

SUMMER BRIDGE 2013 - MATHEMATICS EVALUATIONS

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Summer Bridge 2013 - Mathematics Evaluations

Introduction

The Summer Bridge Program at Crafton Hills College (CHC) is a 2-week program required for students who are accepted to the Left Lane Program¹ and led by staff at the Tutoring Center. The Summer Bridge Program objectives are to 1) orient students to the college campus life and 2) prepare them to the content that they will be taking in the Fall semester. Students are placed in either mathematics or English tracks based on the following criterion: 1) their assessment scores, 2) their track preference, and 3) the space available in each track (the program usually accommodates 200 students in each track). Students in the program participate in Bridge activities that include general academic skills in large groups such as time management, study skills, an introduction to campus life, college expectations, discipline-specific content, and others. Students also preview content for courses they will take in the Fall in conjunction with strategies for success. This report analyzes the results of the Mathematics Summer Bridge Program evaluation completed by student respondents who participated in the Summer 2013.

Summary of Results

Sample

143 Students responded to the Math Evaluation

- 64% of the respondents attended the Morning session
- 36% of the respondents attended the Afternoon session

98% or more of the respondents **Agreed** or **Strongly Agreed** with the following statements:

- My math skills improved because of the Summer Bridge Program.
- The Bridge facilitator was knowledgeable about the subject matter.
- The Bridge facilitator's presentation style and techniques were effective.
- I feel more prepared for the start of classes because of the Summer Bridge Program.
- I found the math handouts and materials helpful.
- I would recommend the Summer Bridge Program to others.

84% or more of the respondents assigned **a rating of 5 or 4** [utilizing a five-point scale where 5 = Extremely Valuable and 1 = Not at all valuable] to the following questions:

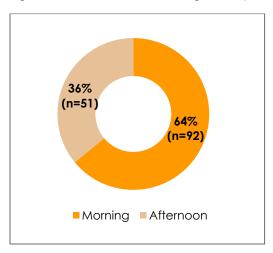
- How easy was it to understand material provided in the program?
- How valuable was the time management session?
- How valuable was the Reading in College session?
- How valuable was the In-the-Classroom session?
- How valuable was the Prepping for Tests session?
- How valuable was the Transfer Center/STEM session?
- How valuable were the Tutoring Center/Study Groups session?

Methodology

A paper evaluation with subject specific questions related to the English Summer Bridge track was administered to respondents at the end of the program in the Summer 2013. The evaluation consisted of multiple-choice questions where respondents were asked to provide their level of agreement with statements about Summer Bridge and to rate how valuable were various sessions they participated in. In addition, respondents were also asked to provide open-ended feedback about the Summer Bridge Program. Individual names mentioned in the open-ended comment tables have been removed and replaced with "[Name]" to protect identities. Respondent comments were categorized by the researcher. A limitation to the categorized comments is that reviewers of the comments might group them differently. Although 143 students completed the evaluation, any "Not-applicable" and/or "missing" answers were omitted. Figure 1 and Tables 1-5 illustrate the results of the evaluation.

Findings

Figure 1. Number and Percentage of respondents' attendance to sessions of the day.



Tables 1-2 illustrate the results of the responses from the evaluation participants. Ninety-eight percent or more of the students who participated in the Summer Bridge Strongly Agreed or Agreed with six statements about the program. Eighty-four percent or more of the respondents assigned a value rating of 5 or 4 to questions regarding the Summer Bridge sessions and activities. Respondents were assigned the lowest value rating to the Campus Tour activity (75.2%).

Table 1. Respondents' level of agreement with Summer Bridge statements.

Statements	Strongly Agree		Agree		Disagree		Strongly Disagree		Total
	#	%	#	%	#	%	#	%	
My math skills improved because of the Summer Bridge Program.	70	49.3	72	50.7	0	-	0	-	142
The Bridge facilitator was knowledgeable about the subject matter.	114	79.7	28	19.6	1	0.7	0	-	143
The Bridge facilitator's presentation style and techniques were effective.	101	70.6	41	28.7	1	0.7	0	-	143
I feel more prepared for the start of classes because of the Summer Bridge Program.	99	70.2	42	29.8	0	-	0	-	141
I found the math handouts and materials helpful.	79	55.6	61	43.0	2	1.4	0	-	142
I would recommend the Summer Bridge Program to others.	115	81.6	25	17.7	1	0.7	0	-	141

Note: "Missing" and "Not Applicable" responses were removed from this table.

