC M=2.55, SD=1.30, $t(375)=.54$, $p=.59$). The overall success and pass rates of ENGL120AC students were also slightly lower (See Table 7), but chi-square tests showed that the differences were not statistically significant. Therefore, although there is a small difference in performance, this difference could have occurred by chance and may or may not be evident in comparisons of future ENGL 120 and ENGL120AC students' performance in ENGL150.

Table 7: Enrollment and Performance in ENGL150
Based on Prior Successful Completion of ENGL120 or ENGL120AC
(Aggregated Data, Fall 13, Spring 14 and Fall 14)

	Prior Course	
	ENGL120	**ENGL120AC**
Number of Students	383	84
Avg Numeric Grade in ENGL150	2.64	2.55
Success Rate (C or higher) in ENGL150	66.6%	63.1%
Pass Rate (D- or higher) in ENGL150	72.1%	70.2%

To determine whether a differentially performing sub-group of ENGL120AC students may have enrolled in ENGL150, the ENGL120 and ENGL120AC course performance was tested. The same pattern was evident as found in the comparison of all ENGL120 and ENGL120AC students. Students who had completed ENGL120AC had a significantly higher grade in that course (M=**3.16**, SD=.70) than students who completed ENGL120 (M=**2.94**, SD=.75), $t(424)=2.445$, $p=.015$. Additional comparisons of the students who moved into ENGL150 after completing one of the two ENGL 120 courses showed no statistically significant difference between the groups in average total units attempted, average units earned and total grade point average (See Table 8)

Table 8: ENGL120 vs ENGL120AC

	ENGL120	ENGL120AC
Avg. Numeric Grade in Prior ENGL Course	2.94	3.16
Avg. Student Units Earned Local (SB16)	29	25
Avg. Student Units Attempted Local (SB18)	39	35
Avg. Student Total Grade Points Local (SB20)	15.7	17.3

Regression analysis was used to determine whether students' successful completion of ENGL120 or ENGL120AC was a significant factor influencing their grade in ENGL150 when combined with

demographic factors and English placement test level. The prediction model indicates that prior completion of ENGL120AC versus the regular ENGL 120 did not have a significant effect on ENGL150 grades (F(5,188)=4.54, p=.001, See SPSS output below). The two factors in the model that influenced the grade in ENGL150 were gender and parents' education. Female students and those whose parents hold a college or higher degree were more likely to receive higher grades in ENGL150. It is important to note that the model only accounted for about 10% of the variance in the ENGL150 grade (R square =,108, Adjusted R square =.084), meaning that other factors not included in the model contribute heavily to students' grade.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.328[a]	.108	.084	1.2353

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.646	5	6.929	4.541	.001
	Residual	286.894	188	1.526		
	Total	321.539	193			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.649	.327		5.036	.000
	Female	.507	.181	.197	2.806	.006
	Parent with College Or Higher Degree	.590	.193	.227	3.057	.003
	White	.284	.200	.102	1.421	.157
	English Placement Level (MENG)	.099	.090	.085	1.091	.277
	ENGL120AC (1) vs ENGL120(0)	.134	.250	.040	.536	.592

a. Dependent Variable: E150_Points

Summary and Conclusion

Overall, students enrolled in ENGL120AC earned a higher average grade and pass and success rates than students enrolled in ENGL120 and ENGL098. Female students were likely to receive higher grades than male students in ENGL120AC, but there were no statistically significant differences in performance in ENGL120AC for other student subgroups tested. Students' performance in ENGL150 based on prior successful completion of ENGL120 or ENGL120AC showed that ENGL120AC students had a lower average grade and slightly lower pass and success rates in ENGL150 than did

students who had completed ENGL120, but these differences were not statistically significant so may not be evident in future groups. Further, the regression analysis indicated that gender and parents' education are more influential factors affecting students' success in ENGL150 than either of the ENGL 120 courses they completed.

It appears that ENGL120AC is more efficient than the ENGL098, ENGL120 sequence in that proportionally more students progress faster and earn higher grades in the course. ENGL120AC and English 120 may be equivalently effective in terms of college-level English success, or ENGL120AC students may perform slightly lower. Replicating this study with future English courses will help clarify this finding.

Addendum: Future Research
After review and discussion with English faculty members Blaze Woodlief, Meg Pasquel and Barbara Bonander, the following additional analyses were requested and will be completed in a subsequent study. 1) Examine progress of students who started in ENGL098 compared to students who started in ENGL120 or ENGL120AC. 2) If data on students' primary language exists, that factor will be included in the comparisons and as a control variable.

In addition, in response to our questions about missing MENG scores and test scores that are lower than the ENGL98 and 120 range, faculty members said these students likely started below ENGL98 in the English sequence. This course enrollment/test score pattern will be examined and incorporated into subsequent analyses, if relevant.

To advance into college-level English (ENGL150), students must earn at least a C in ENGL120 or ENGL120AC. While this study showed that higher performing students in both ENGL 120 groups were the most likely to continue into ENGL150, the study did not examine the grade distributions in ENGL 120 and ENGL120AC for students who did and did not subsequently enroll in ENGL150. Therefore, we cannot determine whether this finding about higher performing students is simply due to the C grade requirement or if there is a finer differentiation in grades among students who enroll in ENGL150 after successfully completing one of the English 120 classes. This analysis will be conducted in the next iteration of this study.

APPENDIX A

Grade Distribution in ENGL150 based on prior completion of ENG120