# **IGNITING THE SPARK:**

## **Tech Trek STEM Camps for Girls**

Tech Trek

2013 Evaluation

of Tech Trek



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### FOREWORD

Encouraging women and girls to pursue science, technology, engineering, and mathematics (STEM) has been a part of the AAUW mission for more than a hundred years. When I was a student interested in science and mathematics, I experienced gender discrimination, but I never thought that a generation later my daughter would be teased in high school about her interest in and talent for STEM.

Later in life, as an AAUW member, I read the 1992 AAUW research report *How Schools Shortchange Girls*. It resonated with me and motivated me to consider projects that AAUW could perform locally to engage girls in STEM. In 1996, I ran for AAUW of California Program Vice President, mentioning in my speech that we could start a science camp for girls entering the eighth grade. No one batted an eye, so I proceeded with a motion to the AAUW of California state board. The board approved the idea, contingent on funding from the AAUW Education Foundation, and Tech Trek was born.

In spring 1997, AAUW of California received a Community Action Grant from the AAUW national office. The California state board had already approved a plan to enlist AAUW branches statewide to provide scholarships for girls from their communities to attend Tech Trek. Girls from all backgrounds—rural and urban—could live on a college campus for a week as they attended Tech Trek science and math camp.

Sixteen years later, more than 11,000 rising eighth-grade girls in California have enjoyed doing hands-on activities at 10 camps on eight college campuses. AAUW volunteers across the state continue to do the many tasks associated with Tech Trek, including directing camps, raising funds, and recruiting interested girls, faculty, and other volunteers.

Glowing anecdotal stories sent by Tech Trek alumnae and their parents could fill books, but a proper research survey of the girls was needed. An e-mail survey of alumnae from the Woodside Research Consortium was conducted in fall 2006, and in spring 2007 the survey results were published. The results of the survey confirmed that Tech Trek camps were very successful. By 2013, AAUW of California volunteers and AAUW national staff knew it was time to update the survey of Tech Trek alumnae. We chose to reach out to girls who attended the camps from 2006 to 2009, knowing that many of them would be juniors or seniors in high school and freshmen or sophomores in college.

The findings of this updated survey were heartening: Ninety-one percent of Tech Trek alumnae said that the program improved their self-confidence in science, and 82 percent of the girls said they took additional science classes in high school as a result of Tech Trek. Overall, the results were strongly positive—Tech Trek camps still encourage middle school girls to pursue STEM careers. Girls enjoy the hands-on experiences as well as the opportunity to meet other girls who share their interests and women who are STEM professionals.

Today, the Tech Trek program in California serves as a model for similar camps in other states. Preliminary evaluations of these new camps promise a bright future for Tech Trek across the country.

I am honored to have founded this program and to see it live on through the support of the AAUW volunteers and members in California and the AAUW national office. Countless girls have expressed, even many years later, what the camp meant to them, why they wanted to come back as camp counselors or directors, and how Tech Trek made them more confident in their STEM skills.

I hope that the Tech Trek legacy lives on to change the lives of many more girls and that the experience many women had of not being able to participate in STEM education and career paths is no longer a reality for the girls who choose to go down this path in the future.

Marie Wolbach Founder, Tech Trek

## **EXECUTIVE SUMMARY**

AAUW's experiential summer camp for rising eighth-grade girls, Tech Trek, promotes girls' interest and success in science, technology, engineering, and math (STEM) fields. The program's goals are to encourage traditionally underserved students to select STEM courses in high school, motivate girls to continue pursuing STEM through college, and inspire them to enter careers in these fields. To learn how the Tech Trek program influenced past participants, AAUW commissioned Woodside Research Consortium to conduct an online survey asking alumnae who attended camps from 2006 to 2009 about their subsequent academic pathways, attitudes toward STEM, and perceived impact of their camp experience.

Survey results indicate that the majority of Tech Trek respondents elected to take more science and advanced math classes in high school after attending Tech Trek. The vast majority not only graduate from high school and enter college on time but also expect to complete college within four years. Nearly three-quarters of all respondents are majoring in, or intend to major in, STEM fields. More than half of those respondents in college intend to go on to graduate school, and most of those students plan to concentrate in STEM-related subjects and careers.

Alumnae describe Tech Trek's enduring impact on their self-confidence, identity, and attitude toward STEM. Tech Trek boosted their self-confidence not only to do well in science and math classes but also to succeed in school overall. Through exposure to real-world scientific phenomena and female role models, participants credit Tech Trek with introducing them to a variety of STEM careers and opportunities about which they were previously unaware. Respondents cite the positive social-acceptance effect of being with like-minded peers who share an interest in STEM, particularly at the self-conscious stage of adolescence. While they continue to encounter relatively few women in the role of college professor or fellow student in college STEM courses, their understanding of their own interest and potential in STEM helps mitigate the discouraging effects of that gender imbalance.

Tech Trek plays an early and influential role in girls' overall learning. The program catalyzes their interests and opens doors to roles they can visualize in STEM subjects. The experiential nature of Tech Trek's pedagogical approach and curricula—hands-on, interactive, real-life—fosters an understanding of the relevance of science, technology, engineering, and math to campers' lives. Activities like biological dissection, telescopic stargazing, microscopic DNA examining, and visits to crime labs and film studios change girls' formerly held perceptions of science as inaccessible or irrelevant. Ninety-nine percent of survey respondents cite hands-on activities as having the greatest impact on them. Tech Trek is designed to bolster each girl's self-confidence, nurture her interest, and provide her with strategies to set and achieve her goals.

In social cognitive career theory, Tech Trek can be seen as a set of formative inputs along a pathway to interest development and professional identity. A primary outcome that alumnae

report from their camp experience is a growth mindset, whereby students understand that learning in a new realm may take effort but that they are capable of making the effort. Tech Trek helps students understand how they learn best, outlines steps they can take to reach their goals, and empowers them with the self-confidence to pursue whatever field they choose.

## INTRODUCTION

In 1998, 151 California girls attended the first Tech Trek camp. By 2013 more than 800 middle school girls attended each of 10 camps held throughout the state, bringing the total number of girls participating in Tech Trek that year to more than 9,000. As of 2013, camps are held each summer at Stanford University; California State University, Fresno; California State University, Sonoma; Mills College; Whittier College; the University of California, Davis; the University of California, Irvine; the University of California, San Diego; and the University of California, Santa Barbara. Following the model established in California, AAUW expanded Tech Trek nationally in four states in 2013 (Florida, Ohio, Oklahoma, and Washington) and to three additional states in summer 2014.

Applicants undergo a rigorous selection process. Students are recommended by their science or math teachers, counselors, or Girl Scout leaders with parental or guardian consent. Once recommended, the girls complete an application and a short essay. Most AAUW branches then interview local applicants and their parents in person to determine which girls would most benefit from attending the camp. Desired applicants represent diverse backgrounds and have an intrinsic desire to attend the camp. Each participating AAUW branch raises its own scholarships to support their chosen campers, often bolstered by partnering organizations. That way, families do not pay more than a \$50 fee.

Tech Trek immerses rising eighth-graders in a week of hands-on exploration and activities, visiting speakers, field trips, and female STEM role models in a college campus setting, complete with dormitory living.

Tech Trek's original goals remain to

- 1. Encourage a diverse group of young women to take math and science courses throughout high school
- 2. Motivate students to attend college
- 3. Inspire young women to consider careers in science, technology, engineering, and math

A survey of Tech Trek alumnae completed in 2007 captured the impressions of girls who had attended Tech Trek in its first four years, 1998–2001. Woodside Research Consortium was engaged in 2012–13 to conduct this study. The current survey was written with the enduring goals of Tech Trek (cited above) in mind and follows some overall lines of inquiry:

- 1. Are girls continuing STEM studies through high school, going to college, and selecting STEM majors?
- 2. What other STEM-related activities are girls involved in outside of academics?
- 3. What course choices are girls making in high school and college?
- 4. To what extent are girls encountering women in the roles of fellow student, teacher, and professor in their STEM courses?

- 5. Do past attendees intend to go to graduate school?
- 6. To what careers do past attendees aspire?
- 7. What impact did Tech Trek have on girls' self-confidence, identity, and attitude toward STEM?
- 8. What was most important to attendees about their Tech Trek experience?

## METHODOLOGY

In collaboration with Tech Trek personnel, an online survey was designed and administered to alumnae of summer camps held from 2006 to 2009 (appendix A). Questions were developed using the earlier 2007 survey as a basis, asking in more detail about course-taking, informal STEM learning, academic and career aspirations, availability of female role models, and the perceived psychosocial effects of the experience. The survey consisted of 32 questions, including open-ended response and selected response.

From a database of 1,190 e-mail addresses, 260 were undeliverable (bounced), 572 did not respond, and 35 responded only partially, yielding a completed response rate of 323 alumnae, or 35 percent. The highest percentage of respondents came from the most recent cohort of campers, and the response rate descended in order of most recent (younger) to least recent (older) campers, as seen in figure 1.

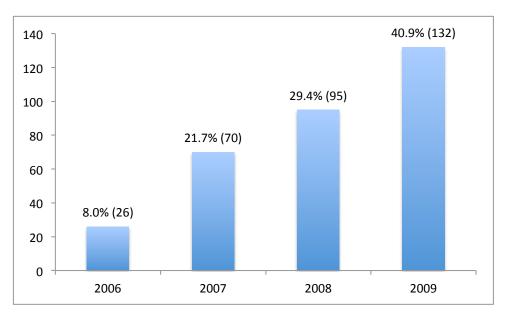


Figure 1. Survey Response Rates by Year of Attendance, 2006–09 (Q2)

This report makes extensive use of individual quotations from answers to open-ended response questions. Each question number is represented with the letter Q and the number of the question on the survey (e.g., Q1). Each student quotation is numbered so that it can be located in full in the appendices. Responses beginning with the number 10 (corresponding to survey question 10) are in appendix L, and those beginning with the number 12 (corresponding to survey question 12) are in appendix K.

#### SURVEY DEMOGRAPHICS

The survey's target population consists of girls ages 16–21 who attended Tech Trek as incoming eighth-graders during the summer of one of the four years from 2006 to 2009. All attended one of seven California college campus campsites (see appendix B). At the time of the survey administration, spring 2013, 70 percent of the respondents were currently juniors or seniors in high school, and 30 percent were freshmen or sophomores in college. The number of non-enrolled respondents (five) was considered negligible and thus excluded from the analysis.

Just under half of survey respondents identify themselves ethnically as white, 22 percent identify as Latina, 13 percent as Asian, 4 percent as African American, 4 percent as Native American, 3 percent as Pacific Islander, 2 percent as Indian subcontinent, and 3 percent as other. English is the only language spoken in 62 percent of the girls' families. (See appendix C for the frequency of non-English languages spoken in the home.)

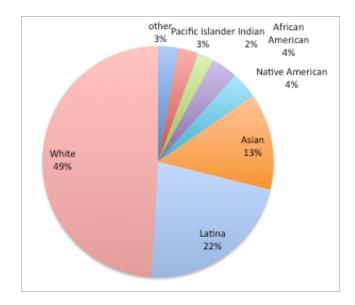
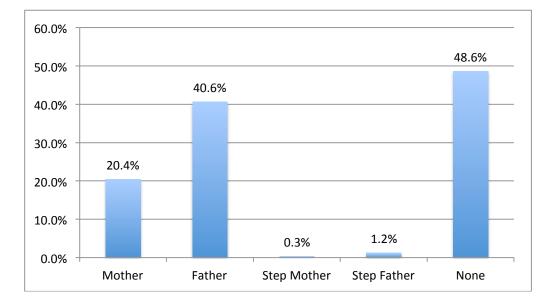


Figure 2. Student Race/Ethnicity (Q32)

When asked if any parent or stepparent worked in STEM fields while the camper attended Tech Trek, 41 percent of respondents reported that their father worked in STEM, 20 percent reported that their mother worked in STEM, and almost half declared that neither parent (or stepparent) worked in STEM-related fields. When asked to describe their parents' jobs, respondents listed cosmetologist, gardener, school bus driver, military service member, forester physician, molecular biologist, nuclear physicist, and many others, as well as unemployed (see appendix D). *Figure 3. At the time you attended Tech Trek, which of the following women or men in your family (if any) worked in STEM fields? (Q11)* 



## FINDINGS

## **1.** Are girls continuing STEM studies through high school, going to college, and selecting STEM majors?

Tech Trek alumnae from the summers of 2006 to 2007 indicate that they graduated from high school on time. The majority (73 percent) of high school graduates are currently in four-year colleges or universities, while 23 percent attend two-year colleges and 4 percent participate in a technical/vocational or job-training program or a professional certificate program. According to the National Science Board's Science and Engineering Indicators for 2012, these rates are higher than the national average for high school graduates (combined male and female) enrolled in postsecondary institutions, of whom 42 percent enter a four-year institution and 28 percent enter a two-year college. (See appendix E for a list of colleges and universities in which Tech Trek alumnae are enrolled.) When asked what year they intend to graduate from college, all current freshmen and sophomore college students indicate they will complete their studies within four years.

## 2. What other STEM-related activities are they involved in outside of academics?

Thirty-two percent of respondents report that they've participated in after-school or nonschool STEM activities during their high school years. Some of these girls attended other summer camps, institutes, and academies. Some elected to take STEM classes and online courses. Several became counselors or junior counselors at Tech Trek or other science camps. Many started or joined STEM-focused clubs (including chemistry, robotics, math, and physics), volunteered in hospitals or nursing homes, or became lab interns in corporations or nonprofit organizations. Students entered competitions and regional and state fairs and attended conferences and career expositions. Among the local, state, and national organizations in which girls participated are WiSE, CABLE, COSMOS, MESA, MOUSE Squad, SMASH, Science Olympiad, American Math Competitions, Math Counts, and KIVA. (See appendix F for a complete list.) Several former campers not only have become junior and senior counselors at Tech Trek while in high school and college but also have returned in the roles of health aide, speaker, teacher, dorm mom, and even campsite director.

Behind this survey question is an attempt to describe the role Tech Trek played in the students' learning ecology, defined as "the total environment of home, school, peers, and virtual spaces that provide opportunities for learning" (Barron, 2006). Based on alumnae perceptions of the lasting influence of their experiences, Tech Trek appears to have three functions in overall learning ecology: catalytic, experiential, and synergistic. Campers see Tech Trek as a catalyst for igniting and sustaining their interest in STEM. The multitude of courses, clubs, internships, programs, projects, peer networks, media resource tapping, and mentoring in which alumnae are involved suggests the extent to which participation in Tech Trek leads to self-initiated learning beyond the summer experience.

#### CATALYTIC EFFECTS OF TECH TREK

Student responses to open-ended questions about the impact of Tech Trek are replete with citations of their camp experience as the life-altering "spark" that "ignited" their interests and set them on a path toward success and fulfillment.

Tech Trek truly was a life-changing experience for me. It sparked my passion for science and math, and gave me the confidence to pursue advanced classes and research opportunities. I honestly don't think I would be where I am today without Tech Trek. I am extremely grateful to Tech Trek for giving me the opportunity to surround myself with other girls my age who were passionate about science and math, and to be in an environment in which we were encouraged to take chances and pursue our passions wholeheartedly. (10.10)

Tech Trek impacted my life because it exposed me to something that I had never been interested in or aware of. My parents did not attend college, so attending college was not something I had in my mind when I was in junior high. However, after attending Tech Trek I knew that I wanted to attend a four-year university. Being in Tech Trek opened my eyes to a life that I did not know about. Spending that week at UCSB made me realize that I enjoy learning about science and math and I have a high interest in these subjects. After experiencing living with other girls in the dorms [and] having science and math classes I knew that I wanted [to attend] a university and I made that my goal. Without the experience of being part of Tech Trek I would not be where I am today—at UC Santa Barbara and preparing to receive my bachelor's degree in biopsychology. (10.46)

#### **EXPERIENTIAL EFFECTS OF TECH TREK**

Tech Trek's informal learning setting is designed to combine interactive and hands-on activities, texts, media, exploration, mentoring, role modeling, knowledge sharing, and direct application to real-world situations. This stands in contrast to a typically more constrained, text-based classroom. Few schools have the resources, facilities, or teachers to venture into more messy, expensive, and time-consuming hands-on exercises or field trips. Conventional middle and high school curricula may not offer courses beyond the basic core science and math syllabi or entertain alternate variations and applications. And the higher the student-to-teacher ratio, the less personal attention each student receives. Many students commented on the unique value of their hands-on, one-on-one experiences with Tech Trek as distinct from what they routinely do at school:

The hands-on activities we participated in were exciting and at the same time they gave me a feeling of pride in myself that I was able to build things on my own and watch them function. Probably my favorite activity was when we learned about electricity and played with some of the hazard-safe materials they had. (12.16)

Tech Trek opened my mind to different sciences than biology such as chemistry, when they taught us how to make our own ice cream; marine biology, when we were taken

out on a boat and studied fish and other life forms from the water; and astronomy, when we were taken on a night walk and given the opportunity to look at the stars with professional telescopes. Tech Trek opened my eyes to many studies and professions that I will keep in mind as I am about to enter into my first year of college. (10.77)

Many other students recalled their fascination with making a hot air balloon out of newspaper and straws, examining the fine fibers of strawberry DNA in a biotechnology class, dissecting a fetal pig, building and programming a robot, seeing a cadaver in a human body class, reenacting a space mission at Chabot Space and Science Center, testing pH levels in water, dissecting squid, measuring the fat content of a McDonald's meal, touring a crime lab and a Pixar film studio, and creating a presentation on world hunger.

#### SYNERGISTIC EFFECTS OF TECH TREK

While innumerable environmental factors (including parents' occupations and availability, expense, and proximity of programs) may contribute to whether girls choose to engage further in STEM-related activities outside of school, Tech Trek opens doors to the variety of ways for young girls to participate in STEM at increasingly sophisticated levels. The Tech Trek approach gives students both psychological and practical strategies for gaining expertise and pursuing their interests. A Tech Trek camper soon realizes her learning can be scattered across contexts, is not limited to school, and can draw from personal contacts, the Internet, the community, institutional and governmental resources, and many other places. Once their interest is sparked during Tech Trek and bolstered with the awareness of supportive resources that help sustain self-initiated learning, girls are well on their way to taking charge of their own learning. The overwhelmingly positive comments from alumnae about the strategies and confidence they gained suggest that Tech Trek acts as a synergistic factor within the larger ecology of the girls' learning environment.

Tech Trek made me realize all the career options I have, and all the steps I can take to get there. (10.248)

I learned that math and science careers were within my reach, and what steps I would need to follow to attain such careers. I also learned that much support was available. (10.23)

#### 3. What course choices are girls making in high school and college?

As the following table illustrates, a majority of alumnae believe that Tech Trek increased their interest in science (96 percent), technology (77 percent), mathematics (69 percent), and engineering (52 percent). Close to half (44 percent) feel that the camp increased their interest in computer programming.

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
Science	0.3% (1)	2.2% (7)	1.9% (6)	37.5% (121)	58.2% (188)
Technology	0.9% (3)	5.3% (17)	16.4% (53)	51.1% (165)	26.3% (85)
Mathematics	1.5% (5)	10.5% (34)	18.6% (60)	48.6%(157)	20.7% (67)
Engineering	1.2% (4)	15.8% (51)	31.3% (101)	35.0% (113)	16.7% (54)
Computer programming	2.2% (7)	19.8% (64)	34.1% (110)	33.4% (108)	10.5% (34)

Figure 4. Tech Trek Increased My Interest In ... (Q5)

Furthermore, 94 percent of alumnae report that Tech Trek boosted their self-confidence in their ability to succeed in science classes, 91 percent feel that their experience gave them greater confidence to do well in school overall, and 78 percent believe that Tech Trek boosted their self-confidence in their ability to succeed in math classes.

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
Science classes	0.6% (2)	1.9% (6)	4.0% (13)	40.9% (132)	52.6% (170)
My ability to do well in school overall	0.6% (2)	2.5% (8)	5.6% (18)	35.9% (116)	55.4% (179)
Math classes	0.9% (3)	6.8% (22)	14.6% (47)	48.0% (155)	29.7% (96)

Tech Trek made me a better learner in all aspects of the word. I am better prepared to answer questions and, especially, ask questions. It showed me that science is what I want to pursue in life and I have a strength in it. (10.301)

Tech Trek increased my confidence in my intelligence and my ability to succeed in advanced classes and challenge myself in all situations. (10.90)

Tech Trek helped expand my knowledge of STEM careers and also motivated me to work harder in high school and not be intimidated to try more challenging courses. (10.169)

Most campers (86 percent) also credit Tech Trek with introducing them to many different STEM careers, and many (73 percent) learned about college majors of which they were not previously aware.

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
Science, technology, engineering, and math (STEM) careers I was not previously aware of	0.3% (1)	5.0% (16)	8.4% (27)	43.7% (141)	42.7% (138)
College majors I was not previously aware of	0.6% (2)	9.6% (31)	17.3% (56)	41.5% (134)	31.0% (100)

Figure 6.	Tech	Trek l	Introduced	Me to	Many I	Different	(Q7)
							1-1-1

Tech Trek helped me realize that there was more to science than just biology and chemistry. I learned that each field has a multitude of branches, [each] more interesting than the next. (10.234)

I always knew that I loved math and science, but I didn't know exactly what field I wanted to pursue. The camp experience showed me many other fields that I wouldn't have known about. (10.231)

Tech Trek sparked my interest in the different fields of science and made me aware of all the possibilities in career choices. I realized how much of the world is dependent upon researchers and engineers. (10.287)

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
Took more advanced math classes in high school	2.5% (8)	12.1% (39)	16.7% (54)	38.1% (123)	30.7% (99)
Took more science classes in high school	1.2% (4)	6.2% (20)	9.9% (32)	40.2% (130)	42.4% (137)

Figure 7. Because of Tech Trek, I ... (Q8)

This combination of interest, self-confidence, and awareness of real-world possibilities led 83 percent of respondents to choose to take more science classes in high school and 69 percent to take more math classes. Beyond the common indicators associated with college readiness such

as parental education levels and family income, participants in Tech Trek are exposed to the importance of course selection. They learn that if they don't take the appropriate succession of courses, they will likely not take the first steps along a path toward completing high school and fulfilling a college major and career in STEM.

The short time I spent at Tech Trek gave me the confidence to do what I love by taking advanced math and science courses, which eventually has led me to my current place in life. I am majoring in biology and minoring in neuroscience and couldn't be happier with my decision to follow my passion for the sciences. (10.72)

Tech Trek functioned as an external push to help me realize that a scientific career was my true calling. Which one? I wasn't sure then, but I was set on the right track afterwards. And so I took as many science courses as I could in high school. (10.95)

Underscoring these comments, figure 8 shows an increasing trend among middle school students to take algebra and geometry before reaching high school. According to the High School Transcript Study data, in 2009 27 percent of female high school graduates had completed algebra before ninth grade, up from 20 percent in 2005 (U.S. Department of Education, 2011). The percentages for those two subjects may signify that these courses were already completed by several respondents in middle school.

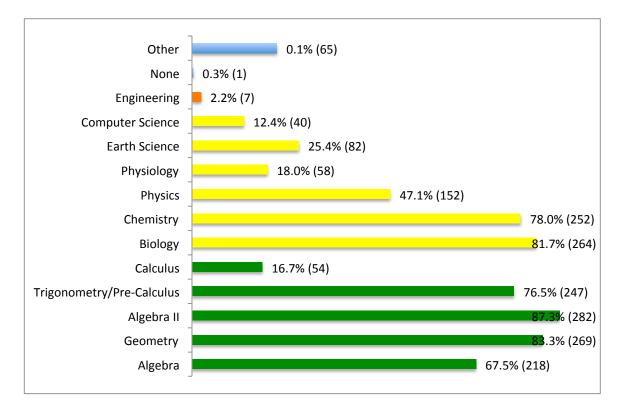


Figure 8. Which of the following non-AP mathematics or science classes did you successfully complete in high school? (Q18) Compared with National Science Foundation statistics on the number of high school graduates (male and female) completing advanced mathematics courses in 2009, Tech Trek alumnae who responded to the survey surpass the national average in most STEM areas. Whereas 87 percent of alumnae completed algebra II, only 78 percent of female students and 73 percent of male students did so nationally. In precalculus, 77 percent of Tech Trek respondents completed the course, while less than 40 percent did so nationally (34 percent of male students and 37 percent of female students). The number of Tech Trek students who completed physics, 47 percent, surpasses the national average of 39 percent. In calculus the numbers are equal, with both groups at 17 percent.

Forty-three survey respondents named additional non-AP mathematics and science classes they've taken (the titles of which were not listed on survey question 18), including agricultural science, anatomy, astronomy, biotechnology, environmental science, forensic science, marine science, and statistics (see appendix G).

Student selections of College Board Advanced Placement science and mathematics courses in high school are reflected in the following figure.

	Currently taking	Planning to take	Completed	Never taken/not planning to take
AP Biology	5.6% (18)	8.0% (26)	22.6% (73)	36.2% (117)
AP Calculus AB	11.5% (37)	11.5% (37)	17.6% (57)	36.2% (117)
AP Calculus BC	6.5% (21)	10.2% (33)	8.4% (27)	42.7% (138)
AP Chemistry	7.4% (24)	5.3% (17)	13.6% (44)	43.7% (141)
AP Computer Science A	0.6% (2)	3.4% (11)	0.6% (2)	55.4% (179)
AP Environmental Science	4.6% (15)	7.4% (24)	7.7% (25)	47.4% (153)
AP Physics B	3.1% (10)	7.7% (25)	4.6% (15)	48.6% (157)
AP Physics C: Electricity and Magnetism	0.6% (2)	2.2% (7)	0.6% (2)	56.0% (181)
AP Physics C: Mechanics	2.2% (7)	3.4% (11)	1.5% (5)	53.3% (172)
AP Statistics	3.4% (11)	14.2% (46)	5.0% (16)	44.6% (144)

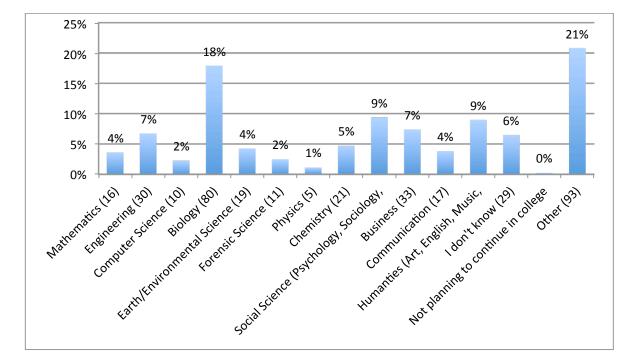
Figure 9. Which of the following College Board AP mathematics and science courses did you take in high school? (Q19) Combining the numbers of students who have completed the course, are currently taking it, or plan to take it, the AP courses most favored (from highest enrollment to lowest) among alumnae are calculus AB, biology, chemistry, calculus BC, statistics, environmental science, physics C: mechanics, computer science A, and finally physics C: electricity and magnetism. Not all high schools offer this array of AP courses, if they offer any AP STEM courses at all.

The following excerpts from students' responses to the question, What impact did Tech Trek have on you? pertain to their choices to enroll in AP classes:

Before attending camp, science class was just another class, but since coming home my interest in science has been beyond excellent. I've taken AP biology and AP chemistry and am currently taking physics. Science has become my all-time favorite class! (10.189)

Tech Trek had a huge impact on me. The next year, my eighth-grade year, I took an advanced math and an advanced science course at North High School. I have continued to take honors and AP math and science classes. Tech Trek gave me a new love for math and science and the confidence to pursue a career in the field. (10.167)

All students (high school and college) were asked about their intended college major, and 73 percent of majors named are in STEM fields. (See appendix H for the full list; 47 percent of the intended majors represented by the "other" category in figure 10 are also STEM-related majors.)



#### Figure 10. What is your anticipated college major? (Q21)

## 4. To what extent are girls encountering women in the roles of fellow student, teacher, and professor in their STEM courses?

