BOYS & GIRLS CLUB
OF UTAH COUNTY

AmeriCorps Utah STEM Initiative

AmeriCorps

Evaluation Report

2024-2025

SOUTENIR SERVICES
Brian L. Jones Ph.D.

Introduction



The AmeriCorps Utah STEM Initiative (AUSI) has teamed up with Soutenir Services to execute an external evaluation for the program's 2024-2025 fiscal year.

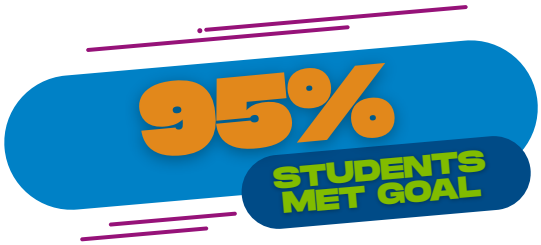
This external evaluation includes the creation and implementation of program evaluation strategies and tools. Additionally, it encompasses the analysis and assessment of evaluation data collected from the AUSI program.

The 2024-2025 AUSI Evaluation Report provides insights into specific evaluation methodologies and the resulting outcomes.

Throughout the 2024-2025 school year and the subsequent summer break, the AUSI program facilitated a variety of initiatives. During the academic year, programs were designed with different approaches, such as in-class support and after-school activities, while summer sessions offered both extended full-day programs and brief, intensive workshops. AUSI's primary goal has remained consistent: to increase the number of students showing enhanced academic engagement and improved social-emotional skills. A success indicator was defined as a ten percent rise in academic engagement or improvements in social-emotional competencies by the conclusion of an AUSI-supported program.

Executive Summary

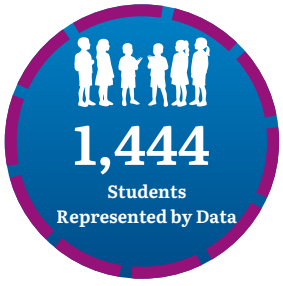
Throughout the 2024-2025 academic year and during the summer of 2025, AUSI supported several initiatives aimed at enhancing students' academic engagement and social-emotional growth. Programs held in school, after school, and during the summer were designed to ignite students' interest in Science, Technology, Engineering, and Mathematics (STEM) fields while developing social-emotional growth. The AUSI program aimed to increase student academic engagement and social-emotional skills by 10% on program key measures. In total, 95% of students achieved this goal.

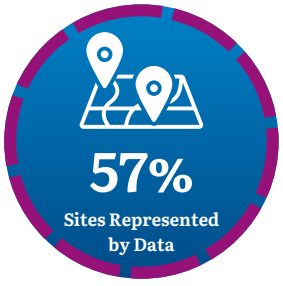


DATA SAMPLE

The AmeriCorps Utah STEM Initiative (AUSI) had an extensive reach in 2024-2025. It supported 37 total sites, which included 32 school-year EiE & STEM programs and 5 PREP summer programs impacting a significant number of students statewide. For this evaluation, a diverse sample of 21 sites provided complete data, representing 57% of all AUSI locations. The findings in this report are based on the 1,444 students who participated at these sites.