Table 2. Respondents' value ratings to questions regarding Summer Bridge sessions and activities.

Questions	5 - Extremely Valuable		4		3		2		1 - Not at all valuable		Total
	#	%	#	%	#	%	#	%	#	%	
How easy was it to understand material provided in the program?	56	40.0	70	50.0	13	9.3	1	0.7	0	-	140
How valuable was the time management session?	93	65.5	37	26.1	8	5.6	4	2.8	0	1	142
How valuable was the Reading in College session?	67	47.2	55	38.7	19	13.4	1	0.7	0	1	142
How valuable was the In-the-Classroom session?	65	45.8	59	41.5	17	12.0	1	0.7	0	-	142
How valuable was the Prepping for Tests session?	76	54.3	48	34.3	15	10.7	1	0.7	0	1	140
How valuable was the Transfer Center/STEM session?	50	42.0	51	42.9	17	14.3	1	0.8	0	1	119
How valuable were the Tutoring Center/Study Groups session?	71	50.4	50	35.5	17	12.1	2	1.4	1	0.7	141
How valuable was the Campus Tour?	61	43.3	45	31.9	21	14.9	13	9.2	1	0.7	141

Note: "Missing" responses were removed from this table.

In Table 3, respondents stated that Summer Bridge started with an easy level of difficulty and progressively became more difficult. Respondents' stated that it was a balance of simple and challenging material; that it was neither easy nor difficult. Respondents also mentioned that some of the program material was too easy and also suggested implementing better approaches to the material. Some comments mention specific Summer Bridge material that poised a challenge to respondents.

Table 3. Respondents' open-ended comments on how Summer Bridge can improve program material.

Material level of difficulty was balanced (n=19)

- Everything was neither hard nor easy.
- Beginning was easy but harder throughout the week
- Everything had a perfect mixture of challenging and simple problems so you could understand the basics and branch out from there.
- Easy in the beginning, but harder as Bridge progressed.
- It was about 50/50. Some of the material was simple review, while other review helped me learn completely what I had trouble with in the past.
- It was not easy but it became easier after the facilitator's explained it to us.
- The beginning was really easy but topics progressively became more challenging.
- Nothing felt too easy or too hard that we learned. It felt like the appropriate material. I should be learning at a math level I am most comfortable at.
- Nothing seemed too easy.
- Though some topics seemed hard at first, it got easier once we reviewed.
- The one thing about the handout was that it started off easy, but it quickly turned into difficult problems the instructors didn't cover.
- Nothing was too easy. I already knew most of the topics we went over, but going over differences, sum, etc. of cubes were difficult for me to do.
- Everything became much easier when explained by [Name].
- The difficult level was average.
- Were all very easy. The only one that was a bit difficult for a while was factoring cubes.
- The first half was easy and the second half more difficult. It was a good review. I wouldn't have changed anything.
- It wasn't all easy, but some of the material that we did I remembered how to do it. Although the stuff I didn't know; she was very helpful.
- The whole class was too easy except for the fractional equations solving for variables that was somewhat cumbersome, but I rejoice in the challenge.

• Everything was helpful. I really needed the review. He did a great job teaching us the topics; not boring at all. I fell much more confident now going into the semester. Math is challenging for me, but nothing was too hard or too easy for me to do.

Material was too easy/review (n=18)

- Everything was review; it was easy. I'm glad though so I can get refreshed since I didn't take a math senior year.
- Everything was too easy because it was such basic math.
- It was easy.
- Everything was mostly review so for the most part it was easy.
- Lots of easy work; did not need to relearn signed numbers, distributive property, linear equations or PEMDAS.
- No problem was too hard and when they were, it was a typo on the sheet so they weren't hard after all. Need harder problems.
- Slope was too easy because I learned about it in seventh grade.
- Adding and subtracting negative numbers -- too easy.
- A lot of the worksheets were basic math. Maybe focus more on pre-algebra.
- Everything that we went over was like review for me so it was easy.
- All worked well; most things started feeling easy as I stared to remember.
- It was a refresher and helped a lot.
- Majority of the topics were review.
- Math topics seem very easy to understand.
- No everything was very understandable.
- Nothing seemed too hard, but some of the repetitiveness seemed too easy.
- The beginning of things seemed really easy. I feel like the first two days should have been quick review and pushed into the first day.
- The exponents' worksheet was too easy because we have already had a lot of practice with them throughout high school.