Figures 11 and 12 confirm that Tech Trek alumnae are witnessing the persistent national gender gap in STEM fields as they progress through college, a gap that manifests both in the number of female role models they encounter as professors and among their peers in classes. Had the survey asked more specifically about each type of STEM course, the outcome may have mirrored existing realities of fewer women in computer science and engineering courses and a higher count of women in the biosciences (NSF, 2010).

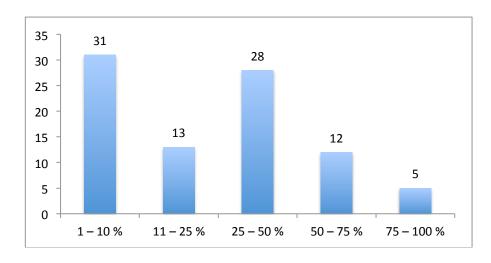
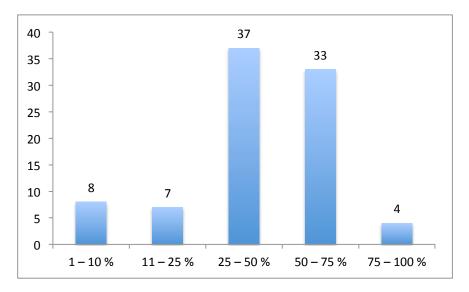


Figure 11. Estimated Percentage of Female College-Level Professors/Instructors in STEM and Computer Science Courses (Q25)

Figure 12. Estimated Percentage of Female Peers in College STEM and Computer Science Courses (Q26)



Once a female student steps into the realm of STEM classes, she may find that she is not alone after all. But taking the initial step often goes against the prevailing norm. As one high school student explained in her survey response

Tech Trek had a huge impact on me. ... If I wasn't introduced to Tech Trek and hadn't attended such things like the women's professional night or been introduced to the technology and careers available to me I probably would have shied away from science thinking it wasn't a very womanly thing to do, whereas now, I see countless women involved in science and math careers who are so successful in their lives I feel like I can do the same with mine. (10.272)

In the words of another respondent,

Women do belong in these fields because the world needs more than the male viewpoint and it is our job as women to encourage each other to strive for these positions in any field, but mostly in the maths and sciences. (12.238)

#### 5. Do past attendees intend to go to graduate school?

The question of whether former Tech Trek participants intend to go to graduate school was posed to campers only from the years 2006 and 2007, since campers from those years would most likely be in their first or second year of college at the time of the survey.

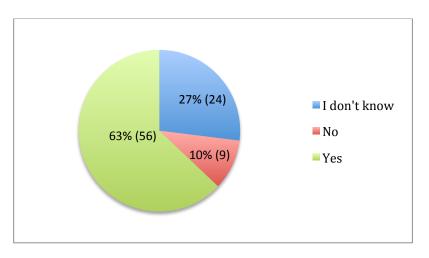


Figure 13. Do you intend to go to graduate school? (Q28)

Out of the 56 respondents who answered yes, 47 indicated what they plan to study in graduate school. Of those 47 respondents, 57 percent plan to study STEM-related subjects. (A complete list of responses can be found in appendix I.)

#### 6. To what careers do past attendees aspire?

All survey respondents, regardless of age, were asked what careers they are considering. A total of 311 students answered the question, and 66 percent of those indicated a career in a STEM field. This statistic echoes the 73 percent of students who named a STEM-related college major in figure 10 (Q21). Careers named range from architect, anesthesiologist, and astrophysicist to materials engineer and veterinarian. (A complete list of responses can be found in appendix J.)

## 7. What impact did Tech Trek have on girls' self-confidence, identity, and attitude toward STEM?

Tech Trek alumnae were asked to indicate which of five suggested effects their camp experience had on them and then to describe in their own words what aspect of the camp they feel had the biggest impact on them. Figure 14 shows alumnae rated "meeting new friends" highest (89 percent). The second-highest rated effect was "new self-confidence in my abilities to learn science or math" (81 percent). These two effects—social acceptance and self-esteem factor heavily in pre- and early teen psychosocial development (Brinthaupt & Lipka, 2002). At this age, girls seek to be taken seriously and valued by peers, are individuating from their parents, and start to develop ideas about directions and goals as well as how to reach them. While most of the survey questions focus on quantifiable cognitive achievements and choices, the more qualitative psychosocial issues and skill sets that Tech Trek influences are no less important (Olszewski-Kubilius & Clarenbach, 2012).

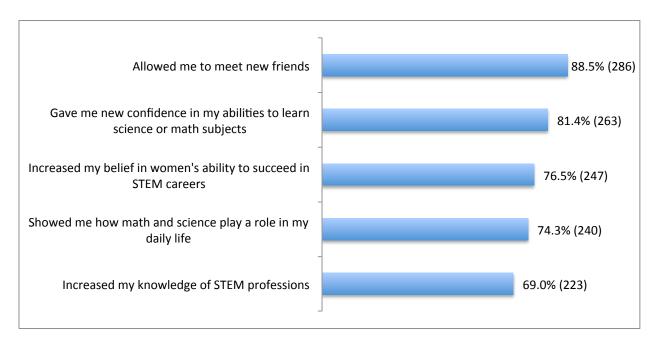


Figure 14. Did going to Tech Trek have any of the following effects on you? (Q12)

The survey questions in figure 14 fit the construct of "social cognitive career theory" (Wang, 2013). This conceptual framework disentangles multidimensional influences—individual, psychological, contextual, and social—that jointly contribute to and promote a student's interest in an area of study. Career selection is seen as a longitudinal process with many input sources along the way. Tech Trek represents an early and formative set of inputs that affect a camper's sense of identity, estimation of her own ability (self-efficacy), interest in STEM, awareness of professional roles and opportunities, and strategies to embrace those opportunities.

#### PEER INCLUSION AND MEETING NEW FRIENDS

The following alumnae quotes emphasize the connections between peer approval, academic aspirations, and a teen's personal identity formation. A sense of belonging among friends in a group who share one's passions enables young teens to define and practice their emerging personality. Tech Trek provides a forum for social affiliation and acceptance, thus fortifying a foundation for girls to continue to thrive in their chosen areas of interest.

I made friendships that have lasted with girls across the state who had similar interests to myself which was a really powerful experience, and especially important given the difficulties many middle school girls have with being themselves. I was also thoroughly inspired by the teachers and strong women around me, and left feeling empowered and confident. (12.63)

What I loved the most was being able to realize that I wasn't alone. That there were girls my age who were intrigued by and in love with science. And while making new friends who understood your passion for science, we were learning more about science, the various paths it can lead you through, and thus nurturing our love and curiosity for it. (12.234)

#### **CONFIDENCE IN LEARNING SCIENCE OR MATHEMATICS**

A crucial factor in a student's motivation to persist in science and mathematics is her selfefficacy belief—she is more likely to pursue a goal she feels capable of attaining. Tech Trek's multifaceted teaching and learning strategies positively shape students' outcome expectations by giving them varied opportunities for successful direct experiences. For many campers, simply being selected and supported to go to camp was a major boost to their self-image. The following excerpts reflect students' high levels of self-confidence.

I would say that the biggest impact Tech Trek had on me was giving me the confidence to really apply myself to science and math. The program showed me that it is cool to be smart and that it is something that should be celebrated and explored. (12.93)

This camp gave me confidence in my math and science abilities which especially helped me this year because I took an AP mathematics course (calculus) and it was extremely challenging for me; however, I learned how to be successful at this camp, which helped me in general to be successful in any challenging courses or classes. (12.228)

#### WOMEN CAN SUCCEED IN SCIENCE AND MATHEMATICS

The understanding that women are just as capable as men are of mastering any STEM field renders students less susceptible to negative stereotyping. Having seen, heard, and worked alongside women scientists and mathematicians during camp, alumnae are predisposed in their resolve and determination to achieve whatever career interests them. The formative role models to whom campers are exposed at ages 12 and 13 help mitigate the effects of gender bias that girls encounter later in high school and in college courses that may not be equally populated by women and men students.

Before I attended Tech Trek, I had not known how valuable women are in society today. My admiration for accomplished women has increased dramatically, and because of this camp, particularly Professional Women's Night, I now want to pursue a career in math or science and make a difference in the world. (12.11)

The biggest impact Tech Trek had on me was that it convinced me that I could be good at science. I was interested in science ever since I was a child. However, I would never see women represented as scientists in movies, television, or books. Even though no one ever told me outright that I couldn't be good at science, I was discouraged because there were no role models for me to follow. Tech Trek was filled with professional women and was empowering. It was a privilege for me to attend. (12.186)

#### MATH AND SCIENCE ARE RELEVANT

The following comments underscore the awareness that alumnae have gained of the ways in which science and mathematics pertain to their daily lives and how dependent their daily lives are on STEM expertise.

The biggest impact on me was learning about how heavily integrated technology was in my lifestyle. Although I was vaguely aware back then of how important it was, until after Tech Trek I didn't really appreciate (as much as I should have) the profound effect that math, science, and technology have on the way I live. (12.176)

Before I went to Tech Trek, science was just science. I didn't know why it mattered in the world. Biology, chemistry, physics, computer science—what was the difference? My experience at camp was the catalyst for me to explore more into all the different ways in which math and science are applied in the world. (12.12)

#### AWARENESS OF STEM PROFESSIONS

Tech Trek sets up a context for young people to envision themselves in various roles and introduces possible routes to reach those ends. When a girl can expect to develop her interests in synchronization with a realizable professional identity, she is more motivated to work toward her goal. The excerpts below reveal the extent to which many professional pathways are invisible to students without access to career information and real-life examples.

Learning about all the different careers there were and all the options that I had opened my eyes and allowed me to see all that I could be. (12.117)

[On] Professional Women's Night, we received firsthand accounts of possible careers and learned all of the fun and interesting stuff associated with STEM careers. The women we met weren't just doing their jobs; they were doing what they loved, and that made a huge impression on me. (12.142)

For all comments see appendix K.

#### 8. What was most important to attendees about their Tech Trek experience?

Survey question 9 asked alumnae to select how important each of six aspects of their camp week was to them, on a scale spanning "not important," "somewhat important," "very important," and "most important." The results (figure 15) show a clear preference for hands-on activities by 99 percent of respondents, of whom 65 percent rated this aspect as "most important." Field trips, being with like-minded girls, the teachers, and the professional speakers are each rated by at least 96 percent of respondents as a close second (combining "somewhat," "very," and "most") in importance, and dorm moms are next most important at 88 percent.

	Not important	Somewhat important	Very important	Most important
Hands-on activities	0.3% (1)	2.2% (7)	32.8% (106)	64.7% (209)
Field trips	0.9% (3)	10.8% (35)	39.3% (127)	48.9% (158)
Being with other girls my age interested in STEM	3.7% (12)	15.5% (50)	43.3% (140)	37.5% (121)
Teachers	1.5% (5)	20.7% (67)	56.7% (183)	21.1% (68)
Professional Women's Night	4.0% (13)	23.2% (75)	37.2% (120)	35.6% (115)
Dorm moms	12.1% (39)	32.2% (104)	35.0% (113)	20.7% (67)

#### Figure 15. Thinking about your Tech Trek experience, how important were the following to you? (Q9)

These results are consistent with the enthusiastic remarks about hands-on activities, cited earlier, regarding the experiential effects of Tech Trek.

Throughout the survey, alumnae volunteered their thoughts about another highlight of Tech Trek's informal learning program: life skills. Many lessons learned carry weight well beyond the goal of STEM involvement. Respondents said the camp increased their awareness of the larger world around them and their self-knowledge. They also commented that they had expanded their social skills, overcome reservations, learned about themselves, and learned to live and work together (see appendices K and L).

Tech Trek taught me more about people than math or science. (12.167)

Tech Trek taught me how to get along with roommates and adapt to new environments quickly. (10.164)

Teamwork was one of the most important things I took away from Tech Trek. (12.80)

For many 12-year-olds, the camp week was the first time they had been away from home. Tech Trek created a community in which they could gain a sense of independence apart from their families and see that support can come not only from parents but from others (teachers, counselors, peers) as well.

By going to Tech Trek, I knew that I could survive on my own without my parents' constant monitoring, and I learned to overcome my shyness and make new friends. (10.128)

Gaining experience in becoming independent—making my own decisions—had the biggest impact in participating in Tech Trek. (12.35)

Students also gained a better understanding of higher education options during their camp week. For those students who never imagined going to college, Tech Trek enabled them to see themselves in that role. For those who had a limited view of attending college, it expanded their vision from a two-year program to a university or from the local college to more varied options further from home. Their Tech Trek summer exposure was one of many influential steps in an evolutionary process, easing their path into a STEM career. The number of women they encounter as classmates in college-level STEM classes (figure 12) and the prevalence of female professors teaching those classes (figure 11) both normalize and inspire girls to continue in their quest.

We had a speech said to us, and the theme was: you can go to college. It was the first time I had been given a positive message about college, and my ability to be successful in getting there. (12.231)

The college experience was amazing and influenced me into setting high goals for myself so I can one day actually attend college at such an awesome university. All in all, I gained enormous amounts of knowledge on college acceptances, requirements, and expenses I will have to face my senior year. I feel as if Tech Trek prepared me for what to expect in high school and college entrance. (12.150)

The richness and recurrence of certain themes in more than 540 open-ended responses by alumnae to survey question 10 (In your own words, what impact did Tech Trek have on you?) (appendix L) and question 12 (Tell us more about what had the biggest impact on you)

(appendix K) suggest three main categories of personal growth and transformation, as depicted in figure 16.

#### Figure 16. The Three Most Powerful Impacts of Tech Trek Reported by Respondents: Increased Self-Confidence, a Greater Sense of Identity, and a Broader Understanding of STEM (Q12)

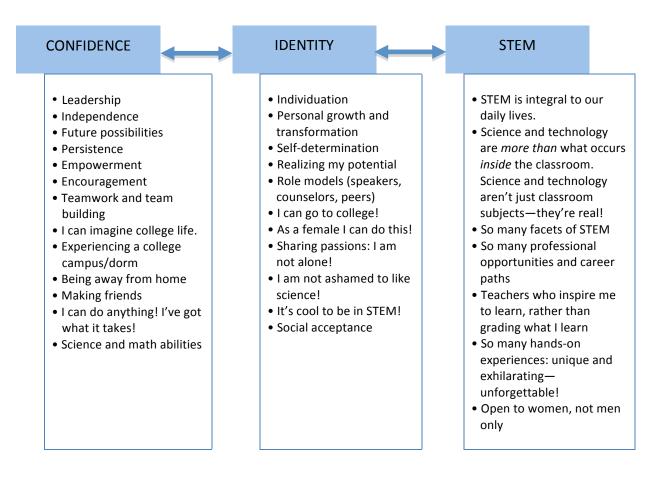


Figure 16 indicates the interplay among these aspects of Tech Trek's impact, as reported by alumnae. Given attention, encouragement, and the necessary support to feel at ease in the camp environment, girls report gaining confidence to be themselves (first column), to express their personalities and interests in an atmosphere of acceptance and inspiration (second column), and to imagine future personalized pathways in the STEM fields (third column).

In addition to bolstering girls' self-confidence and awareness of academic and professional choices, Tech Trek empowers girls with an enabling mindset of growth. A "growth mindset" (Olszewski-Kubilius & Clarenbach, 2012) is one of the psychosocial skills the Tech Trek program cultivates. To adopt a growth mindset is to feel confident that one can learn a new subject by applying oneself, rather than to dismiss the opportunity to learn because a girl thinks she either

has or does not have the inborn predisposition to succeed in a subject area. As the following personal anecdotes show (key phrases are bolded), alumnae recognize ways in which their camp experience helped them understand how they learn best and see the utility of applying effort to reach their goals. Before attending Tech Trek some teens may have assumed that STEM fields were beyond their abilities or that certain students have innate STEM talents and others do not. After Tech Trek, many girls refer to a newfound meta-cognition about their own learning and intelligence: They recognize that they are capable of mastering challenging subjects through diligence and effort. This realization of their own power is motivating and transformative. With a growth mindset, the locus of control lies more within each student and less in the vagaries of peer approval, convention, gender, socioeconomic status, or ethnicity.

Learning that I have the ability to learn science and math impacted me the most. Without learning this about myself I would have not become interested in science and my major would not be biopsychology. (12.116)

The biggest impact that Tech Trek had in my life was **knowing that through hard work and dedication, anyone can achieve** great things, man or woman. Meeting new people and sharing our experiences together made me feel more comfortable knowing that there was someone else who was going through the exact same thing as me. (12.188)

I'm not alone. There are tons of other different kinds of girls out there who are extraordinarily gifted but don't get many opportunities. The whole experience also taught me that there is a whole other world out there, and your future could change every day. Experiment with what you can and go with your heart. But **try your best at whatever you do**. (12.95)

Whether or not they eventually choose to pursue STEM fields, alumnae are exposed to a set of values and skills that equips them to be persistent learners in any sphere.

## CONCLUSION

The results of the 2013 survey of Tech Trek's 2006–09 camps affirm success in the program's goal of promoting STEM fields as viable career options in the eyes of young women. The vast majority of girls express their intention to enroll in and graduate from college, and many expect to pursue more advanced degrees. Respondents report taking more advanced science and mathematics courses throughout high school and into the first two years of college than they would have chosen without the encouraging and supportive role Tech Trek played in their formative years. Girls credit Tech Trek with giving them insight into the variety and depth of ways in which STEM applies to everyday life and the myriad ways in which students can make a difference if they choose to pursue science or mathematics professionally. Nearly a third of the respondents have participated in other nonschool STEM-related programs during high school, building on their early exposure and gaining ground in what had once seemed exclusively male-saturated and male-oriented subject areas. Female role models as counselors, dorm mothers, teachers, visiting speakers, and field trip guides provide support and inspiration, as well as examples of women succeeding in STEM. Nearly three-quarters of alumnae declare their intention to major in a STEM-related field.

Tech Trek appears to be an early and influential input into each girl's learning ecology—the wider landscape of educational variables that shape and promote her journey through academic and social life and on to her career choices. Girls report the catalytic effect of Tech Trek on their future academic choices: Being selected for the program, living away from home, and feeling their interest sparked in STEM validate their passions and raise their sights to the possibility of college. Rich exposure to real-world science and technology by means of Tech Trek's experiential, hands-on learning approach creates unforgettable memories that serve to facilitate girls' options well beyond that summer.

Tech Trek opens realms of possibility for girls to engage in STEM over time and across contexts—formal and informal—like clubs, competitions, internships, laboratories, and more. The camp equips students with the motivation and strategies necessary for eventual self-determination; they are made aware of the steps necessary to reach their short-term and long-term goals.

Gathering this feedback yields a longitudinal outlook on Tech Trek's enduring effects. Girls cite academic choices and achievements as well as generalizable life lessons gained from that influential week, including people skills, a meta-awareness of how they learn best, and perhaps most valuable of all, a growth mindset applicable to any future endeavor or goal.

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**APPENDIX A** 

# Tech Trek Alumnae Survey 2013

IGNITING THE SPARK: TECH TREK STEM CAMPS FOR GIRLS 33

### Tech Trek Alumni Survey

#### 1.

The American Association of University Women (AAUW), the sponsor of Tech Trek, has hired an independent evaluator to collect information from Tech Trek alumni on the impact of their camp experiences. Your candid answers will help us make Tech Trek better for all the girls who come after you. This survey should take no longer than 15 minutes. Please complete each page before moving on to the next, but you will be able to backtrack if necessary. Thank you for your time and cooperation in completing this important survey. All responses are confidential; if you give your name and contact information at the end of the survey you will be entered into a drawing for four \$500 gift certificates.

#### 2.

#### **\*1.** Are you currently enrolled in:

- C College
- O High school
- O Not enrolled in school

•

#### 3.

#### \*2. What year did you attend Tech Trek?

#### **\***3. Where did you attend the camp?

#### \*4. What middle school did you attend? (name and city)

The following questions are all based on your Tech Trek camp experience and its impact on you. Please rate each question using the scale below. Remember there are no right or wrong answers.

#### \*5. Tech Trek increased my interest in:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Science	C	O	0	O	C
Mathematics	Õ	O	O	O	O
Computer programming	O	0	0	O	O
Engineering	O	O	O	O	O
Technology	O	0	0	O	O

### Tech Trek Alumni Survey

#### \*6. Tech Trek gave me greater confidence in my ability to be successful in:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Math classes	C	C	C	О	O
Science classes	Õ	O	O	O	O
My ability to do well in school overall	C	C	O	О	O

#### **\***7. Tech Trek introduced me to many different:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Science, Technology, Engineering, and Math (STEM) careers I was not previously aware of	C	C	O	C	O
College majors I was not previously aware of	C	C	O	C	C

#### **\*8.** Because of Tech Trek I did the following:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Took more advanced math classes in high school	0	C	O	0	O
Took more science classes in high school	C	C	O	C	C

#### \*9. Thinking about your Tech Trek experience, how important were the following to you?

	Not Important	Somewhat Important	Very Important	Most Important
Being with other girls my age interested in STEM	O	C	O	O
Teachers	O	O	O	$\odot$
Hands-on activities	O	O	O	O
Field trips	O	O	Õ	$\odot$
Dorm moms	0	O	0	O
Professional Women's Night	O	O	Õ	$\odot$

## 10. In your own words, what impact did Tech Trek have on you? Please elaborate.

-

4.

## Tech Trek Alumni Survey

11. At the time you attended Tech Trek, which of the following women or men in your
family (if any) worked in Science, Technology, Engineering or Math fields?
Mother
Father
Step Mother
Step Father
None
What is/was their job? (Describe as best you can.)
12. Did going to Tech Trek have any of the following effects on you? (check all that apply)
Increased my knowledge of STEM professions
Gave me new confidence in my abilities to learn science or math subjects
Allowed me to meet new friends
Showed me how math and science play a role in my daily life
Increased my belief in women's ability to succeed in STEM careers
Please tell us more about what had the biggest impact on you:
5.
Now we will ask you a few questions about yourself.
*13. Are you currently enrolled in a:
2-year college
4-year college or university
Technical/vocational program
Professional certificate program
Job training program
Not enrolled in school

ተ 1	4. Name and city of the college, university, or program you are in:
*1	15. What high school did you attend? (name and city)
*1	I6. High school (HS) graduation year (or GED equivalent):
*1	7. While in high school, did you participate in other STEM after/outside of school
	ivities besides Tech Trek?
0	Yes
0	Νο
lf ye	s, what was the most important STEM activity you participated in (including Tech Trek)?
*1	8. Which of the following <u>non-AP</u> mathematics or science classes did you successfully
	I8. Which of the following <u>non-AP</u> mathematics or science classes did you successfully mplete in high school? (Check all that apply)
or	
	nplete in high school? (Check all that apply)
or	nplete in high school? (Check all that apply) Algebra
or	nplete in high school? (Check all that apply) <sup>Algebra</sup> Geometry
:on	nplete in high school? (Check all that apply) Algebra Geometry Algebra II
	mplete in high school? (Check all that apply) Algebra Geometry Algebra II Trigonometry/Pre-Calculus
	mplete in high school? (Check all that apply)   Algebra   Geometry   Algebra II   Trigonometry/Pre-Calculus   Calculus
	Implete in high school? (Check all that apply)   Algebra   Geometry   Algebra II   Trigonometry/Pre-Calculus   Calculus   Biology
	nplete in high school? (Check all that apply)   Algebra   Geometry   Algebra II   Trigonometry/Pre-Calculus   Calculus   Biology   Chemistry
	nplete in high school? (Check all that apply)   Algebra   Geometry   Algebra II   Trigonometry/Pre-Calculus   Calculus   Biology   Chemistry   Physics
	hplete in high school? (Check all that apply) Algebra Geometry Algebra II Trigonometry/Pre-Calculus Calculus Biology Chemistry Physiolgy
	nplete in high school? (Check all that apply) Algebra Geometry Algebra II Trigonometry/Pre-Calculus Calculus Biology Chemistry Physiology Earth science
• on	Algebra Geometry Algebra II Trigonometry/Pre-Calculus Calculus Biology Chemistry Physicogy Earth science

## **19. Which of the following College Board AP mathematics and science courses did you take in high school?**

	Currently taking	Planning to take	Completed	Never taken/Not planning to take
AP Biology	0	C	O	O
AP Calculus AB	0	Õ	O	O
AP Calculus BC	0	O	0	O
AP Chemistry	0	O	O	Õ
AP Computer Science A	0	O	0	O
AP Environmental Science	0	O	O	Õ
AP Physics B	0	O	0	O
AP Physics C: Electricity and Magnetism	O	O	O	O
AP Physics C: Mechanics	0	O	O	O
AP Statistics	0	O	O	Õ
Other (please list):				

## 20. Please list any College Board AP <u>exam</u> you have taken, and the score you received by filling in the bubble under your AP score.

	1	2	3	4	5	Have not taken exam
AP Biology	O	O	O	Õ	O	C
AP Calculus AB	0	O	O	Õ	0	O
AP Calculus BC	$\odot$	O	C	C	$\odot$	O
AP Chemistry	0	O	O	O	O	O
AP Computer Science A	$\odot$	O	C	C	$\odot$	O
AP Environmental Science	O	O	$\odot$	C	$\circ$	Õ
AP Physics B	$\odot$	O	C	C	$\odot$	O
AP Physics C: Electricity and Magnetism	0	O	O	C	O	C
AP Physics C: Mechanics	$\odot$	O	C	C	$\odot$	O
AP Statistics	O	O	$\odot$	C	$\circ$	Õ

6.

	21. What is your anticipated college major?		
	Mathematics		
	Engineering		
	Computer Science		
	Biology		
	Earth/Environmental Science		
	Forensic Science		
	Physics		
	Chemistry		
	Social Science (Psychology, Sociology, Anthropology)		
	Business		
	Communication		
	Humanities (Art, English, Music, Theater)		
	l don't know		
	Not planning to continue in college		
	Other (please specify)		
	22. What year do you think you will graduate colle	ye:	
	23. Have you already earned any certificate or de rtificate/degree? At what school/program, and in v Yes		h school? If yes,
ce			h school? If yes,

## 24. How many science and mathematics classes have you taken at your college/university (do not include AP credits)?

	0	1	2	3	4	5	6	7	8	9	10	More than 10
Mathematics	0	0	$\circ$	O	0	0	$\odot$	0	0	$\odot$	$\odot$	O
Engineering	0	0	0	O	0	0	$\odot$	0	0	0	$\circ$	$\odot$
Computer Science	$\odot$											
Biology	O	O	O	O	O	0	$\odot$	0	0	O	O	$\odot$
Earth/Environmental Science	0	0	0	0	0	0	$\odot$	0	0	$\odot$	$\odot$	$\odot$
Forensic Science	O	O	O	O	O	O	O	0	0	$\odot$	O	O
Physics	$\odot$											
Chemistry	O	O	$\odot$	$\odot$	$\circ$	0	$\odot$	0	0	O	O	$\odot$
Biochemistry	0	0	0	0	0	0	$\odot$	0	0	$\odot$	$\odot$	$\odot$
Other	O	O	O	O	O	O	O	O	O	O	O	0
If you selected "Other," please specify:												

\*25. Of all your college-level instructors/professors (not TA's) in science, technology, engineering, math, and computer science, about what percentage have been female? (Give your best estimate.)

**\***26. In all the college-level science, technology, engineering, math, and computer science courses you have taken or are taking, about what percentage of your fellow students have been female (not including yourself)? (Give your best estimate.)

\*27. What career(s) are you considering?

-

-

*28. I to stud	Do you plan on going to graduate or professional school? If yes, what do you plan dy?
C Yes	
O No	
C I doi	n't know
lf yes, wh	at do you plan to study?
7	

OPTIONAL: ONLY FILL OUT THE QUESTIONS BELOW IF YOU WOULD LIKE TO BE ENTERED IN A DRAWING TO RECEIVE ONE OF four \$500 GIFT CARDS. Thank you for your time and responses... you are helping to make Tech Trek a more effective program! All of the information will be kept secure and confidential. You will be contacted by September 1, 2013, if you are chosen to win one of the four gift certificates. If you would like to learn more about the AAUW, or volunteer in its programs for young women, please visit www.aauw-ca.org or on Facebook: AAUW California.

