Crafton Hills College

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Institutional Effectiveness, Research & Planning

Research Brief

Results from the 2013 Sci Fri Event Evaluation for High School Students Interested in STEM

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Purpose of Brief: Approximately 100 high school students attended Crafton's First Annual Sci Fri event. Sci Fri is the college's spring outreach event targeting local high school students who express an interest in pursuing a STEM major. Students listened to a keynote speaker and participated in workshop sessions related to STEM. This brief examines the results of the event's evaluation completed by 81 students who participated in the 2013 Sci Fri Event.

Summary of Findings:

Student Plans after Graduating High School

The most prominent plans after high school graduation were:

- Attend Crafton Hills College (47%)
- Attend a 4-year college or university (32%)
- Attend another community college (26%)

Overall Event Satisfaction

100% of the respondents agreed or strongly agreed with the following statements:

- Overall, I am satisfied with today's visit to CHC
- Today's workshops were interesting and useful
- After today's visit, I learned more about the science programs at CHC

The respondents *were least in agreement* with:

- After today's visit, I understand the application, registration and financial aid processes at Crafton Hills College (68%)

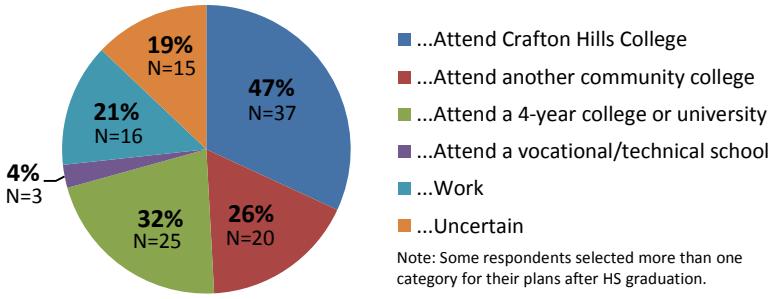
Workshop Sessions

100% rated the Biology Workshop as "*Good*" or "Excellent"
97% rated the Keynote Address as "*Good*" or "Excellent"
96% rated the Chemistry Workshop as "*Good*" or "Excellent"
74% rated the Mathematics Workshop as "*Good*" or "Excellent"

Overview

Figure 1, Table 1 and 2 illustrate results from an event evaluation completed by local high school students who participated in the 2013 Crafton Hills College Sci Fri event at the college campus. The event presented students with an opportunity to learn more about Science, Technology, Engineering and Mathematics (STEM) majors and education at Crafton through several related activities. The evaluation prompted respondents about their future plans after graduating from high school, their level of agreement with four statements about the event activities, and ratings of four different workshop sessions, including the keynote address, they participated in.

Figure 1: Respondents plans after high school graduation.



Note: Some respondents selected more than one category for their plans after HS graduation.

Table 1: Respondents level of agreement with statements about the 2013 Sci Fri event.

Statement	Strongly Agree			Agree			Disagree			Strongly Disagree		
	#	N	%	#	N	%	#	N	%	#	N	%
Overall, I am satisfied with today's visit to Crafton Hills College.	44	81	54	37	81	46	0	81	-	0	81	-
Today's workshops were interesting and useful.	35	79	44	44	79	56	0	79	-	0	79	-
After today's visit, I learned more about the science programs at Crafton Hills College.	54	80	68	26	80	33	0	80	-	0	80	-
After today's visit, I understand the application, registration and financial aid processes at Crafton Hills College.	10	77	13	42	77	55	22	77	29	3	77	4

Note: The total number for N on this table varies because respondents did not answer every question.

Workshop Sessions

Table 2: Ratings of the sessions respondents attended at the 2013 Sci Fri event.

	Excellent			Good			Average			Poor		
Session	**#**	**N**	**%**	**#**	**N**	**%**	**#**	**N**	**%**	**#**	**N**	**%**
Keynote Address	54	78	69	22	78	28	2	78	3	0	78	0
Biology	60	81	74	21	80	26	0	81	0	0	81	0
Chemistry	55	81	68	23	81	28	3	81	4	0	81	0
Mathematics	27	81	33	33	81	41	17	81	21	4	81	5

Note: The total number for N on this table varies because some respondents did not answer every question.

