

Dissertation Research: SEP Participation and Adherence among First-Time COM Students

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Background and Policy

- Title IV Mandate-2012 Student Success Act
- Student Success and Support Program (SSSP)
- Guided Pathways (4 pillars)
 - 1) Clarifying pathways to student completion goals;
 - 2) Helping students choose and enter a pathway;
 - 3) Helping students stay on the pathway; and
 - 4) Ensuring students are learning.
- Also: Eliminating equity gaps

Research Questions

1. What proportion of first-time community college students have developed Student Educational Plans (SEPs) prior to their first semester of attendance?
2. Are students' demographic backgrounds, educational goals, and participation in student success programs related to development of Student Educational Plans?
3. To what extent do first time community college students adhere to their assigned Student Educational Plans during the first year of attendance?
4. How are students' demographic backgrounds, educational goals, and participation in student success programs related to adherence to their Student Educational Plans?
5. Are there assigned courses and/or requirements listed in students' SEPs that have relatively high rates of nonadherence?

Study Design

- Study Population
 - First-time COM Students, Fall 2017, Fall 2018, Fall 2019 (N=1,142)
 - Degree seeking (Educational goal of degree or transfer)
- Quantitative Measures
 - Participation – Proportion of students with an SEP in place at the start of their first semester of attendance
 - Adherence – Proportion of assigned units student enrolled in during first Fall and Spring
- Limitations
 - Study answers “WHAT” not “WHY”
 - Quality of data
 - Some missing data
 - AB705 implementation

Results—SEP Participation

- Analysis: linear probability regression model
 - Significantly higher participation among **females**; **EOPS** students; students in **learning communities**
 - Significantly lower participation among **Hispanic/Latino/x** students (compared to African/American/Black students)
 - No significant effect for first generation, economically disadvantaged, educational goal high school GPA, Summer Bridge participation

Table 3. SEP Participation Rates

Variable Name	Students with SEP at First Enrollment	SEP Participation Rate (%)
Total	704	62
Race/Ethnicity		
Black or African American	36	75
Two or more races	40	65
White	259	64
Asian or Pacific Islander	51	63
Hispanic	300	58
Other Race/Unknown/Unreported	18	53
Gender		
Female	334	66
Male	360	59
Unknown/Unreported	10	53
Economically Disadvantaged Status		
Economically disadvantaged	389	64
Not economically disadvantaged	315	59
First Generation Status		
First generation	242	61
Not first generation	405	62
Unknown or not applicable	55	60
Educational Goal		
Associate degree with transfer	458	64
Transfer only	168	58
Associate degree only	78	58
High School GPA		
<2.0	27	53
2.0-2.49	133	61
2.5-2.99	196	60
3.0-3.49	172	63
3.5 or higher	101	66
No high school GPA	75	60
EOPS Participation		
EOPS participant	101	70
Not an EOPS participant	603	60
Learning Community Participation		
Learning community participant	82	75
Not a learning community participant	622	60
Summer Bridge Participation		
Summer Bridge participant	138	62
Not a Summer Bridge participant	566	62

Analysis-SEP Adherence Measure

Year 1 Assigned SEP			Actual Schedule Taken			
Course/Area	Units	Courses	Course	Units	Course in Plan	Course Not in Plan
Composition	3	1	Composition	3	1	0
Biology 101	3	1	Biology 101	3	1	0
Any Elective	3	1	Kinesiology	3	1	0
Prob. And Stats	4	1	18th Century Lit	3	1	0
Literature	3	1	US History	3	1	0
Any History	3	1	Music Theory	2.5	1	0
Any Elective	3	1	Spanish 3	3	1	0
Any Language	3	1	Intro. Guitar	2	0	1
			Intro. Accounting	3	0	1
Total Assigned	25	8	Total Taken	25.5	7	2
			Total Taken In-Plan	20.5	7	
			Total Taken Non-Plan	5	2	

Adherence: Total Units Taken In-Plan vs. $= \frac{20.5}{25} = 0.82$
 Total Units Assigned

Results—SEP Adherence

- Analysis: Ordinary Least Squares (OLS) regression model
 - Significantly higher adherence among **EOPS** students; students in **learning communities**; students participating in **Summer Bridge**; those **with higher GPA**
 - Significantly lower adherence among students with educational goal of **transfer only**; **first-generation** students
 - No significant effect for race/ethnicity; gender; economically disadvantaged

