

FOOTHILL COLLEGE Institutional Research and Planning

DATE: July 8, 2013

TO:	Sarah Munoz, Instructor, Mathematics
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	Sarah Williams, Instructor, Mathematics
	Teresa Zwack, Instructor, Mathematics
	Leticia Serna, Counselor, Counseling
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	Peter Murray, Dean, Physical Sciences, Mathematics & Engineering
FROM:	Elaine Kuo, College Researcher
	Thomas Margesson, Student Assistant
RE:	2013 Summer Bridge Math Program Intake Survey

<u>Overview</u>

Students participating in the first session of the Summer Bridge Math Program (July 8-July 18) were required to complete an intake survey. While there were 45 students who expressed interest in the program, only 24 students (53%) registered the first day. As the survey was required, there was a 100% response rate among the students attending the first class.

Some highlights:

Student Background

- While over half of the students graduated from high school in 2013 or 2012 (63%), slightly over one-third graduated in 2007 or earlier (38%).
- Over half of the students are currently <u>not</u> working for pay (58%) and among those who are working, most are working between 11-30 hours a week (70%).

Motivation

- The majority of students reported wanting to improve their math placement test (84%) and half noted that it has been over one year since their last math class (50%).
- Almost one-third report initial anxiety about taking a math class in college (29%).

Previous Math Experience

• Almost half of the students took their last math class at least two years ago (46%). Algebra 2 was the most commonly reported last math taken (46%). The grade received in whatever math class they last enrolled in was either a "B" or "C" (38% and 33%).

• Three-fourths of the students who attended the first day initially placed either into Math 220 (42%) or NCBS 401 (33%) (Table 1).

Course	Students	Percent
Math 220	10	42%
NCBS 401	8	33%
Math 235	4	17%
Math 105	1	4%
Other	1	4%
Total	24	100%

 Table 1. Summer Bridge Math Program Initial Placement (Session One), 2013.

Math Perceptions

- Over half of the students rated themselves "average" in terms of their overall math ability compared to the average student (58%) while another one-third rated themselves as "below average" (33%).
- When rating their confidence level, at least half students tended to select "some confidence" for each math concept, with the exception of "graphing a line from the equation of a line" (54% reported "no confidence") and "finding the equation for a line if you are given the graph" (50% reported "no confidence").
- Math concepts where few students indicated confidence include: "Finding the slope of a line" (8%), "Finding the equation of a line if you are given the graph" (8%), "Multiplying or dividing fractions without a calculator" (13%), "Graphing a line from the equation of a line" (13%), and "Working with rules of exponents" (13%).
- Math concepts where more students indicated confidence include: "Adding or subtracting fractions without a calculator" (38%), "Operations with decimals, without a calculator" (29%), and "Operations with negative numbers, without a calculator" (29%).

Future Plans

• Only two students reported not planning to enroll at Foothill in the fall (8%).

<u>Methodology</u>

Students who attended the first day of Summer Bridge were required to fill out the intake survey as their first activity. Data was collected using ReMark survey software.

<u>Source</u>

Summer Bridge Intake Survey

Q4. Which high school did you attend?

Response	Ν	%
Henry M. Gunn High	2	8%
Santa Clara High	2	8%
Fremont High	1	4%
Independence High	1	4%
James Lick High	1	4%
Leland High	1	4%
Los Altos High	1	4%
Menlo-Atherton High	1	4%
Mountain View High	1	4%
Oak Grove High	1	4%
San Mateo High	1	4%
Other (please specify)	11	46%
Total	24	100%



NOTE: Other responses includes: East High, Edge Community, Gunderson High School, Irvington High School, Pacheco High School, Silver Creek High School (Idaho), St. Elizabeth High School, Stanbridge Academy (x2), The King's Academy, and an unnamed school in El Salvador.

Response N % 2013 9 38% 2012 6 25%

Q5. When did you graduate high school?

	<u> </u>	2070
2007-2011	5	21%
2006 or before	4	17%
Total	24	100%



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Q6. What is the last math class you have taken?

Response	Ν	%
Algebra 2	11	46%
Algebra 1	5	21%
Geometry	3	13%
Other (please specify)	2	8%
Basic Math/Pre algebra	1	4%
Precalculus (Algebra)	1	4%
Trigonometry	1	4%
Calculus	0	0%
Total	24	100%

NOTE: Other responses includes Intro to Statistics and AP Statistics



Q7. When did you take you last math class?

