

Table 13. Hierarchical Logistic Regression: Developmental Education Program and Policy Components Predicting Passing Precollege Math Sequence, with Student Demographic Variables Controlled¹

Step	Model df	Chi-Square	Improvement Chi-Square
1. Demographics	27	493.23	
2. Alt placement	26	396.64	96.59***
3. College level instructors also teach dev ed	25	370.94	25.7***
4. Assessment prep course	24	303.44	67.5***
5. Differentiated developmental math tracks	23	288.73	14.71***
6. Math curriculum modules	22	257.55	31.18***
7. # Levels of developmental math	21	246.58	10.97***
8. Mandatory orientation	20	246.44	0.14
9. ATD membership (or participation)	19	245.45	0.99
10. Contextualized Instruction	18	245.01	0.44
11. College mission reflects dev ed	17	244.32	0.69
12. Student Faculty Ratio	16	235.48	11.84***

Variable	Results Step 2			Results Step 3			Results Step 4			Results Step 5			Results Step 6			Results Step 7		
	B	SE	p	B	SE	p	B	SE	p	B	SE	p	B	SE	p	B	SE	p
Alt Placement	0.4	0.16	0.02*	0.4	0.16	0.02*	0.36	0.14	0.02*	0.37	0.14	0.02*	0.29	0.14	0.06	0.28	0.15	0.08
College & Dev Ed Teachers				0.26	0.15	0.1	0.17	0.15	0.25	0.19	0.15	0.21	0.24	0.15	0.11	0.25	0.15	0.11
Assessment Prep							0.31	0.15	0.04*	0.32	0.15	0.04*	0.29	0.14	0.06	0.29	0.15	0.06
Diff Tracks										-0.1	0.08	0.32	-0.09	0.08	0.26	-0.16	0.09	0.11
Modules													-0.23	0.14	0.11	-0.14	0.15	0.36
Num Courses																-0.11	0.08	0.18

¹ Demographic variables controlled and not shown in this table: Start Level, Underrepresented Minority status, SES, Prior Education
 *** Significant at the $p < .005$ level * Significant at the $p < .05$ level

Table 13 Continued.

	Results Step 8			Results Step 9			Results Step 10			Results Step 11			Results Step 12			Results Step 13		
Variable	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
Alt Placement	0.28	0.15	0.09	0.28	0.16	0.1	0.29	0.18	0.13	0.3	0.19	0.13	0.32	0.19	0.11	0.3	0.31	0.35
College & Dev Ed Teachers	0.26	0.17	0.15	0.26	0.18	0.16	0.27	0.19	0.17	0.27	0.19	0.18	0.35	0.21	0.12	0.35	0.22	0.13
Review Course	0.29	0.15	0.07	0.29	0.16	0.09	0.29	0.17	0.1	0.28	0.17	0.12	0.28	0.17	0.12	0.29	0.19	0.14
Diff Tracks	-0.16	0.09	0.12	-0.16	0.16	0.09	-0.16	0.12	0.2	-0.16	0.12	0.19	-0.15	0.12	0.24	-0.15	0.14	0.3
Modules	-0.15	0.16	0.38	-0.15	0.17	0.39	-0.14	0.17	0.42	-0.13	0.18	0.47	-0.15	0.18	0.42	-0.15	0.19	0.46
Num Courses	-0.1	0.16	0.2	-0.1	0.08	0.23	-0.1	0.09	0.27	-0.11	0.09	0.25	-0.07	0.1	0.49	-0.08	0.12	0.53
Orientation	-0.01	0.15	0.94	-0.01	0.15	0.94	-0.01	0.15	0.93	-0.01	0.16	0.93	-0.01	0.19	0.62	-0.09	0.19	0.64
ATD				-0.01	0.17	0.93	-0.01	0.18	0.98	0	0.18	0.98	-0.05	0.19	0.8	-0.05	0.2	0.8
Contextualization							-0.03	0.18	0.87	-0.07	0.19	0.74	-0.06	0.2	0.77	-0.05	0.21	0.8
Mission										-0.06	0.09	0.52	-0.06	0.09	0.49	-0.06	0.09	0.51
SF Ratio													0.02	0.02	0.41	0.02	0.02	0.43
Statway																0.03	0.39	0.93