#### 29. What is your name and contact information?

Name:	
Address Line 1:	
Address Line 2:	
City:	
State:	•
Zip Code:	
Email Address	
(email@domain.com):	
Phone Number (xxx-xxx- xxxx):	

#### 30. What is the best way to reach you?

- Email
- C Telephone
- C Either email or telephone

31.	. Do individuals in your family speak a language other than English at home?	
O	No	
O	Seldom	
O	Half the time	
O	Most of the time	
Whic	ich language(s)?	
32.	. Race/Ethnicity (check all that apply):	
	Hispanic/Latina	
	Asian	
	Indian (subcontinent) – including Pakistan, India	
	Native Hawaiian or Pacific Islander	
	Native American/ Native Alaskan	
	African American	
	White	
	Other (please specify)	
8.		
0.		
*3	33. What year did you attend Tech Trek?	
*3	34. Where did you attend the camp?	
*3	35. What middle school did you attend? (name and city)	
	following questions are all based on your Tech Trek camp experience and its impact on you. Please rate each question using the scale bel	ow.
Reme	ember there are no right or wrong answers.	

#### **\***36. Tech Trek increased my interest in:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Science	O	O	O	O	O
Mathematics	O	O	O	0	O
Computer programming	O	O	O	$\odot$	O
Engineering	Õ	O	O	$\circ$	$\odot$
Technology	O	0	O	O	O

### \* 37. Tech Trek gave me greater confidence in my ability to be successful in:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Math classes	0	O	C	O	O
Science classes	O	O	O	O	O
My ability to do well in school overall	0	C	O	O	О

### **\***38. Tech Trek introduced me to many different:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Science, Technology, Engineering, and Math (STEM) careers I was not previously aware of	O	C	O	C	C
College majors I was not previously aware of	O	C	C	C	C

#### **\***39. Because of Tech Trek I did the following:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Took more advanced math classes in high school	O	C	O	0	O
Took more science classes in high school	0	C	O	C	O

## **\***40. Thinking about your Tech Trek experience, how important were the following to you?

	Not Important	Somewhat Important	Very Important	Most Important
Being with other girls my age interested in Science, Technology, Engineering, and Math (STEM)	O	O	С	С
Teachers	O	O	O	O
Hands-on activities	O	O	O	O
Field trips	O	O	O	O
Dorm moms	O	O	O	O
Professional Women's Night	C	O	O	C

Tech Trek Alumni Survey
41. In your own words, what impact did Tech Trek have on you? Please elaborate.
42. At the time you attended Tech Trek, which of the following women or men in your family (if any) worked in Science, Technology, Engineering or Math fields?
Mother
Father
Step Mother
Step Father
None
What is/was their job? (Describe as best you can.)
43. Did going to Tech Trek have any of the following effects on you? (check all that apply)
Increased my knowledge of STEM professions
Gave me new confidence in my abilities to learn science or math subjects
Allowed me to meet new friends
Showed me how math and science play a role in my daily life
Increased my belief in women's ability to succeed in STEM careers
Please tell us more about what had the biggest impact on you:
9.
Now we will ask you a few questions about yourself.

_					
	ch I	rek	Alum	ni S	urvey

*44. Are you currently enrolled in a:
High school
Technical/vocational program
Professional certificate program
2-year college
4-year college or university
Not enrolled in school
*45. What high school do you attend? (name and city) *46. What is your anticipated high school (or GED equivalent) graduation year?
*47. While in high school, have you participated in other STEM after/outside of school activities besides Tech Trek?
C Yes
If yes, what was the most important STEM activity you participated in (including Tech Trek)?
*48. Thinking of the STEM classes you took in high school, about how many teachers were women? (Give your best estimate.)

$m{st}$ 49. Which of the following non-AP mathematics or science classes have you
successfully completed or are currently planning to take in high school? (Check all that
apply)

Algebra
Geometry
Algebra II
Trigonometry/Pre-Calculus
Calculus
Biology
Chemistry
Physics
Physiology
Earth science
Computer science
Engineering
None
Other (please list)

## 50. Which of the following College Board AP mathematics and science courses have you taken or do you plan to take in high school?

	Currently taking	Planning to take	Completed	Never taken/Not planning to take
AP Biology	O	O	O	O
AP Calculus AB	$\odot$	Õ	O	O
AP Calculus BC	$\odot$	0	O	O
AP Chemistry	$\odot$	O	O	O
AP Computer Science A	$\odot$	O	O	O
AP Environmental Science	$\odot$	O	O	O
AP Physics B	$\odot$	O	O	O
AP Physics C: Electricity and Magnetism	O	O	O	C
AP Physics C: Mechanics	0	O	C	O
AP Statistics	$\odot$	Õ	O	O
Other (please list):				

## 51. Please list any College Board AP <u>exam</u> you have taken and the score you received. Fill in the bubble for each AP test score of the tests you have taken.

	1	2	3	4	5	Have not taken exam
AP Biology	0	O	0	Õ	O	C
AP Calculus AB	0	O	O	Ō	O	O
AP Calculus BC	O	O	0	C	O	O
AP Chemistry	O	O	O	O	O	O
AP Computer Science A	O	O	0	C	O	O
AP Environmental Science	0	O	O	C	C	O
AP Physics B	O	O	0	O	C	0
AP Physics C: Electricity and Magnetism	O	C	O	C	O	O
AP Physics C: Mechanics	O	O	O	igodolarity	O	O
AP Statistics	C	C	0	C	O	O

#### \*52. Are you planning to attend college?

- O Yes
- O No
- O Not sure

$m{\star}$ 53. What is your anticipated college major?
Mathematics
Engineering
Computer Science
Biology
Earth/Environmental Science
Forensic Science
Physics
Chemistry
Social Science (Psychology, Sociology, Anthropology)
Business
Communication
Humanities (Art, English, Music, Theater)
I don't know
Not planning to attend college
Other (please specify)
*54. What career(s) are you considering?

#### 10.

OPTIONAL: ONLY FILL OUT THE QUESTIONS BELOW IF YOU WOULD LIKE TO BE ENTERED IN A DRAWING TO RECEIVE ONE OF four \$500 GIFT CARDS. Thank you for your time and responses... you are helping to make Tech Trek a more effective program! All of the information will be kept secure and confidential. You will be contacted by September 1, 2013, if you are chosen to win one of the four gift certificates. If you would like to learn more about the AAUW, or volunteer in its programs for young women, please visit www.aauw-ca.org or on Facebook: AAUW California.

#### **55. What is your name and contact information?**

Name:	
Address Line 1:	
Address Line 2:	
City:	
State:	
Zip Code:	
Email Address	
(email@domain.com):	
Phone Number (xxx-xxx-	
xxxx):	

#### 56. What is the best way to reach you?

- C Email
- C Telephone
- C Either email or telephone

#### 57. Do individuals in your family speak a language other than English at home?

- O No
- Seldom
- O Half the time
- O Most of the time

Which language(s)?

58.	Race/Ethnicity (check all that apply):	I
	Hispanic/Latina	
	Asian	
	Indian (subcontinent) – including Pakistan, India	
	Native Hawaiian or Pacific Islander	
	Native American/ Native Alaskan	
	African American	
	White	
	Other (please specify)	

•

•

### 11.

#### \*59. What year did you attend Tech Trek?

#### \*60. Where did you attend the camp?

#### **\***61. What middle school did you attend? (name and city)

The following questions are all based on your Tech Trek camp experience and its impact on you. Please rate each question using the scale below. Remember there are no right or wrong answers.

#### \*62. Tech Trek increased my interest in:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Science	C	C	C	O	O
Mathematics	O	O	O	O	$\odot$
Computer programming	O	C	O	O	$\odot$
Engineering	O	O	O	$\odot$	$\odot$
Technology	C	C	C	O	0

#### **\***63. Tech Trek gave me greater confidence in my ability to be successful in:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Math classes	O	C	C	O	C
Science classes	$\odot$	Ô	O	O	Õ
My ability to do well in school overall	0	C	O	0	O

### **\***64. Tech Trek introduced me to many different:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Science, Technology, Engineering, and Math (STEM) careers I was not previously aware of	С	C	O	C	С
College majors I was not previously aware of	C	C	C	O	O

#### **\***65. Because of Tech Trek I did the following:

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Took more advanced math classes in high school	O	C	O	C	O
Took more science classes in high school	O	C	O	O	O

## \*66. Thinking about your Tech Trek experience, how important were the following to you?

	Not Important	Somewhat Important	Very Important	Most Important
Being with other girls my age interested in Science, Technology, Engineering, and Math (STEM)	С	C	C	C
Teachers	O	Õ	O	O
Hands-on activities	0	O	O	0
Field trips	O	O	O	Ō
Dorm moms	O	O	Ō	O
Professional Women's Night	0	O	C	O

#### 67. In your own words, what impact did Tech Trek have on you? Please elaborate.



68. At the time you attended Tech Trek, which of the following women or men in your family (if any) worked in Science, Technology, Engineering or Math fields?

	Mother
	Father
	Step Mother
	Step Father
	None
What	t is/was their job? (Describe as best you can.)
	×

69. Did going to Tech Trek have any of the following effects on you? (check all the	at apply)
Increased my knowledge of STEM professions	
Gave me new confidence in my abilities to learn science or math subjects	
Allowed me to meet new friends	
Showed me how math and science play a role in my daily life	
Increased my belief in women's ability to succeed in STEM careers	
Please tell us more about what had the biggest impact on you:	
12.	
Now we will ask you a few questions about yourself.	
*70. At any time, have you been enrolled in a:	
High school	
Technical/vocational program	
Professional certificate program	
2-year college	
4-year college or university	
None	
f st71. What high school do you attend? (name and city)	
*72. High school (HS) graduation year (or GED equivalent):	

## \*73. While in high school, have you participated in other STEM after/outside of school activities besides Tech Trek?

- O Yes
- No

If yes, what was the most important STEM activity you participated in (including Tech Trek)?

	4. Which of the following <u>non-AP</u> mathematics or science classes have you cessfully completed or are currently planning to take in high school? (Check all that
app	
	Algebra
	Geometry
	Algebra II
	Trigonometry/Pre-Calculus
	Calculus
	Biology
	Chemistry
	Physics
	Physiology
	Earth science
	Computer science
	Engineering
	None
	Other (please list)

## 75. Which of the following College Board AP mathematics and science courses have you taken or do you plan to take in high school?

	Currently taking	Planning to take	Completed	Never taken/Not planning to take
AP Biology	O	C	O	C
AP Calculus AB	O	Õ	O	O
AP Calculus BC	0	O	0	O
AP Chemistry	$\odot$	O	O	Õ
AP Computer Science A	O	O	0	O
AP Environmental Science	$\odot$	O	O	O
AP Physics B	0	O	0	C
AP Physics C: Electricity and Magnetism	O	O	O	O
AP Physics C: Mechanics	0	O	0	O
AP Statistics	$\odot$	O	O	O
Other (please list):				

## 76. Please list any College Board AP <u>exam</u> you have taken and the score you received. Fill in the bubble for each AP test score of the tests you have taken.

	1	2	3	4	5	Have not taken
						exam
AP Biology	O	O	C	C	O	C
AP Calculus AB	O	Õ	O	O	O	Õ
AP Calculus BC	C	O	C	C	C	O
AP Chemistry	O	Ō	O	Ō	Õ	Õ
AP Computer Science A	C	O	C	C	C	O
AP Environmental Science	$\odot$	Õ	O	C	$\odot$	Õ
AP Physics B	O	Õ	C	C	C	O
AP Physics C: Electricity and Magnetism	O	C	O	C	O	C
AP Physics C: Mechanics	C	O	C	C	C	O
AP Statistics	C	C	C	C	O	C

#### \*77. Are you planning to attend college?

- Yes
- O No
- Not sure

C Already started, but not currently enrolled

	78. What is your anticipated college major?
	Mathematics
	Engineering
	Computer Science
	Biology
	Earth/Environmental Science
	Forensic Science
	Physics
	Chemistry
	Social Science (Psychology, Sociology, Anthropology)
	Business
	Communication
	Humanities (Art, English, Music, Theater)
	I don't know
	Not planning to attend college
	Other (please specify)
*7	79. Are you currently engaging in any of the following:
	Planning to move outside the USA
	Employed in full time work
	Employed in part time work
	Unemployed
	Peace Corps
	Peace Corps Teach for America or similar volunteer program
	Teach for America or similar volunteer program
	Teach for America or similar volunteer program Raising a family
	Teach for America or similar volunteer program Raising a family None
	Teach for America or similar volunteer program Raising a family None Other (please list)
	Teach for America or similar volunteer program Raising a family None

•

•

**\***81. Thinking of the STEM classes you took in high school, about how many teachers were women? (Give your best estimate.)

\*82. Of all of your college level instructors/professors (not TA's) in science, technology, engineering, math, and computer science classes, about what percentage have been female? (Give your best estimate.)

#### 13.

OPTIONAL: ONLY FILL OUT THE QUESTIONS BELOW IF YOU WOULD LIKE TO BE ENTERED IN A DRAWING TO RECEIVE ONE OF four \$500 GIFT CARDS. Thank you for your time and responses... you are helping to make Tech Trek a more effective program! All of the information will be kept secure and confidential. You will be contacted by September 1, 2013, if you are chosen to win one of the four gift certificates. If you would like to learn more about the AAUW, or volunteer in its programs for young women, please visit www.aauw-ca.org or on Facebook: AAUW California.

#### 83. What is your name and contact information?

Name:	
Address Line 1:	
Address Line 2:	
City:	
State:	<b>•</b>
Zip Code:	
Email Address	
(email@domain.com):	
Phone Number (xxx-xxx-	
xxxx):	

#### 84. What is the best way to reach you?

- C Email
- C Telephone
- C Either email or telephone

#### 85. Do individuals in your family speak a language other than English at home?

0	No

- Seldom
- Half the time
- O Most of the time

Which language(s)?

86.	Race/Ethnicity (check all that apply):
	Hispanic/Latina
	Asian
	Indian (subcontinent) – including Pakistan, India
	Native Hawaiian or Pacific Islander
	Native American/ Native Alaskan
	African American
	White
	Other (please specify)

# Appendices

## Igniting the Spark: Tech Trek STEM Camps for Girls

2013 Evaluation of Tech Trek

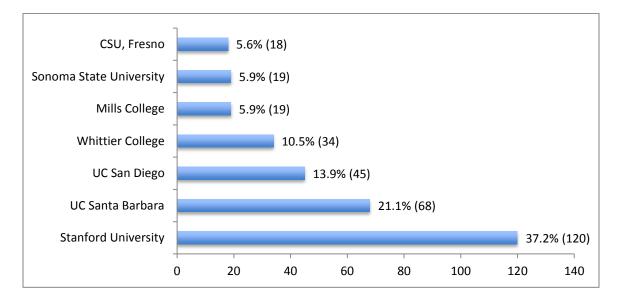
IGNITING THE SPARK: TECH TREK STEM CAMPS FOR GIRLS 1

## **APPENDICES**

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## **APPENDIX B**

### Distribution of Respondents across Seven California Tech Trek Campsites (Q3)

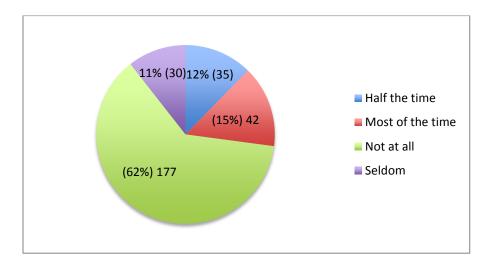


## **APPENDIX C**

#### Non-English Languages Spoken in the Home (Q31)

Do individuals in your family speak a language other than English at home? If so, which language(s)?

In more than half of the girls' families, English is spoken all the time. In 11 percent of families another language is "seldom spoken," in 12 percent of families English is spoken "half the time," and in 15 percent of families another language is spoken "most of the time."



Among the non-English languages spoken are Spanish, Chinese, Tagalog, Korean, Vietnamese, French, Arabic, and Indian dialects. Numerals indicate number of responses for each language listed more than once.

Arabic: 2	Italian
Assamese [India]	Japanese: 2
Burmese	Korean: 3
Cambodian	Romanian : 2
Chinese: 13	Russian
Cantonese: 3	Sinhala [Sri Lanka]
Mandarin Chinese: 8	Spanish: 43
Teochew Chinese: 2	Tagalog or Filipino: 8
Finnish	Tamil
French: 3	Telugu [India]
German: 2	Thai
Gujarati [India]	Vietnamese: 3
Hmong	Yoruba [West Africa]

## **APPENDIX D**

#### Parent and Stepparent Occupations (Q11)

At the time you attended Tech Trek, which of the following women or men in your family (if any) worked in science, technology, engineering, or math fields? What is/was their job? Describe as best you can.

A biologist at UCSF A medical devices engineer A Project Manager at AVID, I think. Accountant Accountant Aerospace engineering Aerospace physiologist Airplane Technician Architect Auto body technician Both my mom and dad have worked in engineering, primarily rubber and plastic pieces for medical use. Both my parents are college English professors and writers (literary criticism and mystery novels). Both my parents are physicians. Both of my parents are active cardiac molecular biologists/researchers. My mom works with zebra fish and my dad with mice. Both of my parents are engineers, although my mother stays home to take care of us and is a Tupperware Director. Building planes (747) **Business Financial Manager and Engineer** CEO and CFO of a high tech company **Certified Public Accountant** CFO of a hedge fund Chemical engineer, statistician Chemist in battery making Chief Financial Officer at CORE (Accountant) Chief Investment Officer of an Investment Management firm **Civil Engineer Manager** 

Clinical oncologist Computer engineer Computer engineer Computer Engineer at Second Sight Medical Products Computer programmer for Bank of America **Computer Programmers/Analysts** Construction Management VP of large SF Bay Area private construction co. working on Public Works jobs (estimating, scheduling, and legal aspects of the company and its interaction with public entities. CPA/Accountant Database Quality Assurance Engineer Dental hygienist Dentist and dental hygienist **Deputy Director of Flight Operations a NASA** Dryden, as well as a flight test engineer (2007) and now is the Director of Air Born Science. Doctor Earth science; an oceanography high school teacher **Electrical Engineer** Electrical Engineer, but more of a manager (official title was Chief Technical Officer) of a tech company Engineer Engineer and Health Care consultant Engineer at Lockheed Martin. Now owns his own computer and Internet technology consulting and repair business. Entomologist for the County of Orange, California

Environmental Biologist Father—Hardware Engineer; Mother— **Dental Hygiene** Father, Carpenter; Mother, Cosmetologist Father-military; Mother-elec. eng., chemical eng. military Father was machinist. Father worked in Pharmaceutical Industry, developing drugs for diabetes Father—firefighter paramedic **Finance assistant** Financial Analyst & Bookkeeping/teacher Fire ecologist and park interpreter Fleet Manager. Crunches the numbers for the trucks and oversees repairs. Flight test engineer General Manager of a Manufacturing Facility General manager of the sales division at SMK link electronics Genetic research, molecular biology Geologist GIS information/mapping Grandfather/guardian—technology teacher He is a Civil Engineer, who deals with environmental planning and managing projects, and designs waste water systems for clients. He is a general contractor and he installs solar, so he constantly works with science, technology, and math when building new houses, and working with high technology solar panels. He is a professor of Integrative Biology. He does research and teaches students at the university level. He is a propulsion researcher for the Air Force Research Laboratory. He is an engineering manager at Broadcom. He used to be in computer engineering He was an IT computer consultant. Information technology Jeweler Machinist

Manufacturing Engineer Mechanical engineer Mechanical Engineer Works in the HVAC field Mechanical Engineer at Raytheon Mechanical engineer at Vandenberg Air Force Base Mechanical engineer in the US Coast Guard Mechanical Engineer. Designs interior and exterior parts of airplanes. Microbiologist Mom—nurse; Dad—nurse Mom: dental hygienist; Dad: naval base engineer Mom: reproductive endocrinologist; Dad: electrical engineer Mother—registered nurse; Father engineer Mother is a Data Analyst for Intel; Father is Lawyer for Science research companies Mother is a physical therapist (and certified athletic trainer). Father is a paramedic fire fighter and ski patrol. Mother—Elementary School math specialist; Father—Computer Engineer at ΗP Mother—assistant for college dean; Father-chief Mother—Undergraduate Advisor in the History Dept. at UCSB; Father—Postal Worker Mother: nurse; Father: geologist Mother: researcher for NASA; Father: computer programmer for Xilinx My Aunt is a managing director at the Keck Institute of Space Studies. My brother was a mechanical engineer. I don't recall on what company he was working for, however his current job duties are very similar. When a machine is broken or having dysfunctions, he would repair the machine to get them working properly.

- My dad is a chemist working for a sanitation district, testing water samples. My mom was a business analyst working in Information Technology.
- My dad is a construction worker for more than 30 years and he has done quite a lot from making cement to underground pipe lying.
- My dad is a high school math teacher.
- My dad is a lawyer.
- My dad is a physicist. He works with nuclear fission and heavy ions.
- My dad is a software engineer for Oracle. I don't really know what he does.
- My Dad is a UPS driver and my Mom is in retail.
- My dad is an accountant and my mom is a bookkeeper.
- My dad is an airplane engineer. He's worked on B1, B51, and the Joint Strike Fighter.
- My dad is an architect and a project manager. He designs houses, buildings, and develops new inventions thought of by other people.
- My dad is an architect.
- My Dad was a medical image tech at our local hospital and my Mom is a medical biller at a medical group.
- My dad was a senior manager of research and development at a pharmaceutical company. My mom worked as a dean for a community college.

My dad was an accountant.

- My dad worked for a company that created computer software called 2Wire
- My father currently works as a Civil Engineer at Caltrans in District 7. He designs additions to buildings, assists in the designing of California freeways, and aids in the designing of water systems.
- My father has a degree in Mechanical Engineering, and works for a company called Lemo. They are based in

Switzerland, but have branches in the United States, were my father works. The company works on making cords, cables, wires, etc., for all sorts of specific reasons and people.

- My father has been working as an oncologist and hematologist for more than 25 years, and enjoys every day of his career.
- My father is a doctor and Professor of Medicine at UCSD School of Medicine.
- My father is a foreman in construction, and my mother's job was eliminated in 2010.
- My father is a molecular scientist at a major science corporation.
- My father is a musician and my mother is a homemaker.
- My father is a software engineer.
- My father is an architect.
- My father is an electrical salesman and my mother works in retail.
- My father is an IT Manager, and my mother is a math tutor.
- My father is bridge engineer while my mother is water resource engineer.
- My father was a computer engineer!
- My father was a UPS driver. My mother is a bookkeeper.

My father was close to becoming a chemical engineer, but instead took over the school his father started.

- My father was in car sales and my mother was a realtor
- My father is a Chief Financial Officer. He must make calculations and balance numbers.
- My father worked in advertising within the tech industry at the time.
- My father worked with computers and is currently at Kaiser as an IT Project manager. He works on developing hospitals in the SF Bay Area.
- My father works as a quality control manager/aerospace engineer.

- My father works as a whole seller and my mother worked in a casino.
- My father works in IT for a company that provides software to various labs throughout the country.
- My father works with the software company Oracle as a software consultant.
- My mom is a postal employee and my father is a machinist.
- My mom is a researcher for NASA Ames, and my dad wrote code for computer chips at Xlinx.
- My mom is a sales person.
- My mom is in charge of New Medical Technology for Northern California at Kaiser.
- My mom is in public relations, and works for a company raising money for nonprofit organizations. My dad is a Director at AT&T, and manages much of the West Coast.
- My mom taught Math Study Skills at the local junior college in Santa Rosa.
- My mom was a computer programmer
- My mom worked for an engineering firm as a program manager.
- My mom worked for Triple A and her status was a supervisor.
- My mom works as a teacher for preschoolers.
- My mom works in web design, and my dad works in IT for Stanford Hospital.
- My mother currently teaches both Honors and regular Human Anatomy and Physiology, and is also piloting a Sports Med class at Saugus High School.
- My mother formerly worked as a nurse at the Community Hospital of the Monterey Peninsula. My father currently is the president of a structural engineering company, called Gerald A. Graebe and Associates, Inc.

- My mother is a math teacher and my stepfather was a software engineer.
- My mother is a Psychologist.
- My mother is a teacher and my father work works for the county office.
- My mother stayed at home, and my father was a Spanish/English teacher at Silver Creek High School.
- My mother taught computer science and my grandfather was an aeronautic engineer.
- My mother used to be a high school math teacher.
- My mother was an elementary school bus driver who never had any extensive background in science, technology, engineering, or math fields.
- My mother was a vice president at a company that sold computer software.
- My mother works in the health care for over 17 years, and my dad is a truck driver.
- My mother works as a Secretary at a downtown jewelry store.
- My mother works as an assistant in a high school. My father is a mechanic.
- My mother works in the building inspection office of SLAC as an administrator.
- My parents don't have an education—they work as gardeners.
- Network Technician
- No job.
- None, because no one in my family had a job that followed any of the fields listed above.
- Nurse, and computer engineer
- Nurse practitioner, and civil and environmental engineer
- Nurse Practitioner, Builder/Contractor and Winemaker
- **Oncologist and Hematologist**
- Operations and maintenance technician at a power plant
- Pharmacist

- Photographers Physician PI of laboratories here in San Diego. Professional Agricultural Engineer Project manager in the biotech field **Registered Nurse** Research scientist for NASA **Respiratory Therapist** Restaurant owner/entrepreneur, Paraeducator **RN** at Kaiser Permanente Serving as a liaison between engineers and customers She is a loan officer who works in construction of water and waste facilities for communities dealing with engineers.
- She is an eighth grade math teacher. Software Coder Software engineer Software engineer/IT consultant Software Engineering (both) Stay at home mom, and my father owns a wood-flooring company. Tech Telecommunications and wastewater prevention manager They are both foresters. My mother is a natural resource planner. They work for security at the airport Used to be Econometrics in High Tech, then became an Architect designing hospitals.

## **APPENDIX E**

#### College, University, or Program in Which Respondents Are Enrolled (Q14)

Name the college, university, or program you are in (asked of college students only; number to right of name indicates frequency, if more than once).