Table 8. Mean SEP Adherence by Subgroup

Variable Name	All Students with SEPs	Mean Adherence
Total	413	.79
Race/Ethnicity		
Asian or Pacific Islander	35	.85
Other Race/Unknown/Unreported	8	.85
Black or African American	18	.81
Hispanic	173	.79
White	153	.79
Two or more races	26	.79
Gender		
Female	203	.80
Male	205	.80
Unknown/Unreported	5	.62
Economically Disadvantaged Status		
Economically disadvantaged	234	.80
Not economically disadvantaged	179	.79
First Generation Status		
First generation	138	.77
Not first generation	238	.81
Unknown or not applicable	36	.79
Educational Goal		
Associate degree with transfer	267	.79
Transfer only	104	.83
Associate degree only	42	.78
High School GPA		
<2.0	18	.71
2.0-2.49	69	.80
2.5-2.99	112	.77
3.0-3.49	107	.84
3.5 or higher	65	.85
No high school GPA	42	.73
EOPS Participation		
EOPS participant at first term	69	.86
Not an EOPS participant	344	.79
Learning Community Participation		
Learning community participant at first term	48	.87
Not a learning community participant	365	.79
Summer Bridge Participation		
Summer Bridge participant	77	.87
Not a Summer Bridge participant	336	.78

Results—SEP Adherence

- Analysis: Ordinary Least Squares (OLS) regression model
 - Significantly higher adherence among **EOPS** students; students in **learning communities**; students participating in **Summer Bridge**; those **with higher GPA**; those with educational goal of **degree only**
 - Significantly lower adherence among **first-generation** students; those with high school **GPA<2.0** or **no reported GPA**
 - No significant effect for race/ethnicity; gender; economically disadvantaged

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Results—Course Nonadherence

- 629 assigned first-year courses students did not enroll in
- 13 courses accounted for 43% of nonadherence

Table 10. SEP-Assigned Courses with Highest Number of Non-Adhered Enrollments

Course	N Assigned Not Enrolled	Percent of All Non-Adhered Courses
MATH 115 - Probability and Statistics	55	9%
ENGL150 - Reading and Composition (1A)	38	6%
ENGL151 - Reading and Composition (1B)	35	6%
BIOL110 - Introduction to Biology	20	3%
SOC110 - Introduction to Sociology	18	3%
COMM100 - Introduction to Communication & Speech	16	3%
BIOL110L - Introduction to Biology Laboratory	15	2%
MATH103 - Intermediate Algebra	15	2%
PSY110 - Introduction to Psychology	14	2%
ANTH101 - Introduction to Archaeology and Prehistory	13	2%
ENGL120 - Introduction to College Reading and Composition	11	2%
ENGL155 - Critical Thinking and Composition	11	2%
HUM101 - The Human Condition	11	2%
Total	272	43%

Table 11. Number and Percent of Students with Most Frequently Non-Adhered Courses in their SEPs

Course	N of SEPs with Assigned Course	Percent of SEPs with Assigned Course
ENGL150 - Reading and Composition (1A)	314	76%
MATH 115 - Probability and Statistics	189	46%
PSY110 - Introduction to Psychology	155	38%
MATH103 – Intermediate Algebra	129	31%
BIOL110 - Introduction to Biology	109	26%
ENGL151 - Reading and Composition (1B)	108	26%
BIOL110L - Introduction to Biology Laboratory	96	23%
HUM101 - The Human Condition	92	22%
SOC110 - Introduction to Sociology	72	17%
ENGL120 - Introduction to College Reading and Composition	67	16%
ANTH101 - Introduction to Archaeology and Prehistory	44	11%
ENGL155 - Critical Thinking and Composition	41	10%
COMM100 - Introduction to Communication & Speech	39	9%



Figure 6. Nonadherence Rates for Specific SEP-Assigned Courses

Conclusions

- Some disparities in SEP participation and adherence among traditionally underserved groups remain, but efforts to address these gaps through retention/success programs with strong matriculation support appear to be succeeding for those who participate in them.
- Failure to enroll in first-year required English and Math courses accounts for a substantial proportion of nonadherence, potentially derailing students from their completion goals.