Methodology

The Sci Fri event occurred on the Crafton Hills College campus on February 1, 2013 and students who participated completed an evaluation form where they provided valuable feedback on the event. The evaluation consisted of a multiple-choice question to determine the respondent's plans after graduating from high school. Respondents were also asked to rate their level of agreement with four statements about the event on a Likert four-point scale, 4 = Strongly Agree; 3 = Agree; 2 = Disagree; 1 = Strongly Disagree, and rate the four sessions they participated on the following four-point scale: 4 = Excellent; 3 = Good; 2 = Average; and 1 = Poor. In addition, the evaluation gave respondents the opportunity to provide open-ended feedback on what they enjoyed the most and how Crafton could improve the Sci Fri event.

Responses to open-ended questions

What did you enjoy the most about Sci Fri?

- I enjoyed everything. I really liked it all.
- The biology PCR; kids excited about the technology and relevance.
- The penny lab
- That I got to learn more about biology; chemistry.
- I most enjoyed the biology, chemistry and the hands-on workshops
- The biology experiments
- That there is more out there than what I thought
- The penny thing
- I enjoyed the biology and chemistry workshops the most.
- Biology and making the DNA of the strawberries and the stairs.
- I enjoy the lessons that I learned from all of the above. I took all these classes and today's sessions actually refreshed my mind again. So yeah, thank you.
- I enjoyed all the hands on activities. Everything was very interesting and kept me wanting to learn more. Laura's story was very touching. I know I can succeed.
- I enjoyed the chemistry and biology labs.
- I enjoyed the keynote speaker. She was very motivational, as well as the mathematics session. I really learned a lot.
- I enjoyed the lab work the most. It was the most interesting.
- I really enjoyed the chemistry portion.
- The brass penny lab
- The campus.
- The chemistry work stations and some things in molecular or DNA, GMO's and PCR uses.
- The labs and the activities.
- Turning a penny gold.
- I enjoyed touring the campus and learning about several different fields of study offered at CHC.
- I mostly enjoyed the biology and chemistry classes. They were captivating and inclusive.

- The thing I enjoyed the most about Sci Fri was the chemistry and biology workshops.
- What I enjoyed the most about Sci Fri was chemistry and biology
- Lighting staff up
- I enjoyed making pennies turn gold.
- The hands-on experiments.
- Chemistry and biology lab
- Biology portion
- The cool different stuff and then normal life.
- The biology lab
- It was very fun to learn about biology and now they can be applied.
- It was fun and I learned a lot, but it needs better food.
- How they could change the way we live.
- I really enjoyed the biology lab. Just being in a professional lab setting was very enjoyable.
- I enjoyed the most from biology and a lot of interesting things.
- I enjoyed the biology session. I liked how we separated the DNA. Also, the speakers were great.
- I enjoyed the food and the biology lab.
- Hands on activities
- The biology lab
- Being able to do hands on activities.
- The labs and hands on activities.
- The little projects.
- I enjoyed learning about new methods of discovery and the technological advances we can use to further advance technology and modify genes to make them better. I generally liked being able to come here and learn new things.
- I enjoyed every activity we did. I learned a lot more than what I expected. Thank for this opportunity. It was interesting. The teachers are great.
- The guest speaker was cool. The biology teacher is great.
- I enjoyed everything that I did today.
- Learning about genetics, the school that I am about to attend, seeing the teachers are not really scary.
- The biology program seems interesting and will me with my career goals.
- The chemistry section and how new the college seems
- The hands-on experience with bio-lab equipment.
- The instruction from teachers was excellent. They taught at a high level while still letting us understand. The hands on workshops were fun and informative.
- The chemistry labs
- Chemistry
- The hands-on experience
- I enjoyed the biology and the chemistry lab.
- The chemistry experiments
- The interesting workshops and the keynote speaker
- I enjoyed the biology lab because it is a topic that i know a lot about and I am currently writing a speech on.
- Doing the lab
- It was fun and I learned
- The DNA thing
- The experiment in the lab; that's interesting
- It was fun.
- Everything.
- I most enjoyed the biology workshop and the overall atmosphere of the college. Also, the layout of the school.
- The biology workshop. I like the introduction. Have schools come out to check Crafton out and see what to offer.