Material was appropriate/no improvement needed (n=12)

- The material was appropriate for the subject it is intended for.
- All of the math topics worked well and were very helpful.
- Distribution of a negative and solving for the variable worked well.
- Don't; the material was great considering the level of math I was in.
- It was great!
- The process of learning helped made understand a lot easier.
- The review was just right. I definitely had forgotten how to do a lot of those problems but [Name] definitely helped.
- No improvements needed.
- No, everything was perfect review for me. I did learn a few things which will be very useful when I start my math class this fall.
- No, it was doable and good review.
- Nope. Great balance.
- Perfect.

Better approach to explain material (n=9)

- All the math topics were great when some got turned into a game.
- Incorporate various ways to approach a problem.
- Deeper insight of more complex material. However, it was helpful.
- I enjoyed the material. I wish we could have gone deeper into the concepts.
- Working through many more examples would be helpful. The worksheets would be better if they had one
 example stated.
- Don't show us the answers.
- No just need a bit more one-on-one explanations.
- Some was a bit redundant.
- Last few topics were unhelpful; there was not much explanation and a lot of slides on presentation were incorrect. I think handouts should have been homework.

Material was difficult (n=5)

- Something's were difficult at first but [Name] really helped me through it.
- Certain worksheets were too hard; if [Name] didn't go over them with us I would have been lost.
- Sometimes if there was something too hard I felt like we would go through it a little fast but I think that's just because it takes me a while to understand math.

- Factoring seemed too hard but it was helpful.
- The worksheets from day 6 and 7 were difficult. I didn't understand the material.

In Table 4, for the most part include comments that includes examples of how the Summer Bridge program helped respondents. Most comments indicated that the program helped participants with an introduction and preparation to college life followed by math skill-building.

Table 4. Respondents' open-ended comments about the help they received through the Summer Bridge program.

Introduction and preparation to college life (n=69)

- Better prepared for college.
- Gives you great knowledge and skills to use in college. The SSAO meetings were extremely helpful to get some review for class and get you a step ahead.
- Got me more familiar with the campus and programs as well as what to expect.
- Got prepared for college.
- All was useful and helped me warm up for the semester.
- Helped me get a feel for the college life and how to manage myself so that I can still be successful.
- I don't feel like such a freshman on my first day here.
- I feel more prepared for college and more excited.
- I feel it made me remember a lot of stuff I have forgotten, and has given me a lot of helpful advice to succeed in college.
- I now know what to expect from college so that I can do better.
- It was very good at refreshing your memory and getting you ready for college.
- It helped me get prepared for college math and kind of how college is going to be.
- It helped me prepare for college.
- It helped me learn about college.
- I am more comfortable coming here for the Fall semester.
- It gave me an idea of what to expect in college.
- It gave me the great opportunity to be able to experience college before it began and it gave me great tips on being successful in college.
- It helped me more mentally prepare for not just math but college in general.
- It helped me understand what I will be expecting of college.
- It helped me to be 10X more prepared for what to expect this fall.
- It will be extremely helpful for when Fall semester begins.
- It made me more comfortable with starting college.
- It helped me better understand the campus and what is expected for my major.
- It helped me get familiar with the campus. Understand what class will be like and the lectures were very helpful.
- It helped me get ready for the start of school
- To get me prepared for college and show me what to expect.
- More prepared for college.
- It helped me sort out differences between what is expected in high school and college.
- It showed me techniques that will help me transition from a high school student to a college student ready to succeed.
- It helped prepare you for school a lot.
- It introduced me to what college is going to be like.
- It helps get ready for the upcoming year.
- I think I am prepared for my class in the fall. I forgot little things.
- Refreshed my mind and prepared me for class.
- It helped me understand what to expect and where things are on campus.
- I didn't know the campus before the tour.
- It helped me know the campus and material better.
- It helped me remember most stuff I forgot and I feel much more prepared for actual class.
- Oriented me to the college so I'm not lost on the first day. Re-acclimated me to school life.
- Yes, the Summer Bridge program was very beneficial, especially the campus tour so now I have the knowledge of where my classes will be located.
- There are some things coming out of high school that you may never know until you stumble through it once you start school.
- The program got me back into the school mindset.

- It was a good warm-up for class and helped me learn where everything was on campus.
- It was a very useful program if you're just starting college. [Name] was a great tutor.
- Helped review stuff you have forgotten before you go back to school.
- Now I know what to expect; got basics down. This program is a great gateway to college. It motivates you to do well.
- Made me feel more comfortable and less scared about starting college. It was a great experience in my opinion.
- It was helpful to for me because it has prepared me for what college is going to be like.
- It gave me a heads up and taste for how things will be.
- I became much more familiar with everything. I'm a lot more confident than before the program.
- Informed me with a lot; I don't feel lost anymore. I just have to get used to everything.

