

MAPS Year 4 Outcomes Assessment

Q1. Did Summer Bridge improved Math placement level of participants?

Method

Data of students who completed Summer Bridge Program in 2014 and 2015 used to make this analysis. Math placement result before and after the summer bridge program was pulled from Student APMS table and recoded¹ for the purpose of this analysis. Then comparison was made between pre and post summer bridge placement results to determine whether students have made progress or not². Then, the result was disaggregated by demographics to check for any disproportionate impact summer bridge may have on the different demographic groups.

Analysis

35% of summer bridge participants were placed one or more levels higher, 59% were placed at the same level, and 6% regressed. The impact was higher for African Americans and Whites, and age groups 20-24 and 25-34. Hispanics and age groups under 20 seems to be benefitting less from the intervention compared to the other groups.

Group	All	Improved		Regressed		Remain the same	
	Count	Count	%	Count	%	Count	%
Summer 2014	165	56	34%	10	6%	99	60%
Summer 2015	99	37	37%	5	5%	57	58%
Grand Total	264	93	35%	15	6%	156	59%

¹ Recode: Four levels below transfer (Math 105); Three levels below transfer (Math 110, Math 112); Two levels below transfer (Math 113, Math 115); One level below transfer (Math 120, Math 125); Transfer Level (Math2**)

² Students are classified as follows based on the results of the post-summer bridge math placement test: “Regressed” if students fall below the pre-summer bridge test, “Remain the same” if students placed to the same level, “Improved” if students placed at higher level.

Math Placement Status After Summer Bridge, 2014 and 2015 Cohorts

Ethnic Group	All	Improved		Regressed		Remain the same	
	Count	Count	%	Count	%	Count	%
Asian/Pacific Islander	10	3	30%	1	10%	6	60%
Black, African-American	8	5	63%		0%	3	38%
Caucasian, White	23	11	48%	1	4%	11	48%
Hispanic	179	59	33%	11	6%	109	61%
Multiple Ethnicities	24	7	29%		0%	17	71%
Total	244	85	35%	13	5%	146	60%
Age Group							
20-24	35	14	40%	2	6%	19	54%
25-34	18	9	50%		0%	9	50%
35-54	4		0%		0%	4	100%
55 and over	3	2	67%		0%	1	33%
Under 20	204	68	33%	13	6%	123	60%
Total	264	93	35%	15	6%	156	59%
Sex							
Females	137	48	35%	9	7%	80	58%
Males	127	45	35%	6	5%	76	60%
Total	264	93	35%	15	6%	156	59%

Q2. Did Summer Bridge (Math 100) boost success rate in subsequent Math courses?

Method

Two groups of students were identified for this analysis. The first group is the Summer Bridge Group which comprises students who took Math 100 in Summer 2014, and subsequently enrolled in Math courses in the following Fall or Winter semesters (155 Students). The second group is the Control Group, and includes students who did not attend any of the Summer Bridge programs but took the same Math courses in the same sections and semesters with the Summer Bridge Group (1262 students).

Math placement level; demographic variables such as Age, Sex, and Ethnic groups; and graded enrollment in subsequent Math courses were pulled from DEC and re-coded for the purpose of this analysis.

Analysis

Overall, Summer Bridge students did not score high success rate in subsequent Math courses compared to those who did not take Summer Bridge [Summer Bridge 45%, Control Group 49%]. Within the Summer Bridge Group, significant difference in success rate was observed between





































students based on their placement status³. Success rate in subsequent Math courses was 47% for students who stay at the “Same” level, 43% for students who “improved”, and 27% for students who “regressed” in their second placement test.

2014 Summer Bridge Participants			
Success in Subsequent Math Courses			
Group	Enrollment⁴	Success #	Success%
Control Group	3705	1826	49%
Summer Bridge Group	190	84	44%
Improved	61	26	43%
Regressed	11	3	27%
Same	118	55	47%

Disaggregated data by demographics (Attachment 1) shows that Summer Bridge participants of White, Hispanic, Multiple Ethnicities, and age group under 20 scored equal or higher success rates in subsequent math courses compared to their equivalents in the control group. Though Hispanics have lower success rate in general, those who participated in Summer Bridge program seems to be more successful in subsequent Math courses than those who did not.

³ Summer Bridge Students re-take Math placement test after they complete the program. The placement level of a student after the second placement test may “improve”, “regress”, or stay at the “same” level when compared to the first placement test.

⁴ Based on course count (not head count)

Fall 2014 Summer Bridge Participants			
Success in Subsequent Math Courses by Demographics			
Group	Enrollment	Success #	Success%
Asian/Pacific Islander	238	125	 53%
Control Group	233	123	 53%
Summer Bridge Group	5	2	 40%
Black, African-American	163	75	 46%
Control Group	154	73	 47%
Summer Bridge Group	9	2	 22%
Caucasian, White	770	524	 68%
Control Group	748	509	 68%
Summer Bridge Group	22	15	 68%
Hispanic	2031	879	 43%
Control Group	1911	826	 43%
Summer Bridge Group	120	53	 44%
Multiple Ethnicities	492	190	 39%
Control Group	469	180	 38%
Summer Bridge Group	23	10	 43%
Female	2076	1063	 51%
Control Group	1979	1019	 51%
Summer Bridge Group	97	44	 45%
Male	1819	847	 47%
Control Group	1726	807	 47%
Summer Bridge Group	93	40	 43%
Under 20	2615	1188	 45%
Control Group	2489	1131	 45%
Summer Bridge Group	126	57	 45%
20-24	706	357	 51%
Control Group	666	343	 52%
Summer Bridge Group	40	14	 35%
25-34	349	232	 66%
Control Group	329	220	 67%
Summer Bridge Group	20	12	 60%
35-54	193	115	 60%
Control Group	192	115	 60%
Summer Bridge Group	1		 0%
55 and over	32	18	 56%
Control Group	29	17	 59%
Summer Bridge Group	3	1	 33%