- Hands-on, very informative, great variety
- What I enjoyed about Sci Fri was the labs
- The chemistry part of changing the penny. Also, the speaker - she was really motivating.
- The lectures the teachers gave
- I really enjoyed the biology and chemistry labs because I love dissecting things and using chemicals.
- I got out of school today; learned more about things
- I enjoyed every part of Sci Fri. I enjoyed most the chemistry section because I got a chance to experiment new things I was not aware of.
- Chemistry: I very much enjoyed plating pennies in brass.
- The keynote [speaker] and talking to inspiring people.
- I enjoyed the burritos, chips, salsa and the biology and learning about the GMO's.
- Doing experiments
- I did like the chemistry a lot
- The experiments were pretty fun.

How can we improve Sci Fri?

- There's no need to improve Sci Fri
- Plan more activities to complete during math. The spring activity was fine, but many groups finished early.
- Little more time in orientation speech.
- The math workshop was not as interesting as the others
- More interesting chemistry and math experiments
- Bring more people and more experience
- More labs
- Nothing.
- Talk about other courses.
- Keep doing what you guys do. I had a wonderful time. Thank you.
- Invite more schools.
- Maybe provide snacks before lunch. Overall everything went very smooth.
- Nothing.
- A bit more labs.
- Having several labs to fit other people's works.
- No need to.
- Having more workshops that the next visitors will enjoy
- Better food.
- Better lunch
- Host it more often and with a wider range of subjects.
- A little more structure in the mathematics class.
- More programs
- The food; more interaction
- The mathematics lab could improve more because it bored me.
- More labs
- There is no need to improve. I think it's good as it is.
- Diversify sciences a bit
- Keep doing what you're doing.
- Staff who is more fun
- I would have liked more mathematics.
- Fewer stairs.
- Mathematics
- A little more exciting math sessions
- I don't know; really it's great
- More activities

- More buildings, theatre, the pool, field
- Better food
- More scientist
- It was pretty good. I can't think of much to improve on.
- It was very good. Just do more interesting things.
- The math session. Maybe by giving students to work on college math will give them a better view of college. That would be a good idea.
- More enthusiastic teachers and more fun.
- One more 5 min break
- More activities
- Show us more around the campus. Talk to us about other majors and classes. Tell us more about Fafsa.
- Do different labs that aren't done in high schools.
- The math class activity was a little short. I think it would be good to have a second one or lengthen the first. The chemistry workshop needed a little work because some of the experiments did not work as expected. The chemistry should have been planned better.
- Class periods need to be sure; more activities.
- Less walking and class periods need to be shorter.
- I was satisfied with today's events. Knowing that this is the first year for Sci Fri, I think it was excellent. Overall I had a good time.
- Talk less.
- More broad approach
- Better experiments because many of them we have already done.
- Choosing which workshops to attend with more options.
- Provide different aspects of the overall topics. The teachers did a good job of connecting the subjects, but I thought that the fields were rather narrow.
- More organized; snack/lunch breaks
- Give a general tour of the college
- I think it was good but needs to be more neat
- The mathematics portion can be developed a little more to be interesting to people who are not really into math.
- Better lab experiments
- Experiments that could be more fun.
- Better Food
- Staff that is more fun
- Maybe some more activities.
- Smaller groups.
- I don't think you should split up the kids from the same school.
- More intense experiments
- Some of the information felt a bit dumbed down. Don't do that please.