Improved math skills (n=44)

- Factoring; the group method.
- Helped me prepare for being a college student and refreshing my math skills.
- I feel really prepared for my math class.
- I think that the Summer Bridge was helpful to me. It made math much easier to me and I learned new methods.
- Definitely yes. If I hadn't taken Bridge I probably would get a very bad grade in math.
- It helped me by refreshing my math skills.
- I'm refreshed on all my math. I'm ready for math 090 now.
- It helped me brush up on my math, which was much needed.
- It helped me refresh my math skills.
- If refreshed my memory about math and informed me about important information regarding the start of school and life at school.
- It helped me prepare for what I am going into. Helped me with math skills.
- Yes, because it helps you start the semester prepared for math or English. Test taking, study tips were good.
- We did really basic math that helped me build a foundation that I missed in elementary school.
- My math skills got way more improved.
- It helped me improve my math skills and it also taught me more about this college. It helped me to have a better start as a freshman in college and I think it will help me be more successful.
- It helped me with math subjects that I had little understanding of or that I had forgotten.
- It helped my memory of math.
- It helped me with math. Also, it prepared me for college.
- It really prepared me for my math class and I feel I might be ahead.
- It helped me better prepare for college by showing us the campus and by reviewing math skills that I forgot.
- It helped refresh my math skills. The classes were helpful and the prep courses were really helpful and I learned new information and techniques.
- It prepared me for math and I feel much better.
- It helped refresh my mind after not having a math class for over a year.
- It refreshed me on my math skills and prepared me 10 times better for college if I didn't do the Bridge program. I learned a lot of math plus extra information about the campus.
- It refreshed my memory of math. I feel like without it I would not be prepared for my fall class.
- It refreshed my math skills since I didn't have class senior year.
- Made me feel more comfortable with my math skills.
- It was very informative. It gave me a jump start on math. Also the advice on how to perform in college was helpful.
- The Summer Bridge program was somewhat helpful for me. This program helped me remember some material in math. It also helped me prepare for college life, such as learning how to manage my time.
- The Summer Bridge program was helpful because it prepared my mind for what is to come in this semester's math course.
- The Summer Bridge program better prepared me and refreshed my math skills.
- I would recommend Summer Bridge program to my friends because it is an extreme refresher to the subject taught.
- It brought everything I know about math back into my head. The Summer Bridge Program helped me be able to walk into school on the first day.
- The math review is super helpful and you get to know the campus well, also you meet new people.
- It was very helpful because now I am ready for school to start and I am refreshed in my math skills too.
- Refreshed my memory.

- It refreshed my memory.
- It helped me to go over the basics that I had forgotten. It also helped me to be prepared for what will be expected of me in the future.
- It refreshed my memory on many things.
- It helped me remember some of the material that was fuzzy.
- It helped me remember things that I forgot so it was very helpful to me.
- It explained topics I was never able to get before.
- Yes, it benefits you a little to refresh your memory.
- I really needed this review, and I will take advantage of the tutoring center.

General Commendations (n=8)

- Helpful for future preparation.
- This program was definitely worth my time and I feel very blessed to have had this opportunity to have such a great environment.
- Summer Bridge has helped me and it would help others too.
- It was a great experience and very helpful.
- It's so beneficial. I got my classes and I'm not worried about the challenge.
- I enjoyed it. I already feel "at home". I adore my facilitator [Name].
- Everything was good. Nothing was boring.
- I think this is good for people who had a year or more break between their last class and now.

Opportunity to network/make friends (n=4)

- I got to review and meet a lot of new people.
- I had a kick start into learning again, and I was excited to begin my first years as a student. Met some awesome people.
- I know more now and it was a good chance to meet new friends.
- I would recommend Summer Bridge to all of my friends. It was a great experience. I met people who can help me later in the year; like tutors.

Improvement recommendations (n=4)

- Time management was redundant because I am an avid calendar/planner.
- The program was not bad but the accountability that comes with being in Left Lane is not my favorite.
- Everything was mostly review so for the most part it was easy.
- It was all pretty much review for the most part.

Priority status (n=4)

- Yes, for priority status.
- Helpful not only with priority but just helping get your foot in the door.
- It was very helpful. It helped me review and let me get priority classes. Plus, you meet new people before school even starts.
- The Summer Bridge program was very worth it because I got priority registration.