Table 15. Hierarchical Logistic Regression: Developmental Education Program and Policy Predicting Passing a College Level Math Course, with Student Demographic Variables Controlled²

Step	Model df	Chi-Square	Improvement Chi-Square
1. Demographics	27	272.53	
2. Alt Placement	26	227.72	44.81***
3. Review Course	25	227.67	0.05
4. College Faculty also teach dev ed	24	220.63	7.04**
5. Diff Tracks	23	215.6	5.03*
6. Modules	22	187.2	28.4***
7. Num Courses	21	179.87	7.33**
8. SF Ratio	20	178.48	0.39
9. Mission	19	162.95	15.53***
10. Orientation	18	155.5	7.45**
11. Contextualization	17	130.75	24.75***
12. ATD	16	120.38	10.37***

² Demographic variables controlled and not shown in this table: Start Level, Underrepresented Minority status, Prior Education

*** Significant at the p<.005 level

** Significant at the p<.01 level

*Significant at the p<.05 level

Table 15 Continued

Variable	Results Step 2			Results Step 3			Results Step 4			Results Step 5			Results Step 6			Results Step 7		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
Alt Placement	0.3	0.15	0.04*	0.29	0.16	0.1	0.31	0.16	0.06	0.31	0.16	0.07	0.25	0.16	0.13	0.22	0.16	0.2
Review Course				0.03	0.13	0.8	-0.01	0.14	0.95	0.01	0.14	0.94	0.04	0.14	0.79	-0.04	0.14	0.76
Faculty Overlap							0.13	0.14	0.37	0.13	0.14	0.38	0.16	0.14	0.24	0.17	0.14	0.22
Diff Tracks										0.01	0.08	0.94	0	0.07	0.99	-0.05	0.09	0.58
Modules													0.22	0.12	0.08	-0.16	0.13	0.25
Num Courses															-0.07	0.07	0.3	0.18

Table 15 continued

Variable	Results Step 8			Results Step 9			Results Step 10			Results Step 11			Results Step 12			Results Step 13		
	B	SE	p	B	SE	p	B	SE	p	B	SE	p	B	SE	p	B	SE	p
Alt Placement	0.22	0.16	0.19	0.18	0.16	0.27	0.16	0.16	0.32	0.08	0.17	0.66	0.11	0.17	0.52	-0.06	0.25	0.82
Review Course	-0.05	0.14	0.72	0.06	0.13	0.65	-0.09	0.14	0.54	0.08	0.13	0.55	-0.12	0.14	0.39	-0.05	0.16	0.74
College Faculty also teach dev ed	0.15	0.14	0.28	0.14	0.14	0.32	0.04	0.17	0.83	0.02	0.17	0.9	0.01	0.17	0.94	0.01	0.17	0.94
Diff Tracks	-0.08	0.09	0.4	0.09	0.09	0.34	-0.1	0.09	0.28	-0.1	0.08	0.25	-0.14	0.09	0.17	-0.19	0.11	0.11
Modules	-0.18	0.14	0.2	0.15	0.13	0.26	-0.1	0.14	0.47	0.13	0.14	0.37	-0.16	0.14	0.28	-0.11	0.15	0.5
Num Courses	-0.1	0.07	0.06	0.12	0.07	0.10	-0.14	0.08	0.07	0.17	0.08	0.04*	-0.15	0.08	0.07	-0.19	0.15	0.05*
SF Ratio	-0.02	0.01	0.27	0.01	0.01	0.3	-0.02	0.02	0.16	0.02	0.02	0.15	-0.02	0.07	0.24	-0.02	0.02	0.26
Mission				0.09	0.07	0.18	-0.09	0.08	0.19	0.06	0.07	0.36	-0.06	0.07	0.38	-0.08	0.07	0.28
Orientation							0.16	0.15	0.29	0.16	0.14	0.28	0.15	0.14	0.3	0.15	0.14	0.32
Contextualization										0.21	0.14	0.16	0.25	0.15	0.11	0.26	0.15	0.1
ATD													-0.14	0.15	0.39	-0.13	0.16	0.41
Statway																0.25	0.27	0.37