Allan Hancock College, Santa Maria Arizona State University, Barrett Honors College, Tempe, AZ Art Institute of California, Sacramento Auburn University, Auburn, Alabama Boston College, Chestnut Hill, Massachusetts Boston University, Boston, Massachusetts Butte Community College, Oroville, California: 2 Cal Poly Pomona: 2 California Polytechnic University, San Louis Obispo California State University, Long Beach: 2 California State University, Northridge, California California State University, Sacramento, Social Work Chabot College, Hayward, California College of Marin, Kentfield, California College of San Mateo, San Mateo, California Cornell **Cuesta College** De Anza Community College, Cupertino, California El Camino College, Torrance: 2 Embry-Riddle Aeronautical Univ., Prescott, AZ, Global Security & Intelligence Studies Golden West College, Huntington Beach, California Gonzaga University, Spokane, WA Howard University in Washington, D.C. Kaiser School of Allied Health Sciences Long Beach City College Los Medanos College, Pittsburg, California

Loyola Marymount University, Los Angeles: 2 Macalester College, St. Paul Minnesota Montana State University, Microbiology Mount Holyoke College, South Hadley, Massachusetts Napa Valley College Northwestern University, Chicago, Honors **Program in Medical Education** Pasadena City College, Pasadena, California: 2 Paul Mitchell The School Pomona College, Claremont, California Radford University, Radford, VA Reed College, Portland, OR Sacramento State, Sacramento, California Saint Mary's College of California, Moraga, California: 2 Salem San Diego State University San Francisco State University, San Francisco San Jose State University, San Jose, California Santa Barbara City College, Santa Barbara, California: 3 Santa Clara University Seattle University Sierra College in Rocklin California, transferring to UC Davis Smith College Solano Community College; I also became a Certified, Licensed Phlebotomist Stanford University Texas State University, San Marcos Torrance Everest College, medical assistant

- UC Berkeley: 3 UC Davis: 3 UC Irvine UC Merced UC San Diego: 3 UC Santa Barbara: 4 UC Santa Cruz UCLA: 2 University of Colorado, Boulder, Colorado University of San Diego University of Mary University of Nevada Reno, Reno, & Truckee Meadows Community College, Reno
- University of Nevada, Reno University of Oregon, Eugene, OR University of Portland University of Rochester, Rochester, NY Ventura College, Ventura Villanova University, Villanova Washington University in St. Louis, MO: 2 Western Washington University, Bellingham, WA Yuba Community College, Yuba City, California

## **APPENDIX F**

### After- and Non-School STEM-Related Activities (Q17)

While in high school, what was the most important STEM activity you participated in after/outside of school (if any)? (asked of all students)

- A two-week pre-med summer camp at UC Irvine for high school students interested in careers in medicine. We learned about how technology is increasingly being used to train pre-med graduate students, and actually experienced some of it for ourselves, such as the da Vinci robotic console with two tiny arms the size of needles used for delicate, complex surgeries and the robotic patient who can exhibit any type of symptom needed to simulate a disease.
- 2. A field trip to a pediatric office
- 3. Ag
- 4. AP Environmental Science. I took the class the first year it was offered at my school, and was one of the two students to earn a 5 on the exam.
- 5. Astrocamp
- 6. Being a counselor at Tech Trek 2012.
- 7. Besides Tech Trek, I participated in COSMOS at UC Irvine. I was in the astrophysics cluster where we learned about space and what it is composed of for a month. I really enjoyed this experience and I learned more about a subject that I would never have the chance to in high school.
- 8. Big Sur Ornithology Lab; CU Boulder Alpine Ecology Internship; UCSC Ocean Atmospheric and Earth Sciences Internship; Biotech Program at my high school; and internship at Genencor International
- 9. C.A.B.L.E, CCD, Care For a Cause, Key Club, Film club
- 10. Calculus Competition
- 11. California State Science Fair
- 12. California State Science Fair in 2011 and 2012, as well as Kern County Regional Science Fair in 2011 and 2012.
- 13. Chemistry
- 14. Chemistry Club
- 15. College Courses through Gavilan. Psychology
- 16. COSMOS Chemistry of Life Cluster
- 17. COSMOS at UCSD Research at Scripps Institution of Oceanography Research at Madras Diabetes Research Foundation Greater San Diego Science & Engineering Fair
- 18. Science Olympiad
- 19. Currently involved in the Envision program for Engineering at school
- 20. Engineering Course at Cal Poly
- 21. Environmental Science Summer Youth Institute (Hobart and William Smith Colleges NY), UCSD COSMOS Biofuel Cluster Alliance Redwoods Environmental Education Counselor
- 22. American Legion Youth Environmental Leadership Conference Delegate

- 23. For my physics classroom we were able to go to a science, engineering, and math activity called Viva Technology that was very interesting and fun. Also, I participate in MESA and Robotics club after school. These clubs, especially robotics are always involved in fun, friendly competitions that require working in a group to create a functional system that is able to perform different tasks.
- 24. Geometry
- 25. I also took part of weekend classes at UCSB, as well as attending the National Youth Leadership Conference on Medicine at UCLA. As well as a STEM 101 class at the city college.
- 26. I am a member of my school's Academic Decathlon, which strongly focuses on STEM areas.
- 27. I am taking environmental science AP this year and had an advantage going in, thanks to tech trek.
- 28. I am volunteering in a lab in San Francisco this summer.
- 29. I created my high school's first engineering club, and it has been a really important factor in my life.
- 30. I did a month long program called COSMOS at UCSC the summer before my sophomore year.
- 31. I did an online course for NASA called WISH.
- 32. I had a summer internship at the Buck Institute for Research on Aging & Age-Related Diseases, where I work with a lab on a project and presented a power point at the end of the summer.
- 33. I have been on a FIRST Robotics team for 3 years getting experience in engineering
- 34. I have my own club, Women in Science and Engineering (WiSE) and am a member of UC Berkeley's IB Women in Science group. Tech Trek was the catalyst for my involvement in these groups.
- 35. I have participated in a Biodiversity Internship in China.
- 36. I have shadowed my father for most of my high school career, and has shown me that science and math are incredibly difficult, however incredibly enlightening subjects to have a career in.
- 37. I interned in an engineering lab in a small biotechnology company that worked to develop cancer diagnosis systems.
- 38. I joined the Aragon Robotics Team, which has quickly become a major part of my life. I am currently one of its co-captains.
- 39. I was a junior counselor at Tech Trek two years later, and I have an entrepreneurial internship.
- 40. I loved all the field trips and examples of occupations.
- 41. I participated in MESA, which stands for math, engineering, and science association. I participated in it for two years. We had a competition yearly at UC Santa Barbara and there were different projects we could participate in.
- 42. I was in a math club briefly freshman year.
- 43. I took a 6-week Introduction to JAVA course during the summer of 2012. I am also working as an intern in a lab at UCSF to do computational biology.
- 44. I took a 3-week marine biology course at another camp, and went to AstroCamp, which is a camp that focuses primarily on Science.
- 45. I volunteered at my local hospital!

- 46. I went to UC Berkeley last summer for a medicine program
- 47. I'm currently doing hospital volunteering, and I've been able to assist with epilepsy research and go on rounds with doctors.
- 48. I'm not sure if this counts, but in March of this year I went to Calculus camp at Lake Arrowhead for about 4 days. It's designed to help the calculus students at my school prepare for the AP Calculus test at the end of the year.
- 49. I'm on my school's Mathletes team. Go Eagle Mathletes!
- 50. I'm part of the math club.
- 51. In my area we met and discussed college, careers, and more. We had many women with interesting professions talk.
- 52. Interning at Sanford-Burnham
- 53. Iridescent Technovation Challenge Program (all-girls program designing, developing, and programming Android apps)
- 54. KIVA Club, which is a micro finance organization that loans money to entrepreneurs all over the world to bring themselves out of poverty.
- 55. Math Counts Math Competition
- 56. MESA
- 57. MITE (Michigan Introduction to Technology & Engineering) in summer of 2011
- 58. My school did not offer anything to help those interested in the STEM fields.
- 59. National Chemistry Olympiad test, Chemistry bowl, Chemistry career day, science club, high school scholars.
- 60. One of my very favorite events to attend are MESA days at UCBS.
- 61. Only AP classes in chemistry, physics and mathematics.
- 62. Operation Catapult at the Rose-Hulman Institute of Technology. Also took all math classes available up to calculus AB, statistics AP, biology AP, computer science AP, AP physics
- 63. Returning in 2012 to Tech Trek as a counselor. My AP Physics class.
- 64. Robotics
- 65. Science Expo, Robotic Club (manager) and Physics Club.
- 66. Science fairs & research
- 67. Science Olympiad
- 68. Science Olympiad
- 69. Science Olympiad, Tech Trek Women's Night, Tech Trek Interview (2012).
- 70. Since Tech Trek I participated in a great program at Stanford University called Stanford EXPLORE. The program is 1-3 weeks long for 4 hours a day. Overall, it's a series of lectures on varying topics in the sciences. I was there for the full three weeks. I loved the lectures and the professors who gave them. It was a great was to introduce high school students to some of the more complex biotechnology, ethical, and environmental impacts of the sciences.
- 71. Solar Cup (high school students build and race a solar powered boat)
- 72. Stanford lab internship in neurobiology
- 73. AMC
- 74. I came back to Tech Trek as a JC.
- 75. "Career Trek" (a program a local community college puts on)
- 76. SMASH Academy

- 77. Volunteering at the Sea Life Center in Avila Beach
- 78. Volunteering for the Marine Science Institute.
- 79. Wildlife Conservation Club
- 80. Tech Trek Junior Counselor
- 81. Science Olympiad
- 82. Tech Trek was the most important STEM activity I participated in, but I also was a part of the SIGGRAPH Pioneer Mentoring program. SIGGRAPH is a computer graphics conference and exhibition, and the mentoring program allowed high school students to go to the conference for free to see all the computer science technologies.
- 83. Tech Trek was the most important STEM activity, because it was the first one it opened up the many possibilities of those fields and gave me the momentum to learn even more.
- 84. Tech Trek led me to become interested in HOSA.
- 85. Math club
- 86. The year after I attended Tech Trek, Bayside Middle School became the Bayside STEM Academy. I had the chance to join the MOUSE Squad, a program where I was able to learn about technology and perform tech support for my teachers.
- 87. The build activities for Science Olympiad
- 88. The most important STEM activities I have participated in are Tech Trek and M.E.S.A.
- 89. The most recent activity I participated in was the Science Olympiad at AVC.
- 90. The Tech Museum Tech Challenge
- 91. This summer I was selected for a STEM program sponsored by ExxonMobil.
- 92. TorBots FRC Robotics Team 1197
- 93. Vice President of WiSE (Women in Science and Engineering) Club at school. I also was a junior counselor the summer after 9th grade at Tech Trek.
- 94. Visiting hospitals and getting together with the other girls/Tech Trek alumnae.
- 95. Volunteering at a nursing home to get some insight into the medical field.
- 96. We went on a tour of Medtronic, which introduced me to the world of Chemical Engineering, a field I have been interested in since Tech Trek.
- 97. Working in science labs at UCSF.
- 98. Workshops involving different chemicals.
- 99. Yes with the mathematics concept I was able to participate in my high school's VITA

## **APPENDIX G**

#### Other Non-AP Math and Science Classes Completed in High School (Q18)

What other non-AP math and science classes did you successfully complete in high school? (asked of all students; 41 responses)

Agricultural Science Agriculture Anatomy Anatomy Anatomy & Physiology Anatomy, Psychology, Finite Anatomy, robotics I & II, 2D animation, audio Anatomy/Physiology **AP Environmental Science** AP statistics Astrobiology Astronomy Astronomy **Biomedical Technology** Biotechnology Biotechnology, Marine Biology, Science **Research Project** Environmental science **Environmental science Environmental Science** Environmental science and anatomy Exercise Science

Forensic Science, College Algebra Forensic science, human anatomy and physiology Forensics, Marine Biology, Astronomy Functions/Statistics/Trigonometry **Honors Biomedical Science** Human engineering I took most of these as the IB diploma. IB Environmental Systems and Societies and Biotechnology **Inferential Statistics** Integrated Science Marine Biology and Probability/Statistics Marine Ecology Marine Science Mechanical Engineering; Biology 2 **Physical Science** Pre-calculus Probability and statistics Psychology Statistics **Technical drafting** 

## **APPENDIX H**

#### Intended College Major (Other than Those Already Listed) (Q21)

The following responses were listed under "Other—please specify" in Q21, What is your anticipated college major? (asked of all students)

Accountant **Animal Science** Animal/Veterinary Science Animation, Digital Special Effects Arabic, International Affairs Architecture Associates Degree in Music Astrophysics Athletic Training **Biochemistry**, Pre-Med **Biochemical Engineering** Biochemistry **Biochemistry** Biopsychology Biotechnology Chemical Engineering Child Development & Psychology; minor in **Criminal Justice & French Cognitive Science Cosmetology License** Criminal Justice Criminology Criminology, Political Science Asian Language & Literature Economics (& Management Science & Engineering) Education **English Literature Environmental Law** Exercise Biology Feminist Studies and/or Linguistics Film & Electronic Arts; Marketing minor Film & EMT Film Studies minor **Gender Studies** Genetics

Global Security & Intelligence Studies; minor in Chinese Graphic Design Health Care Administration Heath Care/Sports Medicine Health Science History History and Kinesiology History and Pre-Law **International Affairs** International Relations; Pre-Med. Kinesiology Kinesiology Kinesiology: Exercise Science Law Liberal Studies (Elementary Education) Media Arts and Animation Medicine Microbiology Microbiology, Immunology, Molecular Neuroscience Nursing Nursing Nursing Nursing Nursing or Nutrition **Nursing Science** Nutritional Science Paleontology or Biology Pharmacology Pharmacy Photography Physiology/Psychology Plant Science Pre-Med Pre-Med

Pre-Veterinary Studies Psychology Psychology and possibly Math minor Radiology Respiratory Therapy Social Work Spanish Therapy Undecided but will double major Undeclared in Letters & Sciences at UCB Zoology

## **APPENDIX I**

#### What Do You Plan to Study in Graduate School? (Q28)

If you are planning on going to graduate or professional school, what do you plan to study?

Accounting Athletic Training Biology, Immunology Botanical Design & Landscape Architecture, from an Environmental/Sustainable standpoint **Business Law** Dental school Dietetics Eastern Cultures Education Either history or Political Science, potentially Law School Either masters or PhD in Environmental Science, or Law School English Literature Environmental science of some sort, maybe restoration ecology Forensic science Forensics, Chemistry History I am in a 7-year medical program. I am still not sure what it is that I want to study exactly. I plan to transfer Santa Barbara City College to a 4-yr University and study Zoology. Nurse Practitioner, or go on to medical school. Law

Law School or continuation in Gender Studies M.D. or M.D. PhD in Chemistry Marketing MBA MBA or MPP (or both) Medical School Medical school Medical school and graduate school to earn my masters in public health Medical School studying Medicine Medical school/optometry school Medicine Medicine at UC San Francisco Medicine, Microbiology, Immunology Not sure yet Not sure yet Nursing Nursing! Occupational Therapy Opera Pediatric Physical Therapy Physical Therapy Premed Psychiatry Psychology Undecided Undecided

## **APPENDIX J**

#### What Careers Are You Considering? (Q27)

What careers are you considering? (asked of all respondents)

Of these responses, 66 percent of careers are STEM related, 31.5 percent are non-STEM, and 2.5 percent are uncertain.

- A career in clinical neuropsychology (or a related form of psychology), or a job as an editor or with a publisher
- A career in musical theatre as a performer and/or psychotherapist
- A career in the humanities
- A child's psychologist
- A job with a government agency using languages
- A Marine Biologist (most likely specializing in Marine Mammals)
- A nurse, possibly specializing in pediatrics, oncology, labor & delivery, or midwifery
- A research scientist, perhaps either a computational neuroscientist or a chemical engineer or maybe even a software engineer
- Accountant
- Accountant, actuary, or other
- Accountant, Financial Analyst
- Accountant, Event Planner, Teacher
- Accountant, finance agent, finance analyst,
- loan officer, loan analyst

Accounting

- Actress, veterinarian, teacher
- Actuarial analyst, teacher
- Administrative assistant or tourism &
- hospitality
- Adolescent Psychology
- AG Business
- Air Force Intelligence Officer Air Force
- Regional Affairs Officer

Anesthesiology

Anything in math or science

Architecture or engineering

- Architecture, Business, Art
- Architecture, Engineering
- Astrophysicist, Aerospace engineer, chemical physicist
- At the moment, I'm thinking about either astronomy and astrophysics or getting and English teaching credential and teaching English in a foreign country
- At this point I am not sure what I want to do with the rest of my life. I am planning on taking engineering and psychology/anthropology classes in college and seeing if I want to pursue a career in any of these areas.
- At this time I am not considering any specific careers. However, I do hope that I can pursue careers centered on English. Athletic Training, Coaching Being a pediatrician, or possibly a teacher
- Bio-chemical engineering
- Biochemical engineering, Biomedical engineering
- Biochemist Genetics, Biomedical Engineer Biochemist, Biochemical Engineer,
- Biomedical Research, and Medicine Biological engineer, zoologist, marine biologist,
- Biologist, Marine Biologist, Environmental something-or-other
- Biology, Pediatrician
- Biomedical Engineer working in medical
- Broadcast journalism, advertising, marketing

Broadcast journalism, nutrition, sports medicine, international studies **Budget analyst** Business, OBGYN/gynecologist doctor Business Administrator, Marketing Specialist **Business Manager, Photographer Business** owner Business process management, education reform, law **Business; Product Design; Investments** CFO or hospital administrator Chemical engineer Chemical engineering or biochemistry Chemical or biochemical engineer, chemist or biochemist Chemist or mathematics Chemist, geneticist, chemical engineer, therapist, writer, musician Child Psychologist Cinematography Commercial/Fashion Photography, Criminal Justice Compound Pharmacist or Neonatal Nursing Computer programming with emphasis in entertainment industry (apps, films, games, etc.—at this time, mostly interested in computer enhanced special effects for film making Computer Scientist, Computer Programmer Constructive Engineering, Music Teacher, Child's Nurse Cosmetic/Reconstructive Surgeon Cosmetologist Counseling, Psychiatrist, anything to do with social sciences Counselor, teacher, psychologist Criminologist, Field Technician Crypto-anthropologist, primatologist, educator Culinary Arts in business Management Director or on-set paramedic Doctor Doctor, Biological researcher

Don't know Ecologist, biomedical engineer, environmental engineer, biochemistry Electrical Engineer, Mechanical Engineer, Civil Engineer, Chemical Engineer, Veterinarian Elementary School teacher Engineer Engineering **English Professor Environmental Attorney** Environmental Educator, Paramedic, English teacher Environmental Engineer, Materials Scientist, Lawyer Environmental Horticulture and Habitat Design **Environmental Lawyer Environmental Scientist** Environmental Scientist/Journalist/Lawyer Family Therapy, Youth programs, Public Health, or Drug dependence programs Farmer FBI agent Field researcher, Lab tech Film Film or television producer, small-business owner Finance or Accounting Finance, Management, or Marketing Financial Analyst Food chemist Forensic chemist Forensic Microbiology Forensic psychologist Forensic Psychology. Psychiatry Forensic Scientist and Lawyer Forensic scientist forensic psychologist Forensic scientists Surgeon Forensic Toxicology **General Practitioner** Genetics, Astronomy, Paleontology Global business Government Foreign policy advisor

**Graphic Design** 

Graphic Design and animation work for

Pixar or Disney.

- Health Care Administration
- High school English teacher
- History teacher
- History teacher/P.E. teacher

Human resources, nursing, communications

I am considering a career in Business or Engineering.

I am considering a career in marine biology. I am considering a career in research.

Although I have many ideas of specific types of research I am not sure exactly. I plan to explore more specific careers and research in college.

I am considering a wide variety of careers such as healthcare administrator, architect, or dental hygienist.

I am considering about becoming a Zoologist.

I am considering being an industrial organizational psychologist

I am considering careers in the math field.

I am considering chemical engineering most seriously, but I also love biology and chemistry, so I might pursue a career in one of those subjects.

I am considering going into pharmacy.

I am considering on becoming an aerospace engineer or a computer engineer.

- I am considering orthopedic surgery. It is difficult to decide at this time because I am about to start college, and a world of opportunities will be available, but I know I want to go to medical school after my undergraduate studies.
- I am considering pursuing art within the commercial field, such as working within the animation industry or creating pieces for companies under advertising.
   I am considering the medical field,

specifically an OB/GYN.

- I am going to go to school to become a nurse or a doctor, working with Geriatrics.
- I am not sure yet.
- I am still unsure whether I would like to pursue engineering but I am thinking about computer science or civil engineering.
- I have a passion for music; I would love to be a music teacher, a vocal coach.

I have given some thought to this, but I have not found a career that I am sure about doing.

I hope to pursue a career in the medical field as a physician or public health care worker. Specifically, I'd like to study biology, public health, and epidemiology, and treat patients suffering in third world countries.

I know that I want a career in marketing. Probably retail marketing.

I may consider a career in the medical field if I major in Physiology, and a career in counseling in I major in Psychology.

- I plan to be a Biotechnologist
- I want to be a doctor, preferably working in the ER as a Trauma Specialist. However, I also wish to double-major in the field of music performance.
- I want to be a mathematician, probably a college professor, and do research.

I want to be a songwriter

- I want to be an animatronics technician.
- I want to become a biochemical engineer or a biochemical pharmacist.

I want to become a Trauma, Cardiothoracic, or Neurosurgeon. My second choice is some form of Medical Diagnostician.

- I would like to be a novelist, and also be in occupational therapy for children.
- I would like to be a nurse or a biotechnology laboratory technician, or hydrologist or biochemist.

I would like to be a Sports Therapist

- I would like to pursue an IT career, software engineer, and as well as pursue a business minor. I also have a love for politics and would like to study American government.
- I would like to work with children in some capacity

I would love to become a pediatrician.

- I'm debating whether I should study to become a criminologist or major in communications and work on producing and screen writing for films.
- I'm not really sure yet. My Dad is an Environmental Chemist, and that seems really interesting. I love chemistry, and I want to help save the environment, because—as I'm discovering even more in my AP Environmental Science class goodness knows, we need it! And so I'm considering some sort of chemical engineer career because I could come up with greener alternatives to so many of the things we humans do and use. I'm not sure

I'm not sure.

- I'm not sure exactly what career I want yet, but I do want it to be in the field of science.
- I've bounced around a couple, but the three most likely will be either a coroner, a forensic scientist, or a vet specializing in large and endangered animals. In the life sciences area ... biology, marine biology, and animal behavior. In the chemical and physical sciences area, paleontology.
- International Development
- Journalism or Paleontology
- Lab research in cognitive

science/neuroscience

Law, Business, Journalism, International Relations

- Law, Foreign Service
- Lawyer working for the district attorney or for the *Innocence Project*

Lawyer, Lobbyist, Activist Lawyer Marine Biologist, Writer Marine Biology or Journalism Marketing in business Materials Engineering Math or science professor Math teacher Mechanical Engineering Mechanical engineering, Environmental engineering Mechanical or bio technical engineering Medical Doctor Medical Field—Surgeon, Child Development Medical research, infectious disease doctor, chemical engineering related fields Medicine Medicine Medicine, Biomedical Engineering Medicine, Biology Medicine, Doctors Without Borders, Health Care Administration Merchandising and marketing Microbiologist, Medical Researcher My career list has expanded tremendously since I was little, my original choice of teaching still on the list. Accounting, engineering, and a career in biology, have all been added to the list of possibilities, in addition to any branches of those fields that interest me. My passion truly lies in the realm of Biology, specifically in DNA therapy & Genetics. Neuroscience researcher, pediatric neurologist, or other career in the medical field Neuroscientist/scientist in general Neurosurgeon No clue Not sure Not sure but looking into various physics and engineering majors. Not sure but something in the health/biological/medical field

Not sure yet Not sure—possibly in the field of mechanical engineering or music Nurse, Doctor Nursing Nursing Nursing Midwife or Obstetrician/Gynecologist Nursing, pediatric nurse Nursing, Translator (Spanish), Advertising/Graphic Design Nutritionist or RN Nutritionist, accountant, something with languages Nutritionist/Dietitian OB/GYN, or some other type of doctor. If not, I'll probably get a PhD in Chemistry. **OB/GYN**, Nurse Practitioner, Emergency Room doctor OB/GYN, something in the medical field **Occupational Therapist** Opera Ophthalmology Optometry/ophthalmologist Orthodontist Orthopedic surgeon, biological research, Medicine, Biotechnology Pediatric Oncologist or Pediatric Rheumatologist Pediatric Physical Therapist or Surgical Patients and a high school Track coach Pediatric Physical Therapy Pediatric Surgeon Pediatrician, Optometrist Pediatrician, General Surgeon Performing Arts Perhaps sports medicine/physical education Pharmacist, nurse, environmentalist Physical Therapist Physical Therapist, Nursing, Cardiac **Catheterization Technician** Physical therapist, biochemist, pediatrician, general practitioner Physical Therapist, Nurse, Doctor

Physical Therapist, Science Engineer, Corporate Lawyer, Investor, ER Physician Physical Therapy Physical Therapy, Athletic Training Physical Therapy, Psychology Physician Physician specializing in Emergency medicine Physician, specifically pediatric oncology Physician, biomedical engineer Physician, Environmental Researcher Political Strategist, Campaign Manager, Political Analyst Possibly a marine biologist, or maybe even behavioral President of the U.S., Congress woman, small business owner, Marketing Specialist, Graphic Designer, Government worker President of the United States, Congress woman, UN member, Non-profit Organization CEO, Federal Reserve employee, economist Print or Broadcast Journalist, Author Professor, Anthropologist Psychiatrist Psychologist Psychologist or Speech pathologist Psychology Psychology, drama Public Relations—Walt Disney Company Public Relations, Business Administrations, Lawyer **Public Service** Radiation therapy **Registered Dietitian** Registered nurse Registered Nurse specialized in Neonatal care. Research and environmental evaluation Researcher Respiratory Therapy and Medical Doctor **RN**; Nurse Practitioner Something in astronomy

Something in engineering or science, preferably natural science or some engineering where I can make things. Something in science! I am not entirely sure yet. I am considering medicine or some sort of engineering, biology, or environmental science Something in the field of Law, corrections, etc. Something in the field of medicine Something in the Medical Field Something in the medical or engineering fields. I have an interest in neurology, so I'm hoping to pursue that if I do go into medicine. Something that has to do with design and computers, maybe related to AutoCAD. Sound Design, Animation Special Needs Teacher Speech and Language Pathologist Speech Pathologist Sports therapist Surgeon Teaching Teaching Teaching of some sort in biology, or microbiologist Teaching, psychology, maybe business

The career I am currently interested in is forensics scientist. The careers I'm considering: Forensic Scientist, music engineer, a music businesswoman, and actor Theater, music, law, political science, archeology Therapist, Psychologist To be a MD; got accepted into a med program. Tourism, Photography, Marketing Translator, Teaching English as a Foreign Language Undecided Undecided Unsure Unsure Veterinarian Veterinarian, Director, Stage Manager, Actor Veterinarian, doctor, environmental science Veterinarian, Medical Helper/Doctor, Teacher Vocal arts teacher or production technician Women and gender studies, Feminist studies, linguistics, Business Writer Writer, Musician, Professor, Artist Zoo Veterinarian

## **APPENDIX K**

### Tell Us More about What Had the Biggest Impact on You (Q12)

- 1. As a result of my Tech Trek experience and other scientific activities, I am now applying to colleges with the intent to major in environmental sciences. Tech Trek was one of the building blocks to confirming my interest in the sciences.
- 2. After we visited the Marine Science Institute during Tech Trek, I became very interested in Marine Biology. I'm still considering this as my college major, and screening colleges based on their ability to provide a strong degree program.
- 3. All mentioned above had a strong impact on me, especially increasing my knowledge of STEM professions, confidence in my abilities to learn math and science, and allowed me to meet new friends. (The first three)
- 4. All of the above were extremely important and I can't decide which is the most important. I would say Tech Trek gave me more confidence to work and excel in my academic courses and helped me identify awesome women role models in science/tech fields. It was inspiring and definitely played a role in where I am now: going to study biology in college next year.
- 5. All of these areas greatly affected me, the most important, however, was my new confidence not only in math and science subjects but in all aspects of my life. Before attending Tech Trek, it was a rarity when I spoke up in class, I never volunteered my ideas, and I was generally timid when meeting new people. Being around such strong, amazing, and successful women, however, I realized that I truly can be anything and anyone that I want. Tech Trek gave me a profoundly new confidence.
- 6. Also having the experience of being able to stay in the dorms and live with other girls had a big impact on myself because I felt all the support that surrounded me. It was a strong positive environment to be in and be able to participate in, we had so many things in common some being we were all females there, and had a passion for Math and Science we will always have TECH TREK in common. This also helped me determine what I would like to learn about because of how fun and how much we as young girls were able to attain with the help of each other.
- 7. As a pre-teen in middle school I was not aware of many careers. Tech Trek showed me many types of science careers that were interesting and actually fun, and made them seem accessible to girls like me.
- 8. As previously stated, tech trek furthered my awareness of the career opportunities before me in the math/science area.