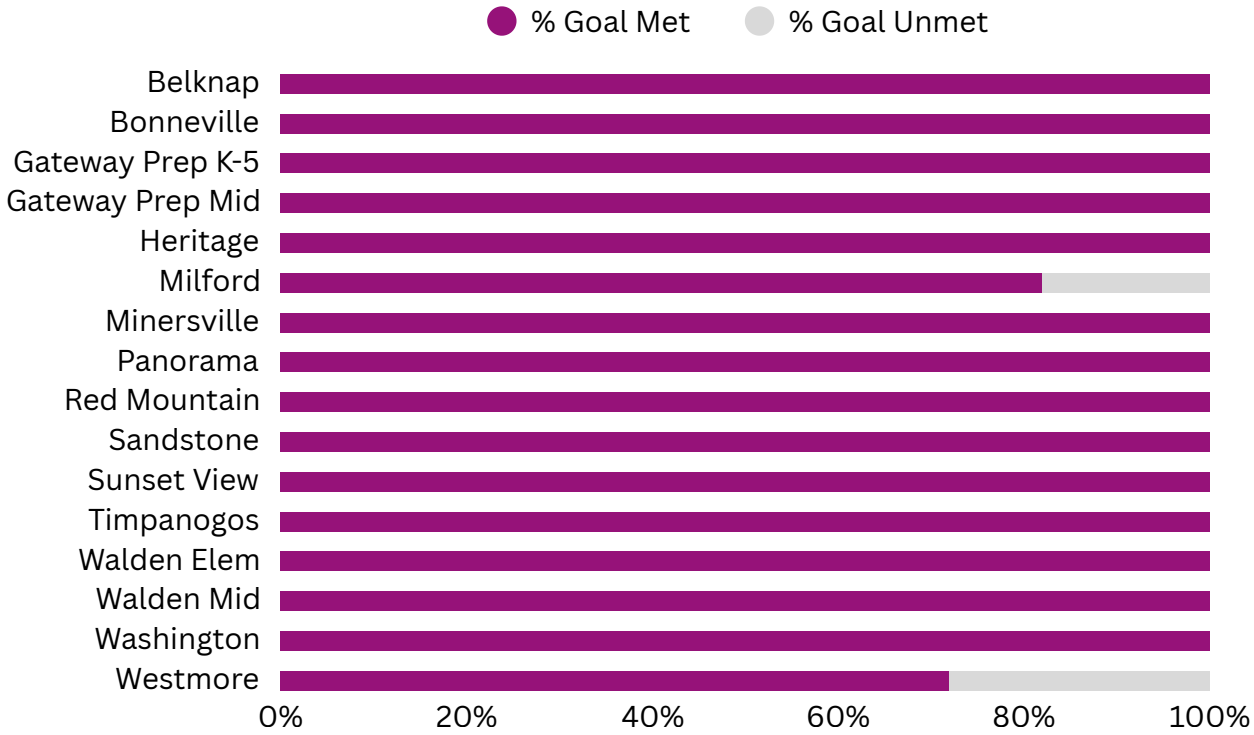




EiE & STEM Programs

The Engineering is Elementary (EiE) program and other STEM-focused educational activities were implemented across 32 sites and organizations. These programs constitute the most significant subset of STEM programs supported by the AUSI program. Most of these programs operated during the school year, with a select few continuing to provide programming throughout the summer. The assessment results were impressive, showing that 95% of students improved in at least one evaluation criterion. The disaggregated data highlights various ways the AUSI program supported student academic involvement and social-emotional development.

Student Evaluations by Reporting Sites

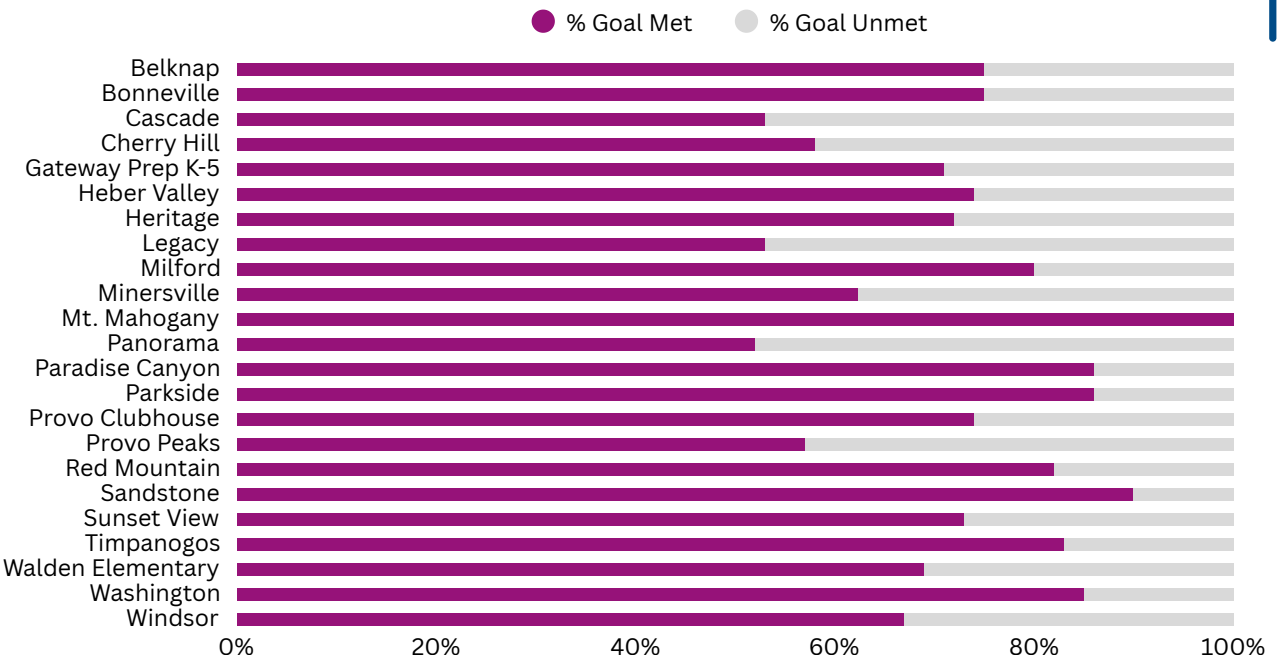


STEM Programs (cont.)

A new AUSI pre-post survey (see Appendix C) was administered across several STEM program sites in 2024-2025. The survey was administered to students in grades K-6 as part of the school year programming. The primary objective of this survey was to gauge young students' perceptions, attitudes, and engagement with STEM. The key areas explored were students' enjoyment of STEM subjects, their understanding of the importance of STEM, the perceived fun and educational value of their STEM club, and their future aspirations related to STEM fields. Results provide evidence of program impact.

Analysis of the pre- and post-survey data reveals that the STEM program had a positive impact on student attitudes and perceptions. Overall, 72% of students showed an increase in at least one of the measured items, indicating a favorable shift in their views on STEM over the course of the program. However, a significant "ceiling effect" was observed, where a large portion of students entered the program with some of the highest possible scores on many items, making it statistically impossible to measure further growth for them on those metrics. This suggests that while the program is effective, the survey instrument may not be sensitive enough to capture gains in students who already possess highly positive views of STEM. Future survey instruments may be revised to capture growth in high-achieving students more effectively. A logistic regression analysis did not find statistically significant predictors of growth based on grade level or site, suggesting the program's positive impact was broad-based across different demographic groups.

Survey Results by Reporting Sites





PREP Programs

The Pre-freshman Engineering Programs (PREP) were essential in equipping students for future education and careers in science, technology, engineering, and math fields. The focus on hands-on activities, workshops, and group projects fostered social-emotional skills while growing intellectual abilities through challenging academics.

The evaluation findings demonstrated notable enhancements in academic achievement and favorable perceptions of STEM subjects, inspiring young students to continue their education and consider future careers in STEM fields.



722 Participating Students



These PREP programs relied heavily on their AmeriCorps volunteers to support this intensive summer programming. Many programs expressed the essential role of AmeriCorps volunteers, noting it would be impossible to run their program without them. The volunteer's ability to provide academic and social-emotional support for students was the unifier across a summer of learning and growth.

Sponsored Programming

