



2015 Texas Navy STEM Camp July 9-17, 2015

- Navy funded a camp for high school students to travel from Norfolk Virginia, and Virginia Beach to Texas.
- The youth were provided opportunities to learn about college life and science/engineering employment.
- The youth were also given the opportunity to experience the culture of Austin Texas.
- The youth gained a tremendous amount of knowledge in STEM and how to use it in everyday life.



Relevance

Military youth traveled from two Navy installation in Norfolk, Virginia. Although the locations were only about thirty minutes apart, the youth didn't know one another. Many of the students were entering high school, or were about the graduate from high school. Although there was a wide age range, the camp provided a variety of educational opportunities for all youth. The students at this age are facing many different life events. These challenges included: academic, peer pressure, self-esteem and dealing with deployment. The Texas Navy STEM Camp provided a great opportunity for twenty youth to set aside their life challenges and gain knowledge in the area of STEM and College and Career Awareness.

Response

The Navy recognizes the stress and challenges youth face in their daily lives. Therefore, the Navy partnered with Texas A&M AgriLife Extension Service - 4-H Military and Navy Child and Youth Services to provide the Texas Navy STEM camp. The camp contributed to the youth's emotional and physical well-being. The youth also gained knowledge in leadership, career opportunities and educational options for college.

- The campers had several "once in a lifetime" experiences.
 Each experience gave the campers a chance to face their fears. For example, several of the youth were not sure about the indoor sky diving. However, once they were educated on how to fly, and watched other youth, they had the courage to participate.
- Every activity in the camp provided the youth with many learning experiences while having fun.
- Every night the youth would use journals to record their experiences for that day. Each night, youth were given a topic to write about. This allowed youth the opportunity to reflect on what they learned. In addition, youth were provided free time to write about their favorite activity.
- The youth developed long-term relationships with the other youth.
- The youth were able to experience college life. They lived in the dorm environment, visited two very different universities, learned how to apply, grant vs loan and career fields.
- The youth learned how to set goals and achieve those goals.

Results

One goal of the camp was to educate the youth about 4-H. Before the camp, many of the youth were not very familiar with what 4-H. After discussions about 4-H, the youth were surprised that there were clubs in Virginia that they could join. Many of the youth stated that they were going to join a 4-H club once they returned to Virginia. Another goal was to measure their knowledge gained in STEM activities throughout the week. Very pleased to see the goals were met in extraordinary measures.

Impact of the Texas Navy STEM Camp

Basic Knowledge of:	Percent of Correct Before:	Percent of Correct After:
4-H	38%	100%
Food Science	50%	95%
Physics of Skydiving	10%	80%
How caverns are formed	52%	93%
How to apply to college	55%	100%
Austin Texas Culture	5%	80%

The camp provided a series of lessons and activities to help youth gain knowledge in STEM, college readiness, team-building and 4-H opportunities. Some of the objectives met through the series of activities are:

- Youth can teach others from the skills they learned
- Youth can better explain to others what college life is like.
- Youth learned to face their fears
- Youth learned about teamwork
- Youth learned how to be a leader
- Youth learned how to journal
- Camp created a positive youth environment



The overall experience and knowledge gained at the camp were very impactful. The youth were very excited to learn while having new experiences, and then sharing with others. This year the camp consisted of nine days, which is two days longer than the previous year. The extended camp, allowed youth additional opportunities to connect and engage in more activities. It also allowed for free time and where youth experienced a graffiti wall and two free music series. Overall, the partnership and coordination between the Navy Child and Youth Services and Texas 4-H Military staff provided an amazing, "once in a lifetime" experience for the military youth.

Comments from Camp Youth and Staff

- "This was a great experience for the youth of today to discover more about themselves
 while learning about the fields of science technology, engineering and mathematics.

 Each teen had an experience that positively changed their outlook on what they would
 like to pursue in the future."
- "The Texas Navy trip was a fun experience. We got to learn a lot of new things"
- "I really like Texas and spending time there, and I already wish I could go back!"
- "I thought Texas was really cool. I really enjoyed the hands on stuff we got to do at the museums."
- "I thought the trip went really well. The teenagers seemed to have gotten a lot out of the different places that we visited and things we got to see. It is something that I would love taking more of our youth to."

Acknowledgements

Thank you to everyone who assisted in providing the youth with a very unique opportunity in the area of STEM. We would like to thank Navy Child and Youth Services, Kansas State University, Texas A&M AgriLife Extension Service and the University of Texas – Hardin House.

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