- 9. At Tech Trek they had many different activities that gave me an opportunity to see science and math in action, instead of just learning about it in a book. Being able to see why we have to learn about science and math helped me appreciate the subjects better. Plus the opportunity to see what going away to college feels like has given me the confidence to look at colleges farther away from home.
- 10. At the time I wanted to be a Marine Biologist so my favorite memory was going out on the boat, learning how to test the pH levels in the water, catching fish in nets, etc.
- 11. Before I attended Tech Trek, I had not known how valuable women are in society today. My admiration for accomplished women has increased dramatically, and because of this camp, particularly Professional Women's Night, I know want to pursue a career in math or science and make a difference in the world.
- 12. Before I went to Tech Trek, science was just science. I didn't know why it mattered in the world. Biology, chemistry, physics, computer science, what was the difference? My experience at camp was the catalyst for me to explore more into all the different ways in which math and science are applied in the world
- 13. Before Tech Trek I was extremely shy and unsure of my abilities and of what I would be able to do. I didn't know about a career in science or engineering because I didn't know if I was smart enough or if I could handle it. Tech Trek showed me that I seriously underestimated my abilities and my desire to work for what I wanted. I became confident enough to pursue high-level science and math courses in high school.
- 14. Being able to explore different science fields available to young women
- 15. Being able to have hands on experience in a college biology lab and living for five days in a college dorm, living like a college student, encouraged my interest to pursue a college degree and a career in the sciences.
- 16. Being able to hear the amazing stories of all the professional women that gave up some of their time to talk to use about their success in these stem fields was very motivating and inspiring to show me that there was a world out there that went beyond English majors. Also, the hands on activities we participated in were exciting and at the same time they gave me a feeling of pride in myself that I was able to build things on my own and watch them function. Probably my favorite activity was when we learned about electricity and played with some of the hazard safe materials they had.
- 17. Being able to see such an immense variety of math and science careers really opened my eyes to the endless possibilities I have when choosing a career path.
- 18. Being able to thoroughly enjoy the hands on activities was the best part. And learning at the same time!

- 19. Being around other people who had such a love for science like I did only helped steer me in the direction of the field I wanted to join.
- 20. Being around so many girls who were interested in science
- 21. Being away from my family and being with girls my age interested in the same things as me had the biggest impact on me. I was able to connect with the girls over our shared love of science, and all the trips and activities planned for us really gave me a good idea of what a job in the sciences would be like.
- 22. Being chosen to attend Tech Trek increased my confidence in my abilities to go into the field of science.
- 23. Being in the class I chose (anatomy) was the best and most important part of the experience to me. The lessons were interesting, and had a lot of hands-on activities (dissections). I only wish the in-class time had been longer.
- 24. Being on an amazing college and learning interesting things. The whole college experience.
- 25. Being surrounded by girls like me who were interested in the same field created an environment conducive to learning.
- 26. Being with girls from a wide variety of backgrounds and interests, yet we all were really interested in science and math and were all intelligent and well rounded. It was nice to know that there are other girls just like me who want to be socially active but also are highly motivated and interested in education
- 27. Between other campers who shared their dreams of being doctors, engineers, and more and the teachers who loved their subjects and the counselors who were working on degrees for or working in these field, simply being in the environment of these strong women impacted me greatly.
- 28. By going to a science/math camp with other smart girls, I was able to make friends at my own academic level and gain confidence in my abilities.
- 29. Definitely giving me confidence in my own abilities. Being a middle schooler, I was a little insecure and self-conscious but by being around many girls who were just like me it gave me the confidence to pursue my interests. I am going to be a biology major at San Francisco State University!
- 30. Doing hands on experiments and activities helped me understand the biology we were discussing and feel more involved in the work.

31. Enjoyed using Apple computers.

#### 32. Everything!

- 33. For me, it was about gaining more confidence in who and what I am. It also was a place that opened me to other career options that at the time I wasn't really considering.
- 34. For me, Tech Trek definitely increased my confidence level. I realized women should no longer be told they are not as good as men at math and science, and that women can truly be successful. I learned that other women my age had similar interests to me, and we were working together to change the future.
- 35. Gaining experience in becoming independent—making my own decisions—had the biggest impact in participating in Tech Trek.
- 36. Hands on experience in science/technology. I was able to be allowed to learn skills that kids my age at that time weren't learning yet.
- 37. Hands-on activities! That was the best way for me to learn, and the large amount of them at Tech Trek only increased my love of math, science, engineering etc. It made STEM professions seem SO awesome!
- 38. Honestly it was living in the college dorms and being responsible for myself that had the biggest impact on me, I learned that I was able to do that and it was empowering. Additionally it put me on track to becoming an active feminist and equality rights advocate.
- 39. Honestly, I was already enrolled in advanced science and math classes, but Tech Trek opened my eyes to the different jobs one could have as a STEM field professional.
- 40. I am still in contact with a few people I met at Tech Trek. I also now know what field I want to go into from my core class.
- 41. I became more comfortable in math, which is now my strongest subject!
- 42. I became much more confident and began challenging myself with harder classes and a rigorous schedule when I got to High School.
- 43. I believe it had all these effects because there were all the other interested girls there from all over that I met, I saw/met successful women in STEM fields, I learned of applications of math and science and the professions I could pursue, and it made me want to try harder in those classes.

- 44. I believe that being with girls my age at Stanford had the biggest impact on me. When I was in junior high, it was difficult to find girls my age that had an interest for science, since it seemed to be a subject for boys. I was inspired by the similarities these girls shared with me, and it made me realize that there is hope for more women to pursue science and math related careers. This hope was rekindled again last summer when I was fortunate enough to counsel for girls who were younger with me, and I was so happy to see that same passion in the girls of the 2012 camp.
- 45. I believe the hands on activities were the most important to me. They really allowed me to delve into the idea of what a career in a STEM profession might be like.
- 46. I believe the part of the experience that had the biggest impact on me was the general idea of the camp as a whole. Every individual part of tech trek was an equal contribution to the experience as a whole, and perhaps the most memorable part of the camp was that everything was equally exciting, fun, and educational. I would definitely encourage young women to participate, as it is definitely an experience worth having!
- 47. I can say that the friendships I made while being there taught me confidence and communication skills that were not so great before I attended Tech Trek. The classes I took taught me asking questions is okay to do and I now have more confidence in class. But the skit we had to do on stage I will never forget because I stood on stage with friends and taught my peers which before Tech Trek I was always terrified to do; but the confidence that I learned helps me when I teach at church or when I do presentations at school.
- 48. I decided to go to Tech Trek because I wanted to gain confidence on my science and math subjects. Participating Tech Trek at Stanford University was a great starting point to inspire me to pursue my college education. I was also looking forward to meet new friends that had similar interests as mine. Overall, I had fun and good memories during my time at Tech Trek. I love it!
- 49. I feel that the cadaver lab had the biggest impact on my life. It helped me realize how much I want to learn about the human body as well as work with it.
- 50. I felt more confident after tech trek. For me, it marked a transition in my life into becoming a smart young woman. It introduced me to the importance of financing, and other daily life tasks.
- 51. I found that math and science were very interesting through Tech Trek, something that I didn't see when I was at school. They made it more fun for me to learn and although I didn't go in to any relating fields to math and science I really did enjoy my time at Tech Trek.

- 52. I got the biggest impact from the hands on experiences and living in the dorms at Stanford. It really opened my eyes to what college life is like and how many opportunities there are for me.
- 53. I had always associated STEM related jobs to men, until going to Tech Trek. Tech Trek made me realize that women are just as capable as men and are just as needed. Ever since going to Tech Trek I have thoroughly enjoyed challenging myself in STEM.
- 54. I had hoped to attend Stanford for my Tech Trek experience and was fortunate to have gone there. Although I applied to Stanford, I was not accepted there. When I attended Tech Trek, I felt there was no other university I wanted to attend. I have now realized my experience was a terrific challenge and something I am proud to have been part of.
- 55. I have a lot of memories from Tech Trek that remind me of how fun learning can be when it is in a fun environment and you are surrounded by other people who enjoy the same things you do. It was also a great experience to get to stay on the campus of a very prestige university, especially since this was really the first time I had ever looked at a college. All the other activities were great as well because they allowed me to experience a variety of things I had never tried before. The whole experience was unique and had a positive impact on my education and goals.
- 56. I have been able to become a mentor to other young woman/men in the field of math and science.
- 57. I have realized the importance of women in STEM majors because the field is mainly male dominated. I discovered my interest in biotechnology and pursued that field of study in my high school biotech program. In the summer of my sophomore year, I interned at Genencor International and gained a professional insight of the biotech field. It has definitely encouraged me to pursue biotech in college. I have also looked into computer programming and coding, influenced by my Tech Trek experience. Women need to play a bigger role in these male dominated fields.
- 58. I learned that science and math weren't as bad as I had previously thought!
- 59. I loved seeing how theories and book knowledge could be applied to the real world
- 60. I loved the "woman empowerment" in the math and science field. I currently attend school with some of the other campers and have been close friends ever since.
- 61. I loved the hands on activities and getting to hear from other women about their unique occupations.
- 62. I loved the telescope night. AMAZING.

- 63. I made friendships that have lasted with girls across the state who had similar interests to myself which was a really powerful experience and especially important given the difficulties many middle school girls have with being themselves. I was also thoroughly inspired by the teachers and strong women around me and left feeling empowered and confident.
- 64. I made lots of new friends I still keep in touch with a couple of them. I thought making new friends was going to be scary but it really wasn't. Now I'm more confident in my abilities to make new friends and my abilities to learn more about science and math.
- 65. I met friends who I was able to connect with and we are all still communicating and pursuing science degrees even 5 years later and in college.
- 66. I most enjoyed the field trips because they are a way to see how people actually use science in jobs and real life, and how I possibly could in the future.
- 67. I participated in this camp 5 years ago. I will always remember coming out one night and looking through telescopes at stars (and planets?). That experience made me realize how small we were and how much there was to discover in the world. We are often so engrossed in our own lives that we sometimes don't realize how much there is to discover in the world. This night event and Tech Trek helped me realize this. After the telescope night event, I was so fixed on studying astronomy/astrophysics.
- 68. I really liked hearing from other woman in the field about possible careers
- 69. I really remember the field trip to Chabot Space and Science Center, in which we reenacted a space mission. Again, I am not planning a career in math or science, but this experience allowed me to see math and science outside of the rigidity of school.
- 70. I remember being interested in Professional women's night mainly because there were so many women who had jobs that I never knew about. It was interesting to hear about the different careers women were in and could be involved in. I remember staying up with my roommate, who I believed was completely different from someone I would normally befriend, and talking to her about common interests until we fell asleep. I then realized that there was more to what meets the eye, and that behavioral sciences is something I'm interested in.
- 71. I remember having to build a rocket out of newspapers and straws. This had the biggest impact on me because at the time I didn't know how we were going to accomplish that task. In the end through hard work and dedication we got the job done. This increased my belief in women's ability to succeed in STEM careers.
- 72. I suppose it was just seeing the women around me Professional Women's Night, speaking over their jobs and how important it was to them to be able to incorporate science into

their lives. It still impacts me today and I believe I can be one of those women too, speaking about the science career that I love.

- 73. I think the biggest impact of the camp was learning about the many science and math applications in life and opportunities to learn more in these areas. Science and math are now my favorite subjects in school, and I plan to go on and study science or engineering in college. The hands-on classes and field trips were my favorite and showed me how fun and interesting math and science can be!
- 74. I think being around girls my age that were just as interested in science as I was made me realize that I shouldn't be ashamed about my love for science. It also made me realized how much I love science and gave me the opportunity to learn about so many different professions involving science and math.
- 75. I think being surrounded by so many dedicated and amazing women was so important to my Tech Trek experience. They were all so encouraging and made me believe I could do anything!
- 76. I think most of all was the fact that I could amongst girls that were interested in the same subjects and were driven like I am. It really gave me confidence in myself and how it is okay to love school.
- 77. I think my favorite part about Tech Trek was the activities that promoted teamwork and working together. These projects allowed for us to get to know everyone better, learn team-building skills, and ultimately have fun.
- 78. I think one of the things that had the biggest impact on me was that I was introduced to other girls and women who were interested in learning more about the STEM fields as well as the fact that everything was so hands on. Being around other girls who were as curious as I was allowed us to create our own community, which bolstered our confidence in our interests. For girls, it is so important to emphasize that there are girls who enjoy science and mathematics and that there is absolutely no shame in being one of them. One of the reasons, that I personally feel, that causes girls to disregard the STEM fields in terms of majors and career choices is due to the fact that not only does our patriarchal society disgraces it but also due to the fact that many girls do not want to join these careers because they believe that they will be outcast-ed. By showing them that there is a community of women that enjoy the STEM fields and who work in them, this illustrates that these girls won't be left out or shunned by other members of society. Secondly, the Hands-on portion was really neat because it allowed you to actually feel what being a scientist or mathematician is like. It just made the whole program more real to me. Overall, the sense of community and the hands-on activities were really powerful and spoke really well to me.

- 79. I think that the workshops like the Bridges helped us to think about how to solve problems and show us how things are designed.
- 80. I think the class I took where we all worked together to make a hot air balloon had the biggest impact on me. Teamwork was one of the most important things I took away from tech trek.
- 81. I think the greatest impact was being with all of the other girls my age. We had so much fun learning and being together. It gave me a lot of confidence moving forward and I have attended several other science internships since then. The food was very good. We enjoyed it quite a bit. Besides all of the content that we learned, I think I learned how to be confident away from home.
- 82. I think the thing that had the biggest impact on me was staying away from home for the period of the camp. It was the longest time I had ever spent away from my family and my home, and it really prepared me for college. I feel that I became more independent, and it was really valuable to be able to experience dorm life before college. Not many people get that chance.
- 83. I think what had the biggest impact was female empowerment. While I did not pursue a college major in STEM, I do advocate seriously for the education and leadership of women, and that includes a higher participation from women in STEM careers.
- 84. I use to think I only used science in school but I've learned there are situations in my life where I need science connections.
- 85. I used to be really shy, but Tech Trek gave the chance to meet new people and I had to learn how to burst out of my bubble and starting making new friends. It gave me the confidence to talk to people that I don't even know and it's much easier to make friends. After Tech Trek, I've noticed that I've overcome my shyness and I've become a very social person (something I never thought I'd be able to do in the past).
- 86. I was able to sleep without my parents in a learning environment. I learned I really do like science and technology. I was in the robotics and engineering lab class, it was a lot of fun!
- 87. I was already confident and believed that women could succeed in STEM careers, so the greatest impact of Tech Trek on me was increasing my knowledge of different professions, since the number of science fields that elementary and middle school students are exposed to is very limited.
- 88. I was also able to see that the CITs had continued in math and science and that made me excited to increase my knowledge in math and science as well.

- 89. I was honored to be chosen to attend Tech Trek. It gave me the opportunity to identify myself as a student of science at an impressionable age. I have continued to enjoy the sciences in high school, especially chemistry and am considering majoring in biochemistry in college.
- 90. I was really inspired by all the women (teachers, dorm moms, and professional women) who were so excited by math and science; I had never been in such an empowering environment
- 91. I will be attending Mount Holyoke College in the fall of 2013. Upon trying to decide between a few colleges I questioned whether Mount Holyoke was the right choice for me as a women's college. One of the deciding factors was remembering back to my enlightening Tech Trek experience. I thought back to the encouraging atmosphere and fearless attitude all the women portrayed and passed onto me. I hope to get at Mount Holyoke the same encouragement and support I felt at Tech Trek. Tech Trek's program gave me the confidence and desire to pursue a career in the sciences. I hope to major in biochemistry in college where I will be working with other smart women who, like me, hope that women have a great capacity to succeed in STEM careers. Tech Trek nurtured my love for science and gave me confidence for the future.
- 92. I wish my experience had been a better one. I realize that this program is beneficial to all girls and In spite of the den moms I learned and grew from the experience and glad for the lessons learned.
- 93. I would say that the biggest impact Tech Trek had on me was by giving me the confidence to really apply myself to science and math. The program showed me that it is cool to be smart and that it is something that should be celebrated and explored.
- 94. I would say the biggest impact is seeing how interested other women older than myself are interested in science, and how they use it in their daily lives.
- 95. I'm not alone. There are tons of other different kinds of girls out there who are extraordinarily gifted but don't get many opportunities. The whole experience also taught me that there is a whole other world out there and your future could change every day. Experiment with what you can and go with your heart. But try your best at whatever you do.
- 96. Increased my confidence in women's role in the STEM fields as a whole.
- 97. It broadened my knowledge on the vast array of way science and math can be applied anywhere in life.
- 98. It encouraged me even more to go into the career I want to go into (Doctor—Trauma Specialist) and allowed me to connect to others who share my passion of learning,

challenging themselves, and proving that women can take up the same careers as men and not be a weak link in that profession.

- 99. It gave me a feel of college life since we stayed at the dorms at the university, which I though was great for furthering my interest in college
- 100. It gave me a look into the professional world and how many different careers were possible. Almost four years later, I still love to tell people some of the cool facts I learned or about the inspiring women I met.
- 101. It gave me confidence in myself and helped me with interactions with all different kinds of people. My roommate was extremely quiet, the opposite of me, and I had to learn to work with that.
- 102. It gave me more confidence in my approach to studying science especially in the field of biotech.
- 103. It gave me the confidence I needed to continue to strive in a community where competition pushes students to their utmost limit to come out on top. I also want to give as much input as I can so that the program can be improved for future Tech Trekkers so I want to give some more details about aspects I thought could be modified. Firstly, during my year at Tech Trek a lot of girls were homesick during the first couple of days that they arrived and as 12-year-old girls, it was expected since a lot of us had not yet been away from home for a long period of time. A lot of girls wished to be able to talk to their parents, and we were allowed about 20 minutes on the first night to talk to our parents and I know a lot of girls who wished they had been given more time and who were crying from being homesick. Also, a lot of the activities we did were things we had already done in class so the program at time was tedious. I think it would be exciting to have guest speakers who could demonstrate advancements in the science and technology industries in today's societies to be able to open the girls' minds to what is capable in today's world. I know we had an orientation on one day before the camp, but a lot of the girls were shy and just ended up sitting with their parents the whole time. And though the parents are all very excited to be there with their children, it's a different experience to make new friends and meet new people when your parents are standing right beside you. It would have been nice to have the camp organize a couple of activities that the girls could have all done together at orientation in a place where they were separated from their parents so they had the opportunity to form more lasting relationships.
- 104. It helped me explore my options. I always knew I loved math, but I didn't know how to narrow that down into a career. It was helpful because it got me thinking at a young age. And to this day, I'm still committed to the career I chose at Tech Trek.
- 105. It helped me realize how crucial math and science are to us on a day-to-day basis and that the world of math and science is open to women as well.

- 106. It made me realize that my interest in the sciences could definitely give way to a future career path.
- 107. It really gave me more confidence in myself to get to know new people, and how as females we can do anything we set our minds to, even if the career is male dominated. It got me to really think about all the different STEM careers out there and to dig deep into what interested me in regards to subjects that I enjoyed learning about, because it is important to study a major and go into a career that you enjoy.
- 108. It really was at Tech Trek where I first felt that I could actually become something great and have an impact on the world. I was exposed to exciting new science careers that fascinated me and was introduced to many successful women in these fields. This became my inspiration and ignited my ambition to follow my dreams because I would reach them despite any obstacles.
- 109. It really was nice to sample different courses of science with girls who actually cared about it, and who weren't just taking the class. It let me experience different fields that I would not have thought about otherwise, such as robotics and animation.
- 110. It showed me how many women and girls also have an interest in math and science.
- 111. It was a push to have me enroll in other summer classes such as LPFI's SMASH Academy. It was a really great opportunity that I'm very grateful that I was able to peruse. I really do think that it has made me look more at math and science in a positive and interesting light. This year (junior) I decided to challenge myself and take honors precalculus and honors physics. For my senior year, I'm signed up to take three science courses and one advanced math course (Anatomy and physiology, food science/bio tech, computer science, and AP statistics). I have no idea what I want to do in college or what kind of career I want, but I feel that it will have something to do with math and science.
- 112. It was inspiring to see that women can succeed in STEM fields if they set their mind to do so. I also greatly enjoyed meeting girls that have similar interests as me.
- 113. It was really eye opening to see how many powerful and intelligent women were involved in STEM careers. I had never doubted my ability to make it in the world of math ad science, but I was also aware of the challenge my gender could prove to be in these fields. Seeing women who had succeeded in doing so was both inspiring and exhilarating. It proved to me that I could do it too!
- 114. It's really hard to say, especially because I was brought up believing I could do whatever I wanted to. So I was already pretty confident in my abilities in math and science, and I already sort of assumed—at least back then—that it would be easy to succeed in STEM, which is what I knew even then that I would go into. Now though, I'm taking much more difficult math classes (science still comes fairly naturally to me) and remembering how fun

it was at Tech Trek encourages me to not give up because I know I CAN understand it if I work hard enough at it, and that then it will make sense. Likewise, now that I know the real statistics for women in STEM careers, I am even more determined to succeed in one myself. I know a lot of guys who are smart and going into STEM, and I know a lot of girls who are just as smart, and we are going right with them!

- 115. Just being in the dorms and staying at Stanford was an experience in itself.
- 116. Leaning that I have the ability to learn science and math impacted me the most. Without learning this about myself I would have not become interested in science and my major would not be Biopsychology.
- 117. Learning about all the different careers there were and all the options that I had opened my eyes and allowed me to see all that I could be.
- 118. Learning about how fun math and science can be!:)
- 119. Learning about professions available and also gaining confidence as a student
- 120. Learning about the different STEM careers had the biggest impact on me. I learned that it is good to be aware of many different subjects and be more well-rounded.
- 121. Learning about the many jobs available in the science field was very interesting. I also thought the career night was Valuable because it gave a range of different types of jobs in the math and science fields. I also really loved the building of the robot, the dissecting of the McDonald's meal and the swimming activities in the afternoon. The Olympic hopeful swimmers were training for the summer Olympics that summer and I got to watch them in the pool.
- 122. Learning in an environment that was not dominated by grades or other stress-causing factors allowed me to really enjoy being a student.
- 123. Living in a college dorm and being around other girls my age had the greatest impact on me. I was very shy, so the experience of learning and living with others who shared my interests allowed me to open up; I made new friends easily and became more self-reliant and outgoing.
- 124. Living in the dorms had the biggest impact on me. Tech Trek helped me learn that living in dorms can be fun.
- 125. Living on my own for a full week like a college student.
- 126. Made me want to have a STEM profession not just for myself, but to represent women in the field. I was very inspired by the feminist movement at Tech Trek.

- 127. Making friends there had the biggest impact. Knowing that other girls my age were interested in the same things that I was, made me feel less alone in my interests. The career night was also very inspiring; to learn about women who are/were interested in similar subjects as us, and working hard to achieve what they wanted
- 128. Marie Wolbach has been a huge inspiration to me. She was my dorm mom in 2009 and I have kept in touch with her since. Her motivation, accomplishments, and passion blow me away. When I go out on a limb and pursue a difficult science class, independent research, or a project of some sort, I like to think that I am making her proud. I attended an AAUW English Tea fundraiser in April and I was honored that I was alongside Marie as the two representatives of Tech Trek. Returning as a junior counselor in 2012 and my friendship with Marie have both made me want to stay as involved with Tech Trek as possible. Inspired by the women I met and my experience as a camper, I want to pursue studying science.
- 129. Meeting all of the women who have succeeded in sciences made me realize that I can too
- 130. Meeting all the women that were so successful in their fields of science or math and learning that I, too, could be like that. It was also very impactful that I attended the camp at Stanford University; I would never have imagined being at a place like that. I absolutely loved it and it helped me understand what it would be like to live at a college.
- 131. Meeting new friends and seeing how science and math influence the world around us.
- 132. Meeting new friends that felt the same way I did about math and science really made a difference.
- 133. Meeting other students was the most important to me because it let me get out of my shell and realize that I had to take action to pursue my career goals.
- 134. Meeting these new girls had the biggest impact on me, to this day I'm still good friends with one of the girls from my dorm.
- 135. My forensic class had the biggest impact on me. I had the opportunity to feel like a real scientist. This class sparked my interest in my future career.
- 136. My roommate and I turned out to be very similar and shared many interests. We're still close friends today.
- 137. On the third or fourth day we were at camp, my group (I was in Marine Biology) got to go out into the San Francisco bay and observe various animals and plants that make their homes there. It was amazing to get to go hands-on with so many different species that I otherwise might never have seen, and it really made me more interested in Biology as a field and a possible career.

- 138. One of the biggest impacts that Tech Trek had on me was my belief in women's ability to succeed in STEM careers. Seeing smart, accomplished women in the workforce, and seeing accomplished girls all around me only increased my determination in following my own dream of becoming a doctor. It was very important to see that, because all around me growing up there were so few females in the STEM careers.
- 139. One of the biggest things was just being at Whittier with other girls who were interested in the same things I was interested in and being shown that women can succeed in a previously male dominated field.
- 140. Presenting in front of several people had the biggest impact on me. It made me feel more confident about myself.
- 141. Professional Women's Night—strong female role models in interesting careers are powerful for young teens
- 142. Professional women's night—we received firsthand accounts of possible careers and learned all if the fun and interesting stuff associated with ST careers. The women we met weren't just doing their jobs, they were doing what they loved, and that made a huge impression on me.
- 143. Seeing how science and math applied to daily life really impacted me and captured my interest in the field.
- 144. Seeing so many other girls my age have such an interest in math and science. It was truly inspiring to know that some of them were athletes, juggling school and their athletics.
- 145. Seeing that other girls my age where interested in the same types of things as me was a very important part of the program, and proved to me that I am not the only one who wants to succeed in today's world.
- 146. Seeing that science and math could be fun and interesting.
- 147. Something that stood out to me is at tech trek I made one of my very best friends. Along with our friendship we boy still have great interest in math and science. Together we push each other and study together for classes and consider our futures in the fields. I think I became more interested in math and science after this camp.
- 148. Tech Trek's biggest impact on me was opening my eyes to all of the possibilities that science, mathematics, technology, and engineering hold for both the future, and my own personal career. Before tech trek my knowledge of science and the careers I could have it in were limited to what I learned in school. After tech trek, the world looks full of possibilities, possibilities for careers, and possibilities for change in the world.

- 149. Tech Trek allowed me to realize that I have the ability to do whatever I set my mind to, even if it is typically regarded as a male dominated field. While my interest in going into a scientifically based career has diminished over time, I have been able to apply the lesson mentioned before to many areas of my life, which has allowed me to strive towards goals that I probably wouldn't have otherwise.
- 150. Tech Trek also helped me get rid of my timid side. I met so many amazing friends & I'm actually still in touch with a lot of them today. It really helped me learn to interact with others and showed me the importance of teamwork. The college experience was amazing and influenced me into setting high goals for myself so I can one day actually attend college at such an awesome university. All in all, I gained enormous amounts of knowledge on college acceptances, requirements, and expenses I will have to face my senior year. I feel as if Tech Trek prepared me for what to expect in high school and college entrance. I loved the fact that the learning at Tech Trek was always hands on. It was always so much fun and it made us excited to work on any projects they had for us or assignments.
- 151. Tech Trek demonstrated to me that I should not allow my gender to hinder my ability to succeed. It taught me that women have the ability and all the means to pursue and achieve very successful careers and aspirations.
- 152. Tech Trek exposed me to the Stanford University Campus, making me dream bigger than I ever thought possible. I formed lasting friendships and am very confident in my ability to succeed in life overall. Before this camp, I had always been told that my race, gender, financial standing, and previous quality of education would prevent me from being anything in life. Most of the adults in my life even throughout high school have expected me to fail because of my circumstances. However, Tech Trek pulled me out of that mindset. I would like to thank anyone involved with the program because one week at this camp changed my life.
- 153. Tech Trek gave me confidence that I could pursue a career in forensics. It also helped me to excel in my high school biology and chemistry course.
- 154. Tech Trek gave me new confidence in my abilities to learn science. I always knew that science fascinated me, but now I know I can achieve my goal of becoming a scientist.
- 155. Tech Trek gave me the confidence to pursue a science-oriented occupation and helped me learn about many professions in the sciences.
- 156. Tech Trek gave me the confidence to stand out and excel in school.
- 157. Tech trek give me confidence in front of other people. It led me to the awareness of different career choices there is for us. I am able to challenge myself academically and socially after the program end.