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Strategies for success (n=3)

There were many elements that were helpful: note-taking, strategies, reading information (ie. scanning techniques - so helpful). Thank you so much!

It gave me many tips such as time management. Also a better knowledge of the campus.

Everything was fine; if I needed help, I asked and she helped me. Study tips great!

In Table 5, respondents were asked to provide any additional comments to improve the Summer Bridge Program. Most comments expressed that there were no changes needed to improve the program followed by suggestions to implement more interactive and engaging activities.

Table 5. Respondents' categorized comments on how to improve the Summer Bridge Program.

No changes needed/recommended (n=23)

- Everything seemed to work great for me so I have no input on the matter.
- No, everything was nice.
- No, everything was helpful.
- No, I believe that you guys are doing very good helping us.

- No, I think it was well planned.
- None that I can think of.
- None, it was excellent. Don't put such a cute girl in my class.
- None. It's a wonderful program and I actually enjoyed it and got a lot out of it.
- Nope it was A-Okay.
- Nope, it's pretty awesome.
- Nothing, everything is good as it is.
- Nothing, the program was very organized and helpful.
- Overall, I think the program is fine as is. I do not see any problem with it.
- The program is great. It is good to get to know people.
- It was solid.
- I think none; you're such a wonderful program.
- I have none.
- Good as is.
- Great job.
- I thought it was good.
- I can't think of anything to improve.
- It's pretty well done. It can only get better with time.
- The program was so insanely helpful and anxiety reducing.

Interactive/engaging activities (n=16)

- I would suggest planning learning activities instead of just giving out work skills. For example, our class played "math jeopardy", and overall, it made the learning experience more active and engaging.
- More activities.
- More games. Things that involve interaction with one another.
- More group activities as a whole; not just one class.
- More partner discussion; that is when I meet people.
- Maybe make the tutoring sessions a little more fun by implementing games into them.
- Do more examples on the board.
- Less repetitive worksheets.
- More fun and exciting.
- Incorporate information we will learn for the class we will be attending to become introduced to it.
- Learn more about other services on campus besides tutoring center. All topics worked well; some were
 just boring.
- Make a little more time to get to know others in the program.
- Talk about electronics & use in class setting.
- More music
- The lectures in the LRC should be more hands on; engaging.
- More time as a whole group.

General improvements suggested (n=11)

- I think the Summer Bridge program is excellent; just needs a few improvements with topics covered.
- Just one, don't put the answers right away on the power points.
- Make sure name tags are prepared ahead of time.
- More benefits.
- More food (pizza would be awesome) every day.
- Always have doughnuts.
- You shouldn't get dropped for missing a day/class.
- Answers to all the worksheets.
- Do some more advanced topics rather than the basic material.
- Don't have a lecture on how to pay attention in class because people won't pay attention. Maybe next time you should have breaks in between class time. 10-15 mins. at least.
- Getting to meet your teachers.

Staff commendations (n=9)

- The program was well organized. Tutor was very helpful and easy to work with.
- SSAO leader kept a positive/funny attitude; it kept people more interested. Put harder Q's on handouts
- Students that don't want to take the program seriously should be identified because they are EXTREMELY disruptive. [Name] was GREAT instructor; very motivational and supporting. I hope everyone had a good experience like I did.
- Ehh...I don't care. I won't be in it again. So make it 4 weeks long. Just kidding. Goo Crafton!! [Name] was

very smart and patient. She made fractions our friends.

- None, [Name] was awesome.
- [Name] was such a beautiful and knowledgeable woman. She is an amazing tutor and helped me out so much. [Name] is very weird but extremely giving. God bless them both.
- [Name] was the best tutor; she was very good at explaining the topics. I have a much better understanding thanks to [Name]. She also made Bridge fun.
- How to manage homework could be covered. [Name] explained everything in good detail. Things were interactive and engaging.
- Have [Name] teach every class.

Improve length of activities (n=5)

- Shorten it; too much information was stretched out.
- Shorter days.
- I would suggest shortening the length of the sessions in the LRC building.
- For it not to be so long.
- I know it is a 2-week program and we have to cram things, but it felt too rushed during math times and didn't feel like we were heavily hitting the topic.

Improve the campus tour (n=3)

- During the campus tour it should be smaller groups so everybody can hear and someone louder.
- The tour was ridiculous.
- More detailed campus tour. It felt rushed and we had a half hour left over afterwards.

Program participation recommendation (n=1)

• I would recommend it to some friends who want to succeed in college and get the classes they need.