Evaluation of English Co-Requisite Model at Cosumnes River College

Office of Institutional Effectiveness

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Author:

Paul Meinz, Ph.D., IT Business/Tech Analyst

Background

In fall 2018, the English department at Cosumnes River College (CRC) began offering transfer-level English (ENGWR 300) paired with a co-requisite lab (ENGWR 108). This option was created to allow students who place one level below transfer to enroll in ENGWR 300 with extra support (the co-requisite; ENGWR 108). In the standard sequence at CRC, students who placed one level below transfer would have to complete ENGWR 101 before enrolling in ENGWR 300. When students are required to complete a sequence of two courses, there are more potential barriers to completing transfer-level English – e.g., failing ENGWR 101, failing to enroll in ENGWR 300, and/or failing ENGWR 300. The co-requisite model (ENGWR 108) was designed to increase the completion rate of ENGWR 300 (a.k.a. the *throughput rate*) by reducing the course sequence and providing added support.

Method

In order to evaluate whether or not the English co-requisite improves throughput for students who place below transfer-level English, course success and demographic data in ENGWR 300 were pulled from the Los Rios Peoplesoft Database. Students in the co-requisite (ENGWR 108) were compared to students who were not enrolled in the co-requisite in fall 2018. Additionally, two-term throughput rates for students in ENGWR 101 were gathered from Datamart for fall 2017. These data were used to answer three main questions:

1) Does ENGWR 108 improve throughput rates relative to ENGWR 101 students?
2) Does ENGWR 108 successfully improve the success rates of students in ENGWR 300?
3) Are there equity gaps in ENGWR 300 course success for students in ENGWR 108?

Summary of Findings

1) The throughput rate for students in ENGWR 108 was over twice that of students who enrolled in ENGWR 101 in fall 2017 (53.7% vs 25.0%; *Table 2,* page 4). This suggests that ENGWR 108 successfully increases throughput for students who place one-level below transfer.
2) The overall success rate of students in ENGWR 108 was lower than that of students who were in ENGWR 300 without the co-requisite (53.7% vs. 66.5%, respectively; *Table 1*, page 3). As such students who placed one level below were not as successful in ENGWR 300 as students who placed directly into ENGWR 300 – even with additional support.
    a. Students in the 2.6 – 2.99 group did not have significantly different success rates than students in fall 2017 with the same GPA who enrolled in ENGWR 300 without the co-requisite (53.7% vs 58.9%, respectively; *Table 3,* page 5). This suggests that the additional support may not have improved course success for these students.
3) No student groups in ENGWR 108 were disproportionately impacted as defined by the California Community College Chancellors Office[1]. However, several groups fell below the average success rate (*Table 1*, page 3). In particular, students with a 1.9 to 2.59 GPA had a success rate 41.8% which was 11.9% below the average course success rate. This has implications for course success in Fall 2019 because the GPA range for placement into the co-requisite will be changed to 1.9 – 2.59.

[1] https://extranet.cccco.edu/Portals/1/TRIS/Research/Analysis/PercentagePointGapMethod2017.pdf

Limitations and Caveats

Because there is no adequate comparison group, It is very difficult to determine the impact of the co-requisite on student success in ENGWR 300. No students who placed one-level below could enroll in ENGWR 300 without the co-requisite, and therefore, it is impossible to conclude how they would have performed without it. Indeed students who enrolled in ENGWR 300 in fall 2017 with a GPA between 2.6 and 2.99 did not have statistically different success rates than the same students in the fall 2018 co-requisite. This suggests that co-requisite may not have improved success for students in this GPA range. However, this is not a perfect comparison – because students in fall 2017 may have had entirely different instructional circumstances.

Conclusions and Recommendations

The evidence provided here suggests that ENGWR 108 has higher throughput rates than the traditional two-term sequence (ENGWR 101 into ENGWR 300). On the other hand, students in ENGWR 108 had a lower success rate than students in ENGWR 300 without a co-requisite. This suggests that the additional support may not have compensated for the lower preparedness of the students. Moreover, students with a GPA from 1.9 to 2.29 had a 41.8% success rate in the course. This has implications for implementation in fall 2019 – when the GPA range for placement into ENGWR 108 will change to 1.9 – 2.29. Given these findings, the Institutional Effectiveness Office makes the following recommendations:

1) Continue to evaluate the effectiveness of ENGWR 108.
2) Investigate ways to provide better support to students in ENGWR 108. For example, during focus groups conducted with ENGWR 108 students, several students stated that they wanted additional support with their essay writing.

Student Demographics and Technical Details

Success rates and demographics can be found in *Table 1* below. A total of 218 students enrolled in ENGWR 300 with the co-requisite, a total of 1522 students enrolled in ENGWR 300 without the co-requisite. Students who are African American or Hispanic/Latino were over-represented in the co-requisite course relative to students in ENGWR 300 without the co-requisite.

Students in the co-requisite course had higher *throughput* rates than students in the traditional ENGWR 101 sequence (*Table 2,* page 4). Throughput is defined as the percentage of students who complete transfer-level English. In fall 2017, only 25% of students enrolled in ENGWR 101 successfully completed ENGWR 300 in two terms. In the co-requisite course, 53.7% completed ENGWR 300 in one term (the success rate for co-requisite students in ENGWR 300).