- 158. Tech Trek had a huge impact on me overall. It made me feel a little more independent, it also mad interested in looking at science careers in the future. I really enjoyed the independence I had. I also enjoyed Women's professional night because it was really inspiring to see that women are capable of taking the role in important jobs.
- 159. Tech Trek has helped educate me the limits on women. Though there are invisible limitations such as glass escalator, glass wall, and glass ceiling, women are still able to succeed and strive for only themselves but for others.
- 160. Tech Trek has shown me that math and science are used in our everyday lives and without them we wouldn't be able to have new technology. I met a lot of new friends while attending Tech Trek who share the same interests as me. Tech Trek has also given me the confidence in my abilities to learn science because I wanted to know more about science and decided to major in science.
- 161. Tech Trek helped me see that math and science could be very fun. The activities from the different fields of math and science that we did helped me realize that there are many different careers that I could pursue. Not only did it broaden my view on the different types of careers, but it also showed me that I am capable of pursuing a career in math and science. Another impacting thing was the fact that I got to meet a lot of girls that have the same interests as I do and the fact that I still talk to a couple of them today.
- 162. Tech Trek increased my knowledge in the STEM professions and because of Tech Trek I am going off to college to become a Mechanical Engineer.
- 163. Tech Trek influenced me to for sure want to pursue a career in science. It also made me open up, or "come out of my shell," so to speak. I really grew as a person though tech trek; I feel more independent, stronger mentally and physically, and definitely much more confident with everything I do.
- 164. Tech Trek made me look beyond what was right in front of me. Interacting with my fellow campers and hearing women professors and other professional women speak about their colleges and careers was incredibly motivating. Middle school is a challenging time and Tech Trek refocused my commitment to doing well and excelling in my studies. Although I am not pursuing a career in STEM, I will be attending Reed College in Portland Oregon on a full scholarship this fall studying Philosophy, Literature, Art and Music. I plan on earning a PhD. in a subject I am passionate about! Thank you for everything Tech Trek gave to me!
- 165. Tech Trek provided me with so much knowledge in such a short amount of time. I learned so much more about science, technology, engineering and math than I ever thought I could in that amount of time. Tech Trek also planted me in an environment and situation that I wouldn't normally be comfortable with and showed me that it was okay to go and do things outside of my comfort zone that interested me and to open up myself and apply myself to what I really love. Now, the older I get, I realize that women are really making

themselves known in the math, science, technology and engineering world and that if I really apply myself like I did in Tech Trek I can make myself known too.

- 166. Tech Trek provided the girls with hands-on activities, and the knowledge earned from those activities stay in their brains. However, I liked that we all learned and had fun at the same time. We took classes in the morning and played volleyball, went snorkeling, etc. in the nighttime. Tech Trek gave us the opportunity to learn and interact with others.
- 167. Tech Trek really proved to me that my opportunities in STEM careers were not limited to being a teacher or a doctor, and meeting women who actually held jobs in these fields really inspired me to follow their paths.
- 168. Tech trek taught me more about people than math or science.
- 169. Tech Trek was an amazing and unforgettable experience. It made me even more interested in the math and science fields and exposed me to new things such as living on a college campus. Tech Trek has been a large factor in my decision to pursue a career in engineering and I hope it continues to spread its information to other girls.
- 170. Tech Trek increased my confidence in learning more in science.
- 171. That we as women have the power to achieve anything we set our mind to. The way the teachers taught the courses made me see things in a new perspective.
- 172. That women can be in any career they put their mind into!
- 173. The atmosphere was great! It was one of the first times I had been away from home and it was a great experience that showed me that there are other people, besides my immediate family, who truly want me to succeed and encourage me to do my best.
- 174. The best part of the trip was meeting other girls that were happy and not insecure like everyone else.
- 175. The biggest impact it had on me was being able to see women who were out in mathematical and scientific fields and knowing that one day I could be like them.
- 176. The biggest impact on me from the trip was learning about how heavily integrated technology was in my lifestyle. Although I was vaguely aware back then of how important it was, until after Tech Trek I didn't really appreciate (as much as I should have) the profound effect that math, science, and technology has on the way I live.
- 177. The biggest impact on me was being surrounded by other girls and women who appreciated knowledge and strived to achieve a higher level of it every day. Being surrounded by other intelligent young and older women made me strive for more intelligence.

- 178. The biggest impact on me was definitely learning all of the different careers in STEM that were available. After Danielle Feinberg gave her talk, I seriously started considering a profession in animation for a few weeks afterward.
- 179. The biggest impact on me was having fun with new friends while learning something useful and important. Also, the hands-on aspect of learning made it more effective.
- 180. The biggest impact on me was my chemistry class that I had enrolled in as one of my main classes in the program as well as the motivating speakers we had who explained their careers and making it possible. After my chemistry class, I had always looked forward to taking chemistry in high school, but it later evolved to be one of my biggest passions in life. When I entered high school I took Honors Chemistry with ease and then decided to take AP Chemistry. Since Tech Trek it has opened doors to a set of possibilities in the science fields.
- 181. The biggest impact on me was the women's career night. It was the first time I had seen so many professional women with careers in math and science. It greatly increased my confidence and resolve to pursue a math and science career.
- 182. The biggest impact on me would have been the many field trips and hands on activities that we got to do. They were so fun and enjoyed every bit of each activity and field trip!
- 183. The biggest impact on me would have to have been meeting new people because being there allowed you to get a closer bonding with those in your groups and it helped you become a friendlier person.
- 184. The biggest impact Tech Trek had on me was exposure to new experiences in a variety of ways from learning more about film technology to building friendships with people who shared the same interests as I do.
- 185. The biggest impact Tech Trek had on me was making me realize that I can do anything I put my heart into. Before the camp, I hadn't really thought that I could succeed in math or science, but afterwards I came to the conclusion that I could succeed in both if I had the right mindset.
- 186. The biggest impact Tech Trek had on me was that it convinced me that I could be good at science. I was interested in science ever since I was a child. However, I would never see women represented as scientists in movies, television, or books. Even though no one ever told me outright that I couldn't be good at science, I was discouraged because there were no role models for me to follow. Tech Trek was filled with professional women and was empowering. It was a privilege for me to attend.
- 187. The biggest impact that came from my experience at Tech Trek was seeing all the different paths you can take with all of the different subjects about STEM. And even

though I didn't realize it at that time, I am now studying one of the things I heard about during that week at Tech Trek.

- 188. The biggest impact that Tech Trek had in my life was knowing that through hard work and dedication, anyone can achieve great things, man or woman. Meeting new people and sharing our experiences together made me feel more comfortable knowing that there was someone else who was going through the exact same thing as me.
- 189. The biggest impact that Tech Trek had on me was that it opened my horizons for college and allowed me to make new friends! :)
- 190. The biggest impact that Tech Trek had on me was to open my eyes to the large variety of career paths within the STEM profession. I especially enjoyed the Professional Women's Night and found it invaluable to be able to talk to professionals about their career of choice.
- 191. The biggest impact the camp had on me was influencing my shift from wanting to be a vet to wanting to animate or work on films.
- 192. The biggest impact the Tech Trek program had on me was the importance of women in STEM education and careers.
- 193. The biggest impact to me was really the girls that I was privileged to meet. They showed me that there are in fact other girls who are interested in science and math. We were able to share a common background, and build lasting memories that I still smile at today.
- 194. The biggest impact was getting to know a diverse group of girls who were all interested in STEM careers.
- 195. The biggest impact was seeing how fun college life can be. Taking classes and being able to live in the dorms on campus was an amazing experience and got me excited to strive to succeed in life.
- 196. The biggest impact was that it showed me how science is used in real life and it is not just something in the classroom. I learned science is a real and amazing career choice that can be used anywhere.
- 197. The biggest positive impact on me was knowing that there are so many careers in science and math that are open to me. The possibilities are endless. I am at the point in choosing a college and major and I have a better understanding about what direction I can take with my life. The biggest negative impact on me was feeling alone the whole time. We were confined to our hall mates and I did not connect with them. The few times they let us go into the common areas, I did meet others. I feel that I was too young and would have handled the situation better now.

- 198. The biggest thing that I took away from Tech Trek is that I am not alone; I will always have a peer support group of intelligent women who are not about to let men take the world from them. I learned that women can be anything they want to be, and change the world.
- 199. The Biology class that I took was the most enlightening experience at the camp. The fact that human kind strives to discover the truth and gain knowledge but only know or have seen 10%, really hit me when we went out into the bay, vacuumed up stuff that was at the bottom of the sea, and analyzed what we found.
- 200. The cadaver lab had the biggest impact on me. I had the pleasure of putting the heart back in the cadaver we were viewing. It was an incredibly moving experience that I still frequently share. I knew even more so that I had to work with the human body after that.
- 201. The classroom experience and field trips were the most important part to me. I really enjoyed the activities with the marine science department, because I was not very familiar with this topic before attending camp. I am considering studying environmental science in college because of the exposure I got at Tech Trek.
- 202. The confidence that just because I am a woman does not render me incapable of becoming an engineer was the most important thing I gained. Also being able to experience what it is like to work in a STEM field was very important to me.
- 203. The confidence which I gained from Tech Trek had the most valuable impact on my life. To this very day, the experiences that I had and the friends that I made remind me that I am strong, and that I have the capability to be great.
- 204. The daily activities and how they were planned.
- 205. The doing it yourself project because it makes me feel like I can achieve anything in life without depending on others for help. I appreciated the Tech Trek for allowing me to attend the camp in 2008. Thank you.
- 206. The dorm life and the field trips we got to go on made me want to dream larger and explore the science and technology field.
- 207. The end of the camp microorganism projects and presentations
- 208. The experience that had the biggest impact on me was the project in Bioengineering class when we talked about genetically modified organisms. At the time, I didn't realize how much of our food is manipulated at the genetic level to produce it in the appropriate quality and quantity that is needed to support our growing population.
- 209. The fact that engineering isn't just for strong brainy guys, it's for Girls like me and my friends, too. The activities were fun and have me interest in way more than one career.

Also, the dorm room experience and the responsibilities were huge for me too. It was the best thing for a 7th grade girl.

- 210. The field trips and activities had a really big impact in a way that helped broaden my perspective, like robotics and engineering or rockets and aerodynamics.
- 211. The field trips! I loved the boat ride and snorkeling and making the PSA. I still have mine!
- 212. The forensics activity really pushed me to pursue a career in that field and now I'm studying forensic chemistry in college!
- 213. The hands on activities and lessons helped me realize my strength and passion for math and science.
- 214. The hands on activities were really fun and helped me understand the real world uses of math and science.
- 215. The hands on work and demonstrations made me consider careers like chemistry and physics that I might have never later taken classes on otherwise.
- 216. The hands-on classes really showed me how fun math and science could be while teaching me valuable things that I still use everyday today. All of the friendly teacher, dorm mothers, and other girls also made it easier to have a great time and branch out.
- 217. The hands-on labs and activities had the biggest impact on me. I was inspired to take physics in high school, and now that I am enrolled, I am considering engineering as a potential career path. I'm so glad Tech Trek helped me on my way to possibly becoming an engineer.
- 218. The increase in knowledge of STEM professions had the biggest impact on me. I had never known that there were so many different STEM professions and had never really considered pursuing it. However, the activities and events like Professional Women's Night exposed me to many different career paths.
- 219. The information that was provided for future reference in high school and college given by the camp director as well as the information received as a whole in the classes and when introduced to guest speakers.
- 220. The largest impact had to be just the fact that I learned about all these different concepts that include STEM. From the guest speaker from Pixar to taking a trip out to the field to view the stars, every single moment furthered my interest in the math and sciences.
- 221. The overall experience of being on a college campus for the week.

- 222. The Pixar host was so memorable and has inspired me to have that goal or working there. I am still in contact with girls I met there and hangout with one of them (Betsy Wall) all the time. Betsy and I are also on the same Water Polo team! I am so grateful I had this opportunity and would highly encourage every girl to go!
- 223. The professional women's night impacted me greatly, because it showed me that many women had careers in STEM, and I could be one of those people as well.
- 224. The Professional Women's Night was really something beautiful! It gave us the opportunity to see a bunch of awesome careers and really sparked my interest in doing something scientific in my future work. Thanks Tech Trek!
- 225. The seminar about college really jump-started my interest on getting to a four-year university and I can truthfully say, that is the base of my work ethic to being accepted to 5 wonderful four-year universities.
- 226. The wide variety of experience that came from the camp had the biggest impact on me. There was at least one thing that interested each person. From the nature walks so the Alka Seltzer rockets. Even though I discovered the fact that I get seasick, going out on the ocean and fishing and seeing dolphins was so much fun. We had some downtime but not too much to where we became bored. Overall, it was a great experience.
- 227. The wonderful people I met really helped shape me into the person I am today. Everyone was so nice, I felt really at home. It was nice to know that I will always have that memory. I can honestly say that Tech Trek is the only memory I have of my middle school years. I left Tech Trek with so much knowledge. The experience helped me pursue a career in math and science. I was extremely touched by all the generosity of our sponsors. All the love and support motivated me to try harder at school than ever before.
- 228. This camp gave me confidence in my math and science abilities which especially helped me this year because I took an AP mathematics course (calculus) and it was extremely challenging for me, however, I learned how to be successful at this camp, which helped me in general to be successful in any challenging courses or classes.
- 229. This camp showed me that science and technology were more than what occurred inside the classroom.
- 230. This summer camp really helped me realize my mathematical and scientific potential. I have greatly enjoyed my math and science courses very much since then and have come to realize my calling, which is in the Medical field. I have grown so much due to this camp and have come to realize that I could have a career in a STEM field.

- 231. We had a speech said to us, and the theme was: you can go to college. It was the first time I had been given a positive message about college, and my ability to be successful in getting there.
- 232. What had the biggest impact on me was talking to the Professional Women's Night speakers because it made me think about what I want to do in the future. After listening to the speakers, I was inspired to pursue careers similar to them.
- 233. What had the most impact on me was that I was able to see that women could achieve in any field especially in the science field. I meet many women that were successful in with their STEM careers and it showed me that it was possible. If they were able to achieve in their field why could I not achieve in a science field, which I was and still are interested in.
- 234. What I loved the most was being able to realize that I wasn't alone. That there were girls my age who were intrigued by and in love with science. And while making new friends who understood your passion for science, we were learning more about science, the various paths it can lead you through, and thus nurturing our love and curiosity for it.
- 235. When I attended Tech Trek I was very shy; but once I left I wasn't afraid of coming out of my comfort zone. Now I am involved in my schools Link Crew club and will be a member of my high schools ASB my senior year.
- 236. When I got home from tech trek I immediately went into Facebook and added my friends from camp so I could keep in touch. It was great to learn what I can do to make a difference and feel that I'm not alone in this experience.
- 237. When we stayed up late at night and got to look at the stars through telescopes was one on the most exhilarating experiences of my life. Another thing that I will never forget is an experiment we conducted using miracle fruit. It heightened the senses of the sweet taste buds. And we got to try different foods while under the effect of the fruit. It was the most fun I have in my life.
- 238. Women do belong in these fields because the world needs more than the male viewpoint and it is our job as women to encourage each other to strive for these positions in any field but mostly in the math and sciences.
- 239. Women have been seen as the lower half of men for centuries, regardless of what they chose to pursue unless it was within their expected field of study. Math and science, however, have been seen as the most far-fetched goals for a woman to chase. Through tech trek, I have seen and met the women that have overcome these challenges and have proven to the world, and to themselves, that the job of a man can be done by anyone. Although women and men and undeniably different, this does not mean either is beneath or above the other, and my time in Tech Trek has also shown me that I have the full capability to pursue anything in the field of math and science, as well as anything outside

this field just as well. Tech Trek shows the congregation of young girls they bring together every year to show them that anything they choose to set their mind to is possible.

240. Working with teachers who inspired me to learn rather than grading what I've learned fostered a bigger interest in physics and chemistry. I found that being good in math, I can develop my understanding of sciences like chemistry better without having to compete.

# **APPENDIX L**

#### In Your Own Words, What Impact Did Tech Trek Have on You? (Q10)

- 1. Tech Trek has impacted me by allowing me to understand and get a grasp of the type of career fields out there as well as what career field I want to enter in. At a young age I wanted to become a doctor because a death that happened in the family. Which took my interest in science, though I am majoring in a Social Work field, my experience with Tech Trek has helped me form myself into who I am with the knowledge that maybe science/health field was not for me. Though I enjoyed my science and math camp experience, that I had a greater desire of helping others. All in all, Tech Trek helped guide me into what career future I wanted to enter into. Tech Trek also increased my interested in attending college and educated me on how important obtaining a higher education was.
- 2. Even though I am not pursuing a career in science or math, Tech Trek helped me see that science was very interesting and helped me do well in future schooling.
- 3. Tech Trek really showed me that as a female I can succeed in careers dominated by males, because I am just as smart.
- 4. I achieved a feeling of pride in myself to know I was chosen to attend.
- 5. Tech trek allowed me to express my interest in science. I always felt out of place, but by getting a chance to experience science camp I felt like I belonged to something. I feel in love with science and now I'm in the medical field. This gives girls the chance to meet people and learn new things that are possibly not taught in school. This is something that I will always remember.
- It opened by eyes to a plethora of fields of science and occupations I didn't know existed. I
  was encouraged to follow my dreams and received the confidence I needed to grow to
  become a strong, powerful successful woman.
- 7. I chose my future career because of an experience I had at Tech Trek, and I still haven't changed my mind. It was definitely the starting point for me to enter the STEM fields. Parents and aspiring students alike love hearing my story about how I became so interested in robotics because of an experience I had at this camp. Very impactful for me personally!
- 8. I felt that having others girls there my age learning math and science was fun. My camp was at Mills College and I stayed in my own dorm room. It made me fill independent and responsible. I really liked the Professional Women's night and was involved in introducing

them. I enjoyed the experience. Also, because of this experience I applied to Mills College after college and spent my first semester there as a student.

- 9. It expanded my knowledge and gave me opportunities and insights that I would never have experienced in middle or high school.
- 10. Tech Trek truly was a life-changing experience for me. It sparked my passion for science and math, and gave me the confidence to pursue advanced classes and research opportunities. I honestly don't think I would be where I am today without Tech Trek. I am extremely grateful to Tech Trek for giving me the opportunity to surround myself with other girls my age who were passionate about science and math, and to be in an environment in which we were encourage to take chances and pursue our passions wholeheartedly.
- 11. Tech Trek was an absolutely amazing experience, it truly did further ignite my interest in science and give me the confidence to pursue a career in science. It was really empowering being surrounded by so many successful women and amazing girls. Since my experience at Tech Trek, my sister has gone to Tech Trek, and I've also come back to Tech Trek as a speaker. I've sincerely love all that AAUW does for these girls, Tech Trek is an amazing experience, and I'm so lucky to have gone.
- 12. It was an amazing experience, and it made science a lot more interesting for me. I learned a lot and it was fun going out to learn and do different things.
- 13. Tech Trek was one of the most memorable experiences I had, being able to experience a place where it was okay to be a girl and to be smart. It got me interested in so many different careers and gave me such a strong opportunity to be more than I thought I could.
- 14. Though I ended up a liberal art major, I'm also premed and may pursue a career in medicine. Tech trek made me more aware of women's issues and the sciences.
- 15. Tech Trek has impacted me by helping me to be more successful in science and it is because of Tech Trek that I have decided to pursue a career in science.
- 16. Tech trek was a great experience and it opened my mind to many varieties of science majors. It also gave me the ambition to go to college.
- 17. I was always really shy so it was a lot different to interact with so many girls my age, it was really fun and I became more open because of it. It was also the first time I had been away from home that long, experiencing the dorm life was new and interesting.
- 18. It gave me confidence in my intellectual abilities and taught me about topics I would not have otherwise been exposed to.

- 19. My experience with Tech Trek has had a lasting influence on my educational career. Because of Tech Trek I was introduced to Biology, and since then it has been my favorite of all the sciences. Even though the camp lasted for a week, I was given the confidence I needed for later for high school-I took Biology and Advanced Placement Biology. This helped prepare me for college, as I am currently enrolled in classes such as anatomy and physiology. I'm preparing to go to graduate school to get my Masters in Occupational Therapy.
- 20. Tech Trek was a wonderful opportunity to meet other girls with the same hobbies and interests. I enjoyed staying in the dorms and doing daily activities with other ladies my age. I am very thankful I got to make connections with others while exploring new personal experiences.
- 21. Great to do science projects and be exposed to fun classes.
- 22. Tech Trek allowed me to better see and visualize what living on a college campus would be like. Tech Trek also exposed me to adults successful in science. Set a goal in mind for a future career.
- 23. I learned that math and science careers were within my reach and what steps I would need to follow to attain such careers. I also learned that much support was available.
- 24. It sparked my love for science. I am now a second year nursing major
- 25. Because of Tech Trek, it was my plan for a long time to become a Biomedical Engineer. However, because of my passion for theatre, I have been on a different track, and am now double majoring in theatre and psychology. I do believe, however, that Tech Trek also helped my interest in Psychology develop because of my fascination with the human mind and body.
- 26. It was a great experience that gave me more confidence to excel in school. I believe the experience opened my eyes and helped me realize that I had many choices and directions I could pursue. It was a long time ago but I think of my week there often. I believe the experience helped me to stay in school, do well, and to go on to college. I am currently in my 2nd year at Napa Valley College and plan to transfer. I have dreams of becoming a Nurse Practitioner.
- 27. My tech trek experience changed my views on how important education as a young woman is. After my attendance as a camper I wanted to be a part of the vastly expanding group of women who are or have been successful because of their interest and hard work toward careers in the fields of math, science and technology. All of my experiences at tech trek as a camper and counselor for multiple years have lead me to attend college to pursue a degree in natural sciences before hopefully expanding on my education in the medical field.

- 28. I found it very inspiring to be around other girls my age and not having to compete with boys my age. The hands-on activities were extremely helpful in helping me become more aware of many different interests and majors that are suitable to me.
- 29. A chance to have fun with math and science in a new environment with other girls who were interested in it as well. Great to meet women who have been successful in math and science field, and neat to see that once you have a solid math science background ... many other interesting and fun opportunities arise! Looking forward to going new places with my math and science knowledge.
- 30. Tech trek showed me that as a girl going through middle school, a very judgmental time, it was ok to show my interest in science and that other girls shared this interest.
- 31. It helped me realize I wanted to pursue a career in medicine.
- 32. Tech Trek increased and reinforced my interests in math and science. It also showed me how important STEM careers are to society
- 33. Tech Trek reinforced my dream to pursue a career in the medical field. It opened my eyes to the human body. I got to experience a cadaver at age 13, who can say they got to do that at that age? I have also been exposed to many local media opportunities to share my Tech Trek experience and I have been a Peer Counselor 3 times and I was invited back a fourth time, but unfortunately could not attend due to work. It means the world to me to help girls pursue a career in STEM and to inspire them that they can do anything they put their mind to! Tech Trek changed my life for a multitude of reasons. I learned a lot about myself, I knew what I wanted to do for the rest of my life, I gained communication skills, learned how to work well adult figures, and to deal with stressful situations. I plan on continuing my involvement with Tech Trek and AAUW for the rest of my life.
- 34. It made me think about the colleges I wanted to attend.
- 35. I am extremely grateful for the opportunity to go and learn in more science related classes. I wish I could say it helped me as a woman to learn that I could do sciences, but I already enjoyed them and had never even thought that as a woman I was restricted. The ability to go and live without parents and in a college environment was a much bigger impact because I learned how independent I can and should be.
- 36. Tech Trek taught me the importance of empowering women in education, particularly that of STEM. As a student at an all-women's college, I find that there are few things more valuable than a chance for women to gain leadership and learn.
- 37. Tech trek was a very fun experience. It made me look forward to college, as it was my first real experience living in a dorm setting and being on a college campus. Even years later, I tell others about my experience and remember how much I loved the campus (and

especially the cafeteria). The classes and hands on activities were especially memorable, such as the squid dissection and building/programming a robot.

- 38. I loved the experience and my computer science class definitely got me interested in film and commercials and the impact they have on society. I am so glad I had the opportunity to go!
- 39. Tech trek made me feel like I could pursue a career in the science field as a woman. It inspired me to have a love for science and math. My major at Villanova University is Environmental Science and Tech Trek may have been a factor in that decision.
- 40. It allowed me to work past my learning disabilities and be confident enough to do everything and strive for the best
- 41. I was able to experience different subjects and fields that my school distinct couldn't otherwise provide or afford.
- 42. It showed me many hands on things I would not have been exposed to otherwise
- 43. Tech Trek helped transitioning to college-settings less stressful.
- 44. Tech Trek was a great experience for me because I learned about multiple science career possibilities and was strongly encouraged to pursue a science-oriented occupation. It helped me figure out from an early age that I wanted to study science in college and was the beginning of my fascination with the sciences. Now I'm in college studying exercise biology and it is the perfect major for me. Tech Trek helped me understand that women can and should study science.
- 45. Attending Tech Trek Camp enforced the drive to attend college and pursue a science degree.
- 46. Tech Trek impacted my life because it exposed me to something that I had never been interested in or aware of. My parents did not attend college, so attending college was not something I had in my mind when I was in junior high. However, after attending Tech Trek I knew that I wanted to attend a four-year university. Being in Tech Trek opened my eyes to a life that I did not know about. Spending that week at UCSB made me realize that I enjoy learning about science and math and I have a high interest in these subjects. After experiencing living with other girls in the dorms having science and math classes I knew that I wanted a university and I made that my goal. Without the experience of being part of Tech Trek I would not be where I am today and that is at the University of California Santa Barbara and preparing to receive my bachelors degree in Biopsychology.

- 47. Tech Trek was an amazing opportunity that exposed me to math and science professions I was currently unaware of. I learned a great amount and am now trying to pursue a career in nursing. Tech Trek gave me confidence to pursue my dreams and desires.
- 48. Tech Trek gave me something that no one in my life had ever given me: hope and opportunity. Neither of my parents graduated from college, one not even from high school. Tech Trek broadened the very little horizon that I saw. It introduced me to new and exciting ideas and thoughts. More importantly Tech Trek showed me, that even as a woman, I could still do great things. Tech Trek is definitely, by far, THE best experience that I have ever had.
- 49. Tech Trek opened my eyes to the different careers I could have in Science and Math. I especially liked that it was geared toward women and therefore for it was more personable. Tech Trek made me realize I am more of a hands-on learner, and knowing that skill it has helped me in my academic career.
- 50. Tech Trek got me excited for college, and grew my interest in math and science. My child attended. Answered on her behave of my memory.
- 51. Being chosen made me feel important and smart, and the experience helped boost my interest in science. I am studying now to become a nurse.
- 52. Tech Trek helped me learn to accept, embrace, and nourish my interests and smarts in science and math. I was in the biotechnology core group, with girls who all wanted to be doctors. I loved being with girls who were intelligent and liked biotechnology like myself. The week was at a time where I was not accepted among girls at school for being smart and good at math and science. I am now going to Macalester College in St. Paul, Minnesota. I am not sure what I will be majoring in, but I will be completing my medical school requirements. Thank you so much, Tech Trek, for that summer experience at a time when I needed it.
- 53. Tech Trek allowed me to have a unique experience where I could learn more about science and math with my peers.
- 54. I had a fun time and enjoyed the other girls that were there. I am majoring in a STEM field that is completely unrelated to the science I studied at Tech Trek, but I did get to see many different fields of science at Tech Trek.
- 55. It gave me confidence to accomplish my goals. Tech Trek was a fantastic experience I eventually would want my daughter to participate in. It was the first time I was away from home for so long, I had a great time. I really enjoyed the kayak trip we took one day, and I loved how we had a group project in one of my classes. Though my interests from that point have changed, I still think it was very important.