Response	Ν	%
This year	3	13%
1 year ago	10	42%
2-3 years ago	7	29%
4 or more years ago	4	17%
Total	24	100%



Q8. What grade did you receive in your last math class?

Response	Ν	%
A	1	4%
В	9	38%
С	8	33%
D	0	0%
F	1	4%
NP	0	0%
Р	0	0%
W	0	0%
Don't remember	5	21%
Total	24	100%



Q9. What is your educational goal?

Response	Ν	%
Transfer to a four-year	16	67%
college or university	10	07 /0
Earn an associate degree	2	8%
Improve basic skills	2	8%
Undecided/Other	3	13%
Continue educational	1	10/
development	I	4 /0
Earn a certificate	0	0%
Advance/Prepare for career	0	0%
Total	24	100%



Q10. How many hours a week do you currently work for pay?

Response	Ν	%
I am not currently working	14	58%
1-10 hours/wk	2	8%
11-20 hours/wk	3	13%
21-30 hours/wk	4	17%
31-40 hours/wk	0	0%
Over 40 hours/wk	1	4%
Total	24	100%



Q11. How many classes are you planning on taking at Foothill in fall?

Response	Ν	%
1 class	0	0%
2 classes	6	25%
3 classes	4	17%
4 classes	7	29%
5 classes	2	8%
6+ classes	3	13%
No classes	2	8%
Total	24	100%



Q12. How many hours a week are you planning to work for pay in the fall?

Response	Ν	%
I do not plan on working	8	33%
1-10 hours/wk	7	29%
11-20 hours/wk	3	13%
21-30 hours/wk	5	21%
31-40 hours/wk	1	4%
Over 40 hours/wk	0	0%
Total	24	100%



Q13. Are you interested in learning about financial aid options to help pay for college?

Response	Ν	%
Yes	16	67%
No	8	33%
Total	24	100%



Q14. Please indicate why you joined the Summer Bridge program (check all boxes that apply):

Response	Ν	%
I would like to improve my math placement test	20	83%
It's been over a year since I've taken math.	12	50%
I'm nervous about taking a math class in college.	7	29%
My counselor suggested it.	5	21%
Other	0	0%
Number of respondents	24	

NOTE: Respondent could selct more than one answer, so percentages will not equal 100%



Q15. How would you rate your overall math ability compared to the average student?

Response	N	%
Highest 10%	0	0%
Above Average	1	4%
Average	14	58%
Below Average	8	33%
Lowest 10%	1	4%
Total	24	100%



Q16. Rate your confidence level regarding your ability to perform the following math concepts.

Multiplying or Dividing fraction without a calculator

Response	Ν	%
3- Confident	3	13%
2- Some confidence	17	71%
1- No confidence	4	17%
Total	24	100%



Adding or Subtracting fractions without a calculator.

Response	Ν	%
3- Confident	9	38%
2- Some confidence	11	46%
1- No confidence	4	17%
Total	24	100%



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Operations (+, -, x, /) with decimals, without a calculator.

Response	Ν	%	100%
3- Confident	7	29%	90%
2- Some confidence	12	50%	
1- No confidence	5	21%	80%
Total	24	100%	70%
			60%
			50%
			40%



Operations (+, -, x, /) with negative numbers, without a calculator.

Response	N	%
3- Confident	7	29%
2- Some confidence	15	63%
1- No confidence	2	8%
Total	24	100%



Solving equations for x.

Response	Ν	%
3- Confident	5	21%
2- Some confidence	17	71%
1- No confidence	2	8%
Total	24	100%



Plotting points on a graph [Example: (-3, 5)].

Response	Ν	%
3- Confident	6	25%
2- Some confidence	15	63%
1- No confidence	3	13%
Total	24	100%



Finding the slope of a line.

Response	Ν	%
3- Confident	2	8%
2- Some confidence	12	50%
1- No confidence	10	42%
Total	24	100%



Graphing a line from the equation of a line.

Response	Ν	%
3- Confident	3	13%
2- Some confidence	8	33%
1- No confidence	13	54%
Total	24	100%



Finding the equation for a line if you are given the graph.

Response	Ν	%
3- Confident	2	8%
2- Some confidence	10	42%
1- No confidence	12	50%
Total	24	100%



Working with rules of exponents.

Response	Ν	%
3- Confident	3	13%
2- Some confidence	15	63%
1- No confidence	6	25%
Total	24	100%