Students in the co-requisite course had lower success rates than students enrolled in ENGWR 300 alone (53.7% vs. 66.5%). Nevertheless, it is difficult to determine how a student would have performed *without* the co-requisite. A possible indication of how students would do without the co-requisite can be found in the fall 2017 ENGWR 300 student cohort. In fall 2017, students were placed into ENGWR 300 with a 2.6- 2.99 GPA, whereas in fall 2018, these students would have been placed in the co-requisite. The fall 2017 students had a success rate of 58.9% in ENGWR 300 *without a co-requisite* (*Table 3*, page 5), whereas students in fall 2018 in the co-requisite with a 2.6 – 2.99 GPA had a success rate of 53.6% (*Table 1*). This success rate was not statistically different from students who placed into ENGWR 108 with a co-requisite, $\Delta\chi^2(1) = 0.337$, *ns.* Therefore, it is possible that the co-requisite did not improve success for these students because students in the same GPA range without a co-requisite in fall 2017 did equivalently.

Finally, disproportionate impact was calculated using guidelines from the California Community Chancellors Office[2]. No student groups were disproportionately impacted in the ENGWR 108 co-requisite.

Table 1. Success Rate in ENGWR 300 for students with and without the co-requisite (ENGWR 108 vs. ENGWR 300)

	Enrolled in ENGWR 108				Enrolled in ENGWR 300 Alone			
Demographic	Headcount	% Headcount	Success Rate in ENGWR 300	Equity Gap	Headcount	% Headcount	Success Rate in ENGWR 300	Equity Gap
Ethnicity								
African American	45	20.64%	51.1%	-2.6%	140	9.20%	52.9%	-13.6%
Asian	40	18.35%	57.5%	3.8%	342	22.47%	75.1%	8.7%
Filipino	<10	3.67%	50.0%	-3.7%	109	7.16%	65.1%	-1.4%
Hispanic/Latino	83	38.07%	53.0%	-0.7%	488	32.06%	64.8%	-1.7%
Multi-Race	15	6.88%	53.3%	-0.3%	116	7.62%	57.8%	-8.7%
Native American					<10		42.9%	
Other Non-White					<10		0.0%	

[2] https://extranet.cccco.edu/Portals/1/TRIS/Research/Analysis/PercentagePointGapMethod2017.pdf

Pacific Islander	<10	2.75%	66.7%	13.0%	19	1.25%	68.4%	1.9%
Unknown	<10	0.46%	100.0%	46.3%	<10	0.20%	66.7%	0.2%
White	20	9.17%	50.0%	-3.7%	297	19.51%	70.4%	3.9%
Foster Youth Status								
Foster Youth	<10		50.0%	-3.7%	18	1.18%	44.4%	-22.0%
Not Foster Youth			53.8%	0.1%	1504	98.82%	66.8%	0.3%
GPA Group								
1.9 - 2.59	55	25.23%	41.8%	-11.9%	110	7.23%	50.0%	-16.5%
From 2.6 to 2.99	56	25.69%	53.6%	-0.1%	149	9.79%	59.1%	-7.4%
3.0 or Higher	28	12.84%	82.1%	28.5%	663	43.56%	77.4%	10.9%
Gender								
Female	118	54.13%	55.1%	1.4%	840	55.19%	69.8%	3.3%
Male	96	44.04%	52.1%	-1.6%	665	43.69%	62.3%	-4.2%
Unknown	<10	1.83%	50.0%	-3.7%	17	1.12%	70.6%	4.1%
Low-Income Status								
Low Income	152	69.72%	55.3%	1.6%	926	60.84%	62.7%	-3.7%
Not Low Income	66	30.28%	50.0%	-3.7%	596	39.16%	72.3%	5.8%
Veteran								
Non-Veteran			53.5%	-0.2%	1499	98.49%	66.5%	0.0%
Veteran	<10		100.0%	46.3%	23	1.51%	65.2%	-1.3%
Total	**218**		**53.7%**			**1522**	**66.5%**	

Table 2. Throughput for co-requisite students compared to 101 students

Demographic	ENWGR 300 Success Rate for Co-Requisite Students	Two-term 101 throughput*	Difference
Ethnicity			
African American	51.1%	22.2%	28.9%
Asian	57.5%	26.3%	31.3%
Hispanic/Latino	53.0%	25.7%	27.3%
Multi-Race	53.3%	13.3%	40.0%
Pacific Islander	66.7%	50.0%	16.7%
White	50.0%	31.0%	19.0%
Gender			
Female	55.1%	28.8%	26.3%
Male	52.1%	20.8%	31.3%
Unknown	50.0%	20.0%	30.0%
Total	**53.7%**	**25.0%**	**28.7%**

* Throughput rate from 101 was gathered from the CCCCO DataMart Basic Skills Cohort Tracker for a cohort starting in fall 2017.

Table 3. ENGWR 300 Success Rate by GPA Range for the Fall 2017 Cohort

GPA Range	Success Rate	Headcount
1.0-1.4	60.0%	10
1.5-1.9	33.3%	33
2.0-2.5	56.6%	106
2.6-2.9	58.9%	265
3.0-3.4	70.9%	344
3.5-4.0	90.0%	170
No GPA	75.0%	12
Total	**68.0%**	**940**