- 56. Tech Trek gave me the confidence to succeed and stand out in science because I was able to connect with other girls who were interested in the same subjects I was and I felt less isolated at school.
- 57. Tech Trek was ultimately what caused me to aim for UC San Diego as my dream school, and in science as a career.
- 58. Tech Trek was a great experience and program for learning about math, science, and technology. The program allowed me to appreciate and understand these subjects much more. I enjoyed meeting all the wonderful girls in my dorm, and getting to know people so quickly. The environment was great at Tech Trek, as I really loved how the activities were both fun and incorporated learning as well. I enjoyed Tech Trek so much that I would love to return as one day as a dorm mom, or just be a mentor to other girls who share my love of science and technology.
- 59. For me, Tech Trek was the first time I was away from home. It was scary, but I soon forgot all about being away from my normal environment when I met many other girls my age who had the same interest in science as I did. I would say that being able to see a cadaver and take the human body class definitely sparked my interest in medicine which I am now pursuing in college.
- 60. It was interesting to learn so much in one week. What I learned was all useful from an educational aspect as well as just for everyday life.
- 61. It was a great experience to live in the dorms, and meet other intelligent motivated girls. It was also amazing to do these science and math activities, and do them in a hands on interesting way.
- 62. Tech Trek helped me to see past the next year of school and into the future. I am now about to graduate with my associates degree and then will begin my bachelors in recreational therapy. Although this seems to stem away from my experiences at Tech Trek activities such as dissecting the eye or looking at the biology of animals helped me to realize how much I love the human body. With my major I will be taking a lot of biology and anatomy classes and my experience at Tech Trek gives me confidence it taking these courses. I believe that it helped me to realize at a young age how much I enjoy the field of science and gave me confidence to pursue a route which would require taking classes in this field. I will always be grateful for the time I spent at Tech Trek and only hope that the program can continue so that other girls can discover earlier what they might want to pursue in college.
- 63. Due to hearing a speaker from Pixar on profession women's night, I am now studying computer science with a film studies minor. Hearing this professional woman's story and her pathway to success inspired me to choose a major related to technology and the entertainment industry.

- 64. Tech Trek was a very good experience for me. At first I was really nervous about the whole thing but overall it was a fun experience for me. I learned a lot during the time I got to stay at Stanford University for a week. Being able to stay in the dorms was a good feel on how it feels to live away and on your own. Although I felt home sick a little because I wasn't used to being away from my house for that long. One thing that had a big impact on me was all the science we learned. I fell more in love with science after that. I loved science class when I hit High School. That was pretty much what I really enjoyed all the Science activities. Everything in general was really fun!
- 65. Tech Trek was my first, real, hands-on experience being surrounded by girls my age who were interested in careers in the STEM fields. It was also the greatest way to help me become more sociable with girls my age and to break out of the shy attitude I had in middle school. Being away from home and getting a tiny look into college life and a look around the campus really got me ready for high school and preparing to find a college campus and major that really fit all of my interests and expectations. I was motivated by all the professionals I met and all the women who spoke so fondly about how being female does mean we can do anything we set our minds to and that there is really no limit to what we can do. This whole experience gave me the confidence to take advanced classes in middle school and in high school and to better educate myself about the college system and to do lots of research about the future career path I hope to enter in the future. This experience is one I have not forgotten and really gave me the roots to become the student I am today, by helping me build confidence in myself and my abilities and to make connections with women who are successful in male dominated fields. I hope that this program continues on, and more girls get the opportunity to experience this camp and share the same fondness that I have for it.
- 66. I loved Tech Trek—it really increased my knowledge of the intricacy of scientific careers, and I really enjoyed getting to know other girls who were also interested in math and science.
- 67. Being in the environment of successful women leading other, younger, women to strive for excellence in subjects the girls are passionate about really molded me into the college student and person I am now. I doubt I could feel so confident about my abilities in math and science and other subjects in general without the experience I had at Tech Trek.
- 68. Tech Trek was the most amazing academic oriented experience I have ever had!!! Because of it, I decided to pursue a college degree in chemistry to work in a forensics lab. I had never considered that a career until the forensics activity that I took part in during Tech Trek. Thank you Tech Trek for showing me that dreams do come true!
- 69. Tech Trek made me realize the importance of education and pursuing academic and career goals.

- 70. Tech Trek was a great way for me to enhance my understanding and love for Biology. The skills and lessons I learned at Tech Trek helped me all throughout high school and into college.
- 71. Tech Trek just gave me a little more encouragement as to the field I wished to pursue for a future career.
- 72. Tech Trek gave me the opportunity to meet and get to know girls from all over Southern California who were also interested in science. I feel that I matured a lot through my experiences at Whittier College with the other girls. Although Tech Trek did not necessarily influence me in choosing a career path (I had already made up my mind to go into a STEM career), it helped me to see that I was not alone in my love of all things "nerdy" and "techy." The short time I spent at Tech Trek gave me the confidence to do what I love by taking advanced math and science courses, which eventually has led me to my current place in life. I am majoring in Biology and minoring in Neuroscience, and couldn't be happier with my decision to follow my passion for the sciences.
- 73. It opened up my eyes that women can be any field they want to be. That anything can be possible, there aren't any barriers. The whole experience was amazing, and meeting new people was great. Having a small view of what college life can be like at such a young age was great. That is a moment I hold dearly to my heart and loved everything about that experience I was chose to be in.
- 74. The feeling of earning an opportunity to experience what going away to college may feel like. Giving me a sense of independence and being proud of what I achieved to earn this opportunity. I encourage all girls to participate it was a very inspiring and eye opening experience which has helped me currently in college. I would love to be a junior leader and share my experience with the girls I'm currently available for the summer. Thank You
- 75. Tech Trek taught me to try harder in class and work together in groups. It also taught me to strive for more in something I find interesting. The teacher I had (Dwynn Famalatte) really helped me understand and find love for science.
- 76. It showed me endless possibilities that I could achieve in the science and math departments. It became more interested in science. It made me realize that because I'm a girl doesn't mean I won't succeed in science and math; it made me more determined to succeed in those subjects.
- 77. Although I already had an interest in Science, Tech Trek allowed me to express that interest with their daily activities. Tech Trek opened my mind to different sciences than Biology; such as, chemistry when they taught us how to make our own ice cream; marine biology when we were taken out on a boat and studied fish and other life forms from the water; and astronomy when we were taken on a night walk and given the opportunity to

look at the stars with professional telescopes. Tech trek opened my eyes to many studies and professions that I will keep in mind as I am about to enter into my first year of college.

- 78. I'm considering biochemical engineering or biomedical engineering as a future career.
- 79. Tech Trek gave me the opportunity to be around different girls who shared my same interests in mathematics and the sciences while at the same time learning about the different majors and careers involving science and mathematics.
- 80. I really loved being around many other girls my age who were interested in the same things I was interested in. I had felt sort of left out of the social scene at my middle school, but after Tech Trek I realized there were a lot more people who shared more things in common with me than I had thought.
- 81. Going to this camp was a very wonderful learning experience. When I was at Tech Trek, it really opened my to the world of science and how many careers revolve around it such as engineering, biology, biotechnology, and other types of fields. It was a very hands-on camp where we could interact with each other and use our innovation to think about things because to me that's what science is; it's using our creativity, logic, and critical thinking to improve and use the world around us. It really made me consider following a science career and going to Stanford University and I still have this goal in mind. This is a goal I still want to accomplish. I still remember dissecting a small squid, learning about sharks and bats, and making ice cream as well. It's a really great experience and it really motivated me to pursue this dream that I have. I would recommend it to any young girl to participate in Tech Trek.
- 82. It was interesting and an honor to participate in a program I'd never thought I'd be chosen for or knew about. I loved how I got to explore the STEM fields in a fun, interactive, and informative way with fellow interested girls. Overall I came out knowing more of the impact and various applications of Science and Mathematics over the course of the Tech Trek program.
- 83. Tech Trek was an awesome introduction to an array of fields from being a veterinarian to being a researcher in a lab. I had an incredible experience at Tech Trek and it was also fun to explore a college campus at such a young age.
- 84. This experience has given me the confidence and pride to follow my dreams and pursue a lifetime in science exploration. Thank you Tech Trek!
- 85. I had my purse stole from the cafeteria with my camera and other significant items. The den mothers called me names impath was just one. I was ridiculed for doing things other girls did. It was about the worst week with the worst women I have ever had, and I have gone to several other camps and became a camp leader. The bulk of the camp was great and the women who came to teach were awesome. I did learn some life lessons.

- 86. It was a nice trip. I had lots of fun in the labs.
- 87. While I am not planning on pursuing a career in math or science, tech trek gave me confidence that I really needed at the time of my attendance. It made me feel that I was smart and could go far with my education. It inspired me to see what women have and are and will be accomplishing.
- 88. Tech trek opened my eyes to many hands on opportunities in the science field
- 89. It gave me the confidence to do well in school and pursue a career in science
- 90. Tech Trek increased my confidence in my intelligence and my ability to succeed in advanced classes and challenge myself in all situations.
- 91. Tech Trek inspired me to continue my interest in science, and I toke more science classes in high school. It was also great to be in an environment where other girls like myself were interested in learning and becoming a woman in the mathematics/scientific fields.
- 92. Tech Trek allowed me to realize that I have the ability to do whatever I set my mind to, even if it is typically regarded as a male dominated field. While my interest in going into a scientifically based career has diminished over time, I have been able to apply the lesson mentioned before to many areas of my life, which has allowed me to strive towards goals that I probably wouldn't have otherwise.
- 93. I gave me confidence, and I am now majoring in Molecular biology.
- 94. Tech Trek increased my interest in math and science and made me feel confident pursuing a career in these subjects, even though I am a woman.
- 95. Tech Trek gave me the opportunity to learn about science outside of my school, its curriculum, and what my parents have taught me. It was the first time I had gone on a field trip alone, thus it allowed me to gain some independence, and confidence in the fact that I could do things on my own. It was an exciting discovery! I also realized how much science means to me. Every activity, revolving around a specific scientific career, seemed extremely appealing to me, whether it was marine biology or veterinary. In a way, Tech Trek functioned as an external push from my life to help me realize that a scientific career was my true calling. Which one? I was sure then, but I was set on the right track afterwards. And so I took as many science courses as I could in high school.
- 96. Tech Trek opened my eyes to my future and how my interests in school could lead me to all kinds of careers and exciting opportunities in life

- 97. Tech Trek gave me greater confidence in my abilities and increased my independence. The camp also opened my eyes to the many diverse fields of science that I could choose to pursue and furthered my interest in math and science.
- 98. Tech Trek made me more comfortable living in college dorms, and gave me a basic understanding of biotechnology.
- 99. Tech Trek has introduced me to biotechnology and has sparked my interest in it. When I went to high school, I was fortunate enough to have the chance to take courses and an internship in the biotechnology program at San Mateo High School. Since my exposure to biotech at Tech Trek, I have started to pursue my project of cloning orchids in my independent research class. I am very thankful of what biotechnology has introduced me to, especially since biotechnology was a fairly recent field when I attended Tech Trek.
- 100. Tech Trek impacted me in a positive way and motivated me to pursue a career in mechanical engineering.
- 101. I met girls outside of school who were just as passionate about science as I was. Tech Trek made me believe that I could pursue science and excel because I knew that I had been selected to receive this opportunity. The camp was packed with things for each day but it was so educational and it was a rewarding experience.
- 102. Tech Trek taught me that I was not the only little girl with big dreams in science. Getting to know all these other girls with the same interests as me and then going back as a Junior Counselor, was a huge eye opener.
- 103. It was really great to be with so many kids with interests in science and technology and to meet so many women who have become successful in the field of engineering.
- 104. Tech Trek helped me get a real college life experience by demonstrating activities relating to science courses offered and also giving you the chance to leave your family for a week while moving by yourself in your own dorm with or without a roommate. I learned what it was like to move out of my house and live life on my own. It was tough not having my parents with me especially at such a young age. I would've preferred to have this experience as a Junior in high school because that's where you really start to focus on college. I still enjoyed Tech Trek and I'm thankful that I had the opportunity to go because I feel more prepared for college life knowing what it's going to be like and I feel like I'm ahead of my classmates with this transition.
- 105. Tech Trek impacted me in the sense of opening my eyes, to see the many possibilities I have. It also made me realize how much I will enjoy my future career. In overall it was an experience I will not forget.
- 106. Tech trek helped me to find out what truly made me happy.

- 107. It encouraged me to consider fields in the math/sciences and surrounded me with inspiring and driven women. It helped me realize my potential!
- 108. Tech Trek expanded my knowledge in engineering careers. It wasn't just about building bridges.
- 109. Tech Trek is what ultimately convinced me about applying myself to all my classes so that I can strive to get into the college of my dreams. Tech Trek was definitely the key motivator in making me discover my passion for the math and sciences.
- 110. The hands on curriculum is what really impacted me the most. I never really experienced anything like it before!
- 111. No lasting impact on my academic interests.
- 112. As someone who grew up in the Bay Area, finding women and girls interested in science and math is not a rarity—in fact, it's commonplace. Before Tech Trek, I had a solidified impression of what I imagined myself specializing in within 10 years—neurosurgery. Because of this, Tech Trek did not help change my perspective on math and science, I already actually really enjoyed these subjects. What Tech Trek introduced to me was confidence in my capabilities and intelligence. Tech Trek was the first time in many years that someone told me that they believed I was capable of more and believed that they saw a spark of potential within me. Growing up in the Bay Area, exposure to math and science was never an issue, but the sheer amount of competition that surrounds schools in my community easily retracts from the confidence a lot of people hold in their own abilities. Before Tech Trek, I was getting used to being just one of many girls who was good at science and math and who always received good grades, but Tech Trek helped me realize that though all my peers demonstrated the same interests, someone believed that I had the potential to not just be good, but to be great. And that was the best thing that could have happened to me before I went to high school to more of the same competition in a society that fosters competition only rewards those at the very top.
- 113. I came away from Tech Trek with a greater love for the sciences and an amazing friend. I learned how to pipette for the first time at Tech Trek, a technique I have used hundreds of times in high school and a technique I have passed on to others. Being with other young girls my age, interested in the same topics, gave me confidence. I learned more than the simple lab techniques though, more importantly I learned what its like to work with others. I was provided the unique opportunity of working in lab groups far before any of my classmates had even ventured into the sciences let alone into a lab class where cooperation with your peers is essential. Even though my continuation in biology, chemistry, and biotechnology courses over the years has provided me with unique opportunities, I will never forget my first glimpse at the fine fibers of strawberry DNA in the Tech Trek biotechnology class.

- 114. Tech trek made me more confident in my math and science abilities. It also opened my eyes to all the possible careers in math and science. It definitely strengthened and encouraged my interest in math and science.
- 115. Tech Trek gave me the confidence that I could be successful student in math and science. I already enjoyed these subjects, but Tech Trek helped me figure out that I wanted to do something related to math and science. It helped become more confident in these subjects because I had a unique experience with them.
- 116. Tech Trek was an amazing experience! I still remember the excitement I felt when I entered the campus, realizing that I was at a camp where I could do science experiments and take workshops for fun! It made me look at science in a different way because it wasn't just learning about science in a conventional classroom setting; we were actually experiencing science, getting our hands dirty. I will always remember the fun I had at Tech Trek and I am so grateful to AAUW for letting me go!
- 117. Tech Trek increased my ambitious to obtain a career in medical field.
- 118. Participating Tech Trek, it opened my eyes to the different science and math careers that I am eventually became interested in.
- 119. It made me more aware if the jobs and careers available for those who have a niche or interest in math and science.
- 120. One of the biggest impacts Tech Trek had for me was the chance to meet other girls who were just as interested in the science and math fields as I was. I enjoyed learning about the careers that are available for women and the careful planning of all the events at the camp. Listening to experts in their field describe their jobs was amazing. I will never forget that week on Stanford Campus. I felt very special for being selected to attend but also very responsible for sharing the information with other girls and people I knew. It was a unique experience and I was privileged to be there.
- 121. The overall learning experience.
- 122. Tech Trek showed me just how many women made a great future for themselves and how possible it was for me to do it, too. Having a great time with other girls my age made the experience more memorable especially since I now go to school with many of those girls. Overall, the environment was really cool and relaxed while also giving you a taste of a college experience.
- 123. Tech Trek showed me how we could make an impact on society with the knowledge we gain and the resources we have. It led me to explore harder math classes like Honors PreCalculus/Trigonometry as well as AP Biology and Honors Anatomy and Physiology.

- 124. It led me to consider all of the different fields of sciences and made me realize my interest in marine and environmental sciences.
- 125. Tech Trek was an amazing experience at a time in my life that was challenging. I was feeling labeled as a nerdy smart kid and although I liked doing well in school and learning new things there is a social aspect that makes those things challenging. Tech Trek introduced me to whole campus of girls and professional women like me, intellectual and motivated to learn, and that was very reassuring. Tech Trek taught me to be proud of myself and what I could accomplish.
- 126. Tech Trek was an amazing experience. This camp introduced me to what life will be like when I get out of high school. I already had an interest in math and science, but this just made me more excited about them. I feel that the camp made me more focused in my classes and helped me to strive to be the best that I can be. I also loved that there were so many hands on activities. Hands on is the best way for me to learn so all of the activities were great learning experiences for me while still being very fun. I still have some of my experiments that we created there because they are fun and good reminders of my experience in Santa Barbra.
- 127. It made me feel more confident in my schooling and opened my eyes to more majors.
- 128. By going to Tech Trek, I knew that I could survive on my own without my parents constant monitoring, and I learned to overcome my shyness and make new friends.
- 129. Tech Trek made me aware of all of the different science and math-related careers that I could explore, but it also helped me realize that I could do well in college and, even if I don't end up in a STEM major, that I can succeed anyways.
- 130. Tech Trek definitely opened my eyes to the many science and math fields that were available in the work force. Before, I only though that if I wanted to pursue a career in science, the only choice I would have was to become a doctor. That was not the case at all. I was exposed to so many different things and meeting so many girls interested in the same things as me was so worthwhile.
- 131. Tech Trek made me realize how heavily technology impacts my life.
- 132. It showed me that there was a lot more to math and science careers aside from just a general biologist or math teacher. The amount of possibilities are astounding when it comes down to what our passionate about and how you want to contribute to the world. Whether it be a pharmacist for Amgen down to astronaut for NASA. It gives you an insight (while they are still young girls) on options and how far you can go with careers in these fields, in this case you can actually reach for the stars!

- 133. I have always been fascinated and interested with science. From elementary school my favorite part was science because we got to do many fun and cool experiments. And as I began middle school I was still really into the whole science thing, so I joined the science club. But anyways I got a wonderful opportunity of attending the Tech Trek camp. I learned so much from the classes I got to take and the many fun field trips and activities that came along with it. Also, now that I have graduated high school I am in college now and fulfilling my dream of becoming a Biotechnologist. So long story short, Tech Trek has impacted my decisions about the path I want for my future.
- 134. Tech Trek introduced me to food chemistry. Since then every project I have chosen to do I have done something in that field. I also plan on getting a PhD in food science after I graduate from UC Berkeley's College of Chemistry that I will start attending in the fall.
- 135. Made me want to take more math.
- 136. It gave me a new understanding of science fields
- 137. My experience at Tech Trek allowed me to learn what careers were available to women in science and math related fields. It expanded my previous knowledge of science and math and really emphasized my love and passion for these fields of study. I was able to focus on understanding concepts and ideas that I would use later on in high school, college, and potentially, my entire future, while being surrounded by girls trying to accomplish the same thing. I was also able to attend at Stanford, one of the most prestigious universities in the world. The opportunity presented me with motivation for the upcoming years. In high school, I made sure I got the most out of my biology, chemistry, physics, and math classes. I was nominated to return as a counselor for the summer 2012 camp. The experience last summer was completely different from the summer I attended as a camper because I was able to be a role model for the twelve-year-old girls. They looked up to me as a positive influence, and I told them about opportunities they could receive from science and math. Last summer did two things: reassured me that the future is bright for females in science and math related careers and strengthened my love for these subjects. I know the path I want to follow after high school, and this would not have been possible without the intellectual experience I had both summers at Tech Trek. I am honored to say that I will be returning for a third time this summer as a Senior Counselor for Camp Curie at Stanford University. I will be attending University of Colorado, Boulder in the fall as a biology major with the intention of continuing to medical school after I graduate.
- 138. Tech Trek was honestly one of the best experiences of my life. During that time, I was having difficulties "being myself" and was struggling with low self-confidence. Being around other intelligent girls and women who were not afraid to be who they were was life-changing.

- 139. I was already interested in science but even though I enjoyed the camp I do not think it encouraged my interest because it was already there. Also, I was not impressed by the other girls there, so I felt as though nobody interesting to talk to was also interested in science.
- 140. I thought about becoming an astronomer.
- 141. Tech Trek's impact on me was a strong one I was able to grow out of my shell and be more social with other. I was able to branch out and not be that shy and intimidated person I once was. Tech Trek also helped to decide what path I wanted to embark on with my education. I was able to determine that I wanted to have a career that involved science.
- 142. Tech Trek showed me that women have a place in the world and can make it their own if they step outside of the accepted norms, to go out and into harder, male oriented fields.
- 143. Tech Trek gave me confidence to pursue math and science in more advanced classes in high school and helped further develop my interest in these areas of study.
- 144. Based on my attendance with Tech Trek, I changed my profession from being a chemist to being a doctor specializing in Pediatrics.
- 145. Tech Trek gave me more interest in the science and math. Because of the various field trip and hands on activities I performed in my group I gained a greater interest in science.
- 146. Surrounded me with girls interested in the same things I was! Showed me some really fascinating things in the field of science I wasn't aware of, increasing my interest in the subject.
- 147. To be honest it was a fun experience. I believe my trip to Tech Trek was the first time being away from home for an extended amount of time. It was hard at first but once I got involved and got to know the girls I felt better. The experience of staying in an actual college dorm was fun also. In a way it gave me a feel of what going to college feels like. Tech Trek made me look forward to going to college.
- 148. Tech Trek allowed me to meet other girls my age with similar interests in math and science. It was not only fun, but I also learned about actual careers that could I could make possible for myself in the future. As a senior in high school, I am still planning on majoring in a science field in college. Tech Trek also let me visit and live on college campus for a week. UC Santa Barbara is actually one of the colleges that I am considering accepting to attend next fall. Tech Trek helped me in all of these ways, from challenging myself in classes throughout high school, to deciding what to study for my future career.

- 149. It was a great experience to be with girls my age who were chosen for the same reason. I have stayed in touch with one of them since then and we are still great friends. It was a great way to build relationships and learn together.
- 150. I really enjoyed the opportunity I was given to explore a college campus and learn from some of the greatest women professors. It was a good experience to realize what an impact women can have if they really try to make a difference in the world!
- 151. Tech Trek had a huge impact on me. Tech Trek allowed me to discover that I have a passion for Marine Biology, which I previously did not know. Because of Tech Trek, I volunteered with the Marine Science Institute in order to ameliorate my understanding of Marine life and the field itself. It was a life changing experience to actually gain fieldwork experience while learning about such amazing things! Tech Trek also has encouraged me to explore the STEM field even further and to take more classes about them while in high school. I'm really glad that I was encouraged to do so; I wound up taking five years worth of science classes (all at advanced levels except for two which were not offered at an advanced level) and absolutely loved it! In addition, I also plan on majoring in biology while in college, which I'm not sure that I would've done prior to attending Tech Trek. Tech Trek has had a really positive impact on my life altogether by allowing me to realize the amazing potentials of science and mathematics as well as to realize that it's important to follow your dreams, whether you wish to be a scientist or a mathematician, regardless of what society dictates as normative for women. I think that it is fantastic that the camp continues to motivate young girls to pursue careers in the STEM fields where a female presence is strongly needed. Keep up the fantastic work! :)
- 152. Tech Trek expanded my horizons and gave me confidence to try my hardest in high school and to go to college.
- 153. Tech Trek gave me the resources and confidence to set higher goals for myself. The program equipped me with many life skills which I have been able to utilize frequently as I have grown.
- 154. This program opened up a whole new world in the math and science industry. It was amazing to see the positions women hold in these fields, and hear about the struggles they had to go through to get where they are today.
- 155. Tech Trek gave me a lifetime of memories and it helped me learn about the college life experience and how it would be far away from home. Tech Trek also helped me meet wonderful people and get out of my comfort shell. It was one of the best experiences in my life.
- 156. It allowed me to know that I am capable of advancing my knowledge of Science and what is available to me as a girl

- 157. I've met a lot of people who help change my life and experience the chance to see the world in a different view.
- 158. Tech Trek surrounded me with peers who were also interested in science. I was finally in an environment where it was ok to be passionate about school, and I didn't feel judged for being 'nerdy'.
- 159. Tech Trek exposed me to many other girls who were just as interested in math and science as I am, and inspired and encouraged me to continue pursuing my interest in those subjects. Seeing other people just as excited about the subjects I was in love with only increased my love for them.
- 160. Tech Trek gave me more confidence in myself in science and math, and introduced me to other girls who were just a passionate as I was. It gave me the push that I needed to pursue my goals in high school, and helped me get into a great college.
- 161. I believe that above all else, to have confidence in my passion for the sciences is the driving factor that allowed me to continue in my pursuit of knowledge throughout high school and into college. Because my experience with Tech Trek taught me to pursue my interests, as well as creating for me an environment in which this was made possible, I felt extremely determined to chase what I believe is my reason to be wherever I am. Tech Trek also inspired me to do well throughout all my years of school and become aware of any opportunities that may be given to me, and accept these opportunities fully. In Tech Trek, I was given self-esteem and individuality, realizing that it is important to be confident and fearless in the pursuit of directing my passions and interests into a career.
- 162. Tech Trek gave me confidence after doing things I've never done before. After touring the crime lab in San Diego it sparked my interest in forensics, which I would love to have a career in. I remember many of the experiments and lessons that have helped me in my high school courses.
- 163. I loved every second of Tech Trek. The other girls were very fun and friendly, the teachers were informative, and the dorm moms were very kind. I originally attended Tech Trek because I wanted to become a veterinarian, however, the camp shifted my job interest to computer engineering (animated films). The Pixar presentation was eye opening for me and changed my perspective on what I wanted to do when I was older. Tech Trek also gave me a taste of what dorm life is like and what to expect when first going to college. I have to make a quick comment on the vanilla ice cream machine in Stanford's cafeteria. I remember all the girls were obsessed with the ice cream and I have to admit, I have not come across better vanilla ice cream since the summer of 2009. I love and miss the girls at Tech Trek and highly recommend the camp to younger girls.
- 164. Tech trek taught me how to get along with roommates and adapt to new environments quickly.

- 165. Tech Trek had an overwhelming impact on my perspective of career choices that I would have never really encounter if it weren't for this program. It also empowered the idea of women in the mathematical and scientific fields that are mostly dominated by men at such an early age. Also the fact that I was surrounded by other girls from different areas of San Diego that had the same aspirations as I did was very motivating in continuing the program in a comfortable condition and broaden my perspective of not only engineering field, but motivate me to go to college. After Tech Trek, I felt the need to participate in more science and engineering programs and took whatever opportunities I could.
- 166. It was an amazing experience that I will never forget!!! I got to learn from so many influential people and I remember doing a PSA on world hunger! If I apply for anything, I always add the fact that I went to tech trek because I believe it was that great of an experience! I learned computer tech, which I never knew much about previously.
- 167. Tech Trek had a huge impact on me. The next year, my eighth grade year, I took an advanced math and an advanced science course at North High School. I have continued to take honors and AP math and science classes. Tech Trek gave me a new love for math and science and the confidence to pursue a career in the field. Also, Tech Trek was a great way for me to bond with other girls my age who share the same interests as me and gave me lasting friendships.
- 168. Tech Trek made me realize that I can be successful in all areas of my life, despite the fact that I am a woman. I gained a completely new sense of confidence in all areas of my life—academic and social—that I am immeasurably grateful for. Tech Trek is what shaped me into the woman that I am today.
- 169. Tech Trek helped expand my knowledge on STEM careers and also motivated me to work harder in high school and not be intimidated to try more challenging courses.
- 170. Tech Trek helped me to be more confident in myself and my goals, sparked an even greater interest in (which has grown into love for) science and math in my life, and allowed me to completely fall in love with the Stanford University campus leading me to strive to study there in college.
- 171. It interested me in a career in medicine and exposed me to different types of opportunities for women in both math and science that I had never known before.
- 172. Through Tech Trek I was exposed to a variety of fields and career options in scientific fields. The numerous field trip opportunities allowed me to see science in action. As a young woman, the perspective from other female scientists and professionals was encouraging and inspirational.
- 173. Tech Trek gave me the confidence to be on my own, and also allowed me to meet many girls my own age with the same interests.

- 174. Tech Trek encouraged me to seek a career in the sciences and strive to improve my mathematical skills.
- 175. It was an experience that helped me become more open and outgoing. It helped deepen my interest in fields I never had access to before.
- 176. It opened my eyes to science as a career. Throughout school, I always did well in math and science, but hadn't considered it when it came to jobs.
- 177. Tech Trek's Impact on me was major since I would always be the shy unconfident girl in school. After all my experience in the program and getting to socialize with people from different parts of the county, I learned how to socialize and open up. Many girls are really smart, wise and talented and I personally learned a lot from each and every one of them including the dorm moms. I also became more responsible and made epic decisions in what I want to study in college with the courses I took in the summer program. As a conclusion, I came up with the decision of majoring in biology and during high school took AP classes including AP Calculus.
- 178. It was a fun, interactive to become engaged in the fields of science, and even though I couldn't take the class that I thought I connected with the best (anatomy), I still had a blast and learned a lot about the subject I studied (Forensics) and how I can apply it to everyday life (problem-solving, deductive reasoning)
- 179. Tech Trek introduced me to friends I still have even now, four years later. It gave me the opportunity to explore the campus of Stanford University, my dream school! And it gave me so much hope in my dream to becoming a surgeon. It showed me that I have every chance to complete my goals. It was a once in a lifetime experience.
- 180. Tech trek was a once in a lifetime opportunity. It was one of the best experiences of my life. It allowed me to be on my own for a week with other girls who shared my love of math and science. It was a great way to meet new people and interact with adults that I've never meet.
- 181. Has increases my knowledge about the vast field of science.
- 182. Only a positive impact. It got me excited to continue to do well in school because of how much fun I had and how much I had learned that week. It also convinced me that I want nothing more than to live in a dorm when I get to college because nothing was more fun than at the end of the day hanging out with your friends and being on campus.
- 183. An opportunity of a lifetime
- 184. It allowed me explore different areas of Math and science and provided me with different opportunities to fulfill my own potential.

- 185. What really impacted me was the experience I had there and I was able to be involved in science while having fun and I really enjoyed that part of it. I was also able to really be a part of the program and get involved and meet new people who were also interested in the subjects I was. It was overall a great experience and I love having the opportunity to broaden my view on science and math.
- 186. Tech Trek opened my eyes to the possibilities I have as a girl to make a difference in the science field.
- 187. I have so many amazing memories from tech trek that I will never forget. This program has made a permanent impact on my life. After participating in tech trek I realized that I needed science in my life and I am now shaping my carrier path with tech trek being an influential part of my life.
- 188. Tech Trek gave me the confidence and desire to keep working in the STEM field and apply to other programs similar to it.
- 189. Before attending camp, science class was just another class but since coming home my interest in science has been beyond excellent. I've taken AP biology and AP Chemistry and currently taking Physics. Science has become my all time favorite class!
- 190. Tech Trek helped me to connect with other girls who had similar aspirations for their futures. I kept in touch with many of the friends I made for years. Additionally, Tech Trek helped inspire me to pursue a major in STEM in college, something that I will keep in mind when I apply to colleges next year.
- 191. Tech Trek encouraged me to pursue a career in math and science. It also increased my admiration of women already working in math and science.
- 192. It allowed me to experience a bunch of fun and new activities that strengthened my interest in math and science alike. It also gave me the opportunity to go outside my comfort zone and meet new people.
- 193. I was able to interact with others who were similarly interested in STEM fields. I was also introduced to activities that made me more interested in engineering.
- 194. I never considered me a strong math/science student. But once I attended Tec Trek I felt more confident in those field studies. I still look back at my times at Tec Trek with enjoyment. One of my best experiences in junior high!
- 195. Tech Trek allowed me to broaden my horizons on the available opportunities on the engineering field.
- 196. It made me more investigative and more social. Being with a group of friends just like me made me want to work hard.

- 197. For myself, Tech Trek made me more aware of science and math careers. Previously, I had never considered what STEM jobs I might take on in the future and was probably more oriented towards social sciences or art. However, Tech Trek opened me up to explore new interests in sciences, especially engineering and environmental sciences.
- 198. My attendance at Tech Trek, both as a camper and a counselor, has caused me to want to pursue a STEM field career later in life.
- 199. Tech Trek had an important impact on me because I was able to be with other girls my age that were just as motivated as me in science and mathematics and to do well in their future in general. I also enjoyed my physiology class as it was extremely interesting, hands on, and it was taught by a fantastic teacher.
- 200. It allowed me to meet other girls who shared the same interests in math and science. I got an insight into college/dorm life. I practiced careers that were unfamiliar and interesting to me. It was a great experience.
- 201. Effable, and surreal, I had such a great time. I still remember it as if it was last year. I also made friends there that I still talk to.
- 202. I remember it made me realize how much I liked science and the variety of career options available.
- 203. I learned that there's nothing that can hold women back and to not worry about constrictions on my dreams and goals. There were so many inspiring women there that I felt I could do anything!
- 204. I have never been much of a math/science girl. But I loved going to tech trek at Stanford. Staying in the dorms on campus was a whole new experience for me. The day classes were amazing, but the field trips were my favorite. It was a great experience
- 205. It broadened my knowledge on math and science careers and really gave me a unique experience that I always look back on.
- 206. Matured me at younger age. It allowed me to focus more on the future then other kids my age.
- 207. Ever since Tech Trek, my personality around new people has changed. I used to be scared of meeting new people, now I'm not
- 208. I really enjoyed tech trek and I wish I could go back. I have always been health conscious but we did an experiment where we blended a full McDonald's meal and then measured its fat content. That image has stuck in my head to this day and very rarely do I ever eat

fast food now. I feel that the camp also gave me time to be special and realize the opportunities that I could take advantage of.

- 209. Tech Trek allowed me to view fields in STEM that I previously didn't even know existed and helped me kindle my passion for math and science.
- 210. It gave me more exposure to a variety of hands on science activities.
- 211. I enjoyed meeting more girls that were interested in science like I was am wanted to work hard to get into a good college. I also liked being on Stanford's campus because it gave me a goal to work for.
- 212. Before attending Tech Trek, I didn't think much of college and I wasn't even sure if I wanted to go to college. After Tech Trek, I learned so much and was extremely motivated to do well in high school and pursue a career that I truly enjoy. Tech Trek also introduced me to my dream school, UC Santa Barbara.
- 213. It was a great experience overall and a great program which I hope will continue for younger generations.
- 214. Tech Trek taught me that science can be fun and interesting as well as math
- 215. I become motivated to succeed because of Tech Trek! The camp gave me the confidence I needed to push myself!
- 216. It made me realize that not only can I work for a man's job as a woman, but it gave me the confidence in how smart I truly am. Tech Trek gave me the life skills at an early age to become an engineer, just like my grandpas. It really changed my life.
- 217. I was very honored to have been invited but was disappointed in the actual experience. I found too many girls completely uninterested in being there. As an example, my roommate only wanted to sneak out at night and hang out with her friends looking for boys. Additionally, my dorm mom was not able to deal with any of the conflicts or situations in an appropriate and healthy manner.
- 218. Tech Trek taught me how to open up to people of my age. I am able to connect with many people for the first time in the shortest amount of time. I appreciate how the camp helped me gain the courage to take the opportunities that were offer to me later on.
- 219. It gave me a view of fields and careers in science.
- 220. Tech trek provided me an opportunity to interact with other girls with my same passion for math and science. I also attended two other years as a junior counselor at the Stanford camp as well as a senior counselor at the UC Davis camp. Both times that I returned I

became empowered to be a leader and spark curiosity in the minds of the girls. It was such an amazing experience I plan on attending once more as an adult volunteer. This camp also has such a positive atmosphere for learning and discovery to promote and stimulate to need for knowledge. This camp also exposed me to many professional careers that I never knew existed before. Tech Trek is such a wonderful opportunity for the girls, as well as a life changing experience.

- 221. It opened my eyes to the number and variety of intellectually gifted girls out there. It definitely increased my confidence and independence overall and also helped me gain friends I still keep in touch with. It introduced me to life in college, and helped me figure out which fields of study I would love to go into. Overall it helped me grow as a person. It was a highlight of my youth, and an incredibly important point in my life.
- 222. Because of Tech Trek I became more involved in Math and Science majors. It showed me that science and math were fun! I also met new people whom I am still friends with to this day! :)
- 223. The best part of Tech Trek was being surrounded by successful women and getting exposure to so many different areas of science and technology. I really appreciated the diversity of all the activities I got to do. However, I was disappointed because most of the other campers with my dorm mom did not seem as excited about science or math as I was, so I did not feel like I fit in with the other campers.
- 224. After Tech Trek, I realized my love for math and science. The program did an excellent job of blending math and science into fun activities that left a good impression.
- 225. I found a new love for the human body when I got to visit the cadaver lab.
- 226. Increased my interest in science, particularly biology and genetics.
- 227. I will always remember my short time at Tech Trek. Not only working for the chance to get this experience was a fun challenge, it allowed me to expand on the unknown future. The most memorable teaching I learned was when the Pixar host came to talk to the class, and I was very inspired by this. I am happy to say that I am now interested in getting involved with graphic design and maybe even working for Pixar someday!
- 228. Tech Trek was a priceless experience. I was surrounded by motivated girls and met so many fascinating and inspiring women. It definitely fed my interest and excitement in science. The classes, activities, field trips, campers, and AAUW members were all awesome. Because of Tech Trek, there are several women (dorm moms, counselors, and hosts) who I get to share my excitement and accomplishments with. I returned as a counselor this past year and it reignited the thrill of Tech Trek.

- 229. I didn't know that other girls my age were as interested in science as I was. It made me feel okay with being nerdy and smart and gave me a much-needed overall confidence boost. I also got to know girls that I am still friends with in high school.
- 230. Tech Trek was a great experience to show me how truly fun math and science fields can be. I got to experience activities that many are not going to easy get and I also got a taste of the college life. After having so much fun with knew people I also saw that academic subject can be exiting and interesting. I really think I'd like to look to a future career in science and math and this camp showed me the highlights of the fields. As a add in bonus I made great friends who years later I still talk to and the girl next to my room is now one of my very best and closest friends today!
- 231. I always knew that I loved math and science, but I didn't know exactly what field I wanted to pursue. The camp experience showed me many other fields that I wouldn't have known about.
- 232. It opened my eyes to the fact that girls could be just as intelligent as our male counterpart and that women are in control of their own future and have the strength to break free of the mold that states women should not be involved in science and mathematics.
- 233. Meeting women involved in those fields and girls my age who were interested in those subjects influenced me to think bigger with my future.
- 234. Tech Trek helped me realize that there was more to science than just biology and chemistry. I learned that each field has a multitude of branches that are more interesting than the next.
- 235. It made me take higher math and science classes, and expanded my career interests.
- 236. I had always been interested in science and Tech Trek inspired me to do more. I take AP classes now, and had an internship at the Buck Institute. It was encouraging to hear other successful women want young girls to follow in their footsteps
- 237. It gave me the confidence to take more advanced sciences.
- 238. Tech Trek introduced to me how being involved in science and math can lead to new careers and life styles.
- 239. Tech Trek gave me a larger amount of confidence in myself to pursue my goal of going into the field of engineering. Everything was amazing about the program and really increased my knowledge about the math and science fields. The hands-on activities made the program that much more fun and I wish I could do it again!
- 240. It further solidified my idea of wanting to work in the medical field.

- 241. It opened my eyes in my own ability to push myself in school. I found my new love of biology even though I originally was in physics
- 242. Tech Trek opened my eyes to the many possibilities out there for women in science, math, and engineering fields, and increased my interest in said subjects. Though my career choice at the moment is uncertain, I always look back on my time at teach trek for inspiration, and I am thankful for the spark in my interests that it gave me. Before tech trek I liked science, and I loved my science classes, but it wasn't really something I necessary saw myself doing. After Tech trek, I found it was really something I might want to pursue in the future. It was also my first sort of real introduction to college. I know I was young, but just being on UCSD campus made the experience of going to college feel more real and present in my life, rather than just that place I would be going to when I was older. My time at tech trek gave me the confidence to expect more from myself, and to pursue those lofty goals that come with pursuing a passion. The entire experience was life changing. Being there with all of the wonderful teacher, dorm moms, and campers, and learning about all the amazing things the world of math and science have to offer will be memories that stay with me the rest of my life.
- 243. I would definitely agree that Tech Trek not only gave me confidence that I could succeed in a STEM field, but it just helped me gain confidence in myself in general.
- 244. Tech Trek showed me different careers I could choose. It showed me that women can be anything a man could be and changed how I think about myself and my career possibilities.
- 245. Tech Trek made me realize my love for math and using technology. It also had an impact on me that made me realize that I love experimenting and interacting with my environment, whether it was doing collaborations with other girls my age in the classroom, or doing the fun little activities about why and how you can poke a skewer through a balloon without it popping.
- 246. During Tech Trek, not only did I learn many new things, I made new friends and had fun while doing so. It increased my interest in STEM fields and was generally an amazing experience.
- 247. Tech Trek has inspired me to explore math and science more. I have always been interested in those areas, but through Tech Trek, I was able to find my future career. Unlike schools and tutoring places, Tech Trek provided the students with more hands-on activities and experiments and I really enjoyed them. Meeting new people in the campus also made me more confident and sociable. Staying at UCSD for a week with great people and opportunities was one of the best summer trips I had.
- 248. Tech Trek made me realize how many career options I have, and all the steps I can take to get there. The university setting have a realistic experience, and made me aspire to set

higher goals than I had previously. I was truly one of the best weeks of my life; I made great friends and learned so much about all of the opportunities in the science and math fields.

- 249. Before Tech Trek I dreaded my science and math classes because I thought they were boring. After going to Tech Trek and getting to experience the hands on aspect of both science and math my eyes were opened to how interesting math and science can really be. I'd say my entire school life was impacted by Tech Trek.
- 250. Tech Trek inspired me to be proud in my interests in the STEM fields as a woman, and being in an environment with other girls who felt the same made me grow even more. In high school I have founded a Women in Science and Engineering club, in which I utilize sources from AAUW and other major organizations to encourage women to pursue their interests in STEM and learn about the fight for gender equality and pay equity.
- 251. It taught me about new careers in the science field. I was interested in being a forensic scientist from my 8th grade year to my 11th grade year but now I am leaning towards becoming a psychologist.
- 252. Tech trek made science and math less intimidating and more fun to understand
- 253. Tech Trek gave me a sense of what it was like to be away from my family at school. It increased my interest in physics, which I am taking right now in my junior year of high school. It led me to be more successful in biology by being exposed to previous dissections at camp.
- 254. As a young girl, I was unaware of all of the possible roads which I could follow. I was timid, ignorant, and intimidated by the world around me. However, I had always had a curious mind, one which my science teacher happened to notice. The very act of applying to Tech Trek was momentous for me, and when I received the news that I had been accepted, I was entirely elated. The week spent with the other 83 girls was a priceless experience for me. I began to realize that I could be a doctor or a scientist or a mathematician, and most importantly, I could myself. The friends and confidence that I gained from Tech Trek will remain with me for a lifetime. Whenever I falter or lose my footing, I have only to recall my week at Stanford University to regain my strength.
- 255. Before Tech Trek, I had no idea what I wanted to be, or what I was capable of. I had little understanding of just how far I could go in life if I applied myself. Tech Trek helped me uncover my passion for science and inspired me to encourage others to believe in their own abilities. When I apply to colleges next year, I will be applying to colleges with strong science programs because I want to major in environmental or biological science. Tech Trek showed me my true path in life and helped me learn that I am smart enough to do anything.

- 256. Tech Trek made me more confident in my ability to do well in and enjoy science. It made me realize that there were others out there with the same interests as me, and that I had people to help and support me in whatever I chose to do.
- 257. Tech Trek allowed me to be more independent, which was positive. However, I felt alone the entire time. I learned that you need a tough skin to get through life situations. Being a quiet person in that kind of environment was not beneficial for me. I have only recently broken out of my shell and if Tech Trek was offered to me a little bit later in my life, I would have benefitted more. Especially since I am now thinking of colleges and careers. What I did love about the camp was the field trips, which let me explore and wander in my own way, where as the dorms were tight confinement.
- 258. Tech Trek was one of the best experiences of my life. Not only did I make friends that I am still in contact with, but I also realized how much I liked to learn. It definitely increased my interest in science because I realized how fun science could be.
- 259. It opened up and showed me the possibilities that a woman can do just the same or better in a math or a science career that a man can.
- 260. At first I thought I was not really going to understand how to do most of the things but with the hands on activities and the teachers they really got me interested in learning more about engineering and science. I did not know there were so many different jobs in science I thought there was only the scientist. Now that I am in high school the science teachers are telling us things and I'm like "Hey I learned that in Tech Trek."
- 261. Although, I am not planning a career in math or science, I have found that these topics will always be interesting. I look fondly upon the memories made with Tech Trek. I was exposed to once in a lifetime experiences.
- 262. Tech Trek increased my knowledge on the importance of Science, Technology, Engineering, and Math. The program also introduced me to many interesting majors and work fields within those subjects. Overall, the importance of women in work fields concerning STEM had the biggest impact on me.
- 263. I had known that I wanted to go into the sciences ever since I could remember, but wasn't sure what I wanted to do. I was also unsure that there were any other girls or women interested in the same fields I was. Tech Trek solidified my science foundation and gave me the confidence I needed to pursue my passion.
- 264. Tech Trek helped me figure out what I could potentially be good at what I wasn't. I learned that I wasn't very strong in the science and math department, however I did learn that I was able to collaborate and adjust well to new environments and different types of people. I learned more about my interest in people and behavior through staying in the

dorms, meeting new people, and my roommate. Overall, I still loved my experience with Tech Trek.

- 265. It drove me to take advanced and high levels of math and science in high school and allowed for me to see that my personal passion is in history and law, which I will be studying in a year in college.
- 266. It showed me another field of study I didn't really think about before it allowed me to discover my passion for physiology and all things biology when we took samples from the ocean floor and dissected the calamari. Tech Trek really opened my eyes to new possibilities.
- 267. Tech trek for me was an eye opening experience that allowed me to realize how good I was in both math and science and the professions that were open to me.
- 268. Tech Trek introduced me to many other girls my age with similar interests. I really feel that I also gained an advantage in school and it definitely increased my interest in science.
- 269. I was honored to be chosen to attend this amazing camp, and the experience I had there was completely life-changing. Not only did I make new friends, but I also became more confident in my abilities and have a clearer vision of my future. Tech Trek opened my eyes to other careers I had not thought about, and I am extremely overjoyed that I got to make so many memories and include Tech Trek camp as the best experience of my life.
- 270. Tech Trek had a major impact in my life it helped me discover that I was really passionate when I put my heart into anything I was doing. The day I had a dissecting lab and dissected a Fetal Pig in which one of the procedures was to dissect and take out the fetal pig's brain in order to anatomize it, study it closely I certainly was able to fully complete the procedure and hold in my hands the brain was in great conditions, it was a difficult operation. I was able to accomplish this and that moment I will cherish forever because by doing so something sparked in me that I realized that I was committed, passionate and enjoyed Biology by doing this I was able to help the rest of my peers in my group to also finish their lab. I was able to take pictures holding the fetal pig's brain in my hand because I was so excited of this big achievement of mine. This demonstrated to myself that I could be myself, have a fun time and help others so that we would all have fun. It was through the hands on Biology activities in which I participated dissecting many different animals and plants that I felt comfortable and certain that I would like to pursue a career in the medical field up to know I am confident that I would like to become a surgeon and help out people who are in need of help. Go Biology Group 09'!
- 271. To put it bluntly, it got me all fired up about science! I wanted to learn about and explore everything I could afterwards, applying as much of my newfound knowledge as possible. It opened up to me new fields of science that I had no idea I would have been interested in.

It also helped me with my independence and leadership skills, what with being on my own for a week. Lastly, it taught me that UCSB has awesome food.

- 272. Tech Trek had a huge impact on me. Before Tech Trek I knew I liked science, but I wasn't fully aware of how much I really did like science and how many science related careers were available to me. Not only that, but Tech Trek made me so much more confident, from the application process right down to leaving Tech Trek after the week I spent there. Tech Trek has made me more confident to enroll in higher-level math and science classes to truly challenge myself. Even today I feel the impact of Tech Trek because now that I'm almost done with my high school years I am considering a career in science which makes me so happy because if I wasn't introduced to Tech Trek and hadn't attended such things like the women's professional night or been introduced to the technology and careers available to me I probably would have shied away from science thinking it wasn't a very womanly thing to do, whereas now, I see countless woman involved in science and math careers that are so successful in their lives I feel like I can do the same with mine.
- 273. Tech Trek gave me the college experience and pushed me to try my best to get into a good college. Being at Stanford and learning interesting things made me very excited about the rest of my life and the opportunities I have. It motivated me to try my best in every subject, even the ones I was not that passionate about.
- 274. Tech Trek was an amazing summer experience that gave me the opportunity to discover different STEM career paths and meet new people. I especially enjoyed being provided with equipment (i.e. video cameras and Macintosh laptops) to experiment with film and video editing in my course.
- 275. It opened my eyes to what types of STEM fields were actually out there, not just the glorified ones or the smattering that were mentioned in school. It increased my love for science and technology and helped me get ahead in the science subjects I would learn in school. It also should how many other females like myself are interested in science and technology.
- 276. Tech Trek helped me develop my passion for science and desire to go further in my educational career. It pushed me to strive to always do my best at school and work hard in math and science class no matter how difficult it got.
- 277. Through Tech Trek I became more comfortable and sociable with different people. It was new associating with girls who worked really hard to get into the program. I made amazing lasting impressions! I was able to experience many new things at an early age like dissecting and dorming at a college. The many women I met intrigued me with following a career in possibly engineering.
- 278. Tech Trek truly made me recognize my interest and strength in math and science. I loved meeting other girls with the same interests at me, and staying in a college environment. I

also enjoyed the hands-on learning activities and field trips. I think the trip encouraged me to challenge myself in math and science in school.

- 279. Tech Trek was a fantastic opportunity to be exposed to a wide array of math and science careers and to meet successful women in those fields. It was also wonderful to meet and make friendships with other girls who enjoyed math and science.
- 280. Tech Trek opened my eyes to the fact that there were so many funny and intelligent people my age out there who were incredibly active in their schools and communities. Talking with them made me want to get involved in more career-based activities, and on a greater scale.
- 281. Tech Trek was the once in a lifetime experience that encouraged me to become a mechanical engineer. Before I wanted to be a doctor because that was what I believed successful girls did. But after attending Tech Trek, I realized that my true passion was in the field of engineering. Tech Trek gave me the confidence and experiences that helped me become the woman I am today. I am grateful for this program for giving me a life changing experience.
- 282. It allowed me to see the potential math and science had outside of school. It allowed me to apply some of my previous knowledge. Career night showed me that there are a lot of careers in math and science that can be not only interesting, but fun also.
- 283. I went to Tech Trek at a time when I was becoming more interested in math, and Tech Trek helped to nurture that interest.
- 284. Guided me towards my interests.
- 285. It helped me overcome my fear to speak up in front of a crowd. It also encouraged me to be the best I can be and to do and be the best in school.
- 286. Tech Trek taught me a lot of things, but probably the most profound things were that it taught me to be independent and confident. I learned not to doubt myself or my abilities and I learned to be independent and get things done efficiently and properly on my own.
- 287. Being introduced to physics and other sciences through hands-on, interesting activities was wonderful. However, learning science while interacting with a group of girls who also aspire to be scientists was even better.
- 288. Tech Trek sparked my interest in the different fields of science and made me aware of all the possibilities in career choices. I realized how much of the world is dependent upon researchers and engineers.

- 289. It was really fun to experience math and science that way. I'd always loved science, but Tech Trek showed me how math was fun too. It was really great to share that with other girls. I loved it so much that I came back as a JC in 2012, which was a really fantastic experience. That increased my confidence in my leadership abilities, and I got to keep learning—helping one of the teachers with a computer programming class that we didn't have three years earlier.
- 290. Tech Trek helped me experience innovative science, math, and technology activities and classes that really helped me realized that I enjoyed working with technology and science. Before tech Trek I was strongly considering an English major but after that week and the following events, I changed my mind and I have been working and preparing myself to become a biochemical engineer. This year in high school, due to the great fun I had in Tech Trek I am taking physics and have already signed up for AP Physics next year and its one of my favorite courses.
- 291. Tech trek taught me so many lessons, not only about myself as a person, but as a student as well. I came into Tech Trek having only a vague idea of what majors I was interested in, and honestly not knowing if I would know how to connect with the girls around me. During my stay, I not only discovered my true passion, DNA therapy/genetics, but I also was able to build my social skills, and bond with the girls in my dorm to create truly special and lasting friendships. This experience has given me so much confidence in myself. I know that I can be independent and take care of myself. I am now not afraid to push myself to my full potential. Most of all, I found that I have the courage within myself to be my own person, to choose what I am most interested in and pursue it, to be kind of person I truly want to be.
- 292. Tech trek was a great experience that allowed me to be more confident in my abilities in school. It opened my eyes to how many different career paths I could pursue in the science field, and encouraged me to work toward that in the future.
- 293. Tech trek allowed me to see my true potential at a young age, it pushed me to pursue in more advanced science classes and further developed my love for science. Tech trek made me aware of the many opportunities and career paths I have to choose from. Tech trek was an amazing experience and it truly made an impact on my life.
- 294. Tech Trek made me realize that it's great for girls to be good at science and math too. I liked being around other smart girls.
- 295. It helped me realize that there are a lot of math and science fields out there that would be interesting to get involved in. And it gave me a greater confidence in the things I do.
- 296. It has made me an independent young woman and I'm not afraid to research and explore my life options.

- 297. This experience motivated me to focus my future on science and math. I have taken all of the advanced math and science classes offered at my school and will continue on to college majoring in one of the stem fields.
- 298. Tech Trek had a great impact on me, because it helped me be a little more independent, and also gave me an idea of how college life is. I also got interested in doing more research on things about science careers.
- 299. I feel it made me more confident and allowed me to sleep without my parents and do more things without their consent. It was very fun.
- 300. I am looking for a career in a science related field. Tech Trek gave me the confidence that I can do anything if I put my mind to it.
- 301. Tech Trek made me a better learner in all aspects of the word. I am better prepared to answer questions and especially ask questions. It showed me that science is what I want to pursue in life and I have a strength in it. It also gave me lasting friendships—I am still Facebook friends with three of the girls from this camp!
- 302. Was a confidence builder to be selected and attend the camp. I learned a lot about Math and Science professions
- 303. Tech Trek at first seemed to me like something good to put on my college application. However, once I got there, it became an experience I'll never forget. It allowed the handson and one-on-one time with students that public school cannot. It was a valuable well of positivity that depicts how female students can and do become successful in math and science fields. On top of all that, meeting other girls who are just as nerdy and amazingly bright as yourself, the Techy, is an amazing and empowering experience that I will be grateful for forever.
- 304. Tech Trek really helped bring me closer to science and greatly affected my career decision. Because of Tech Trek, I now want to be a surgeon and do my part in the STEM fields.
- 305. I learned that we are surrounded daily with products and uses that only math and science have afforded us ... from learning about bridges in physics, to simple things like how makeup is made.
- 306. I think one that had the most impact on me was when we got to learn about Bats and their importance in our ecosystem. It gave me a new perspective on Bats and a new respect for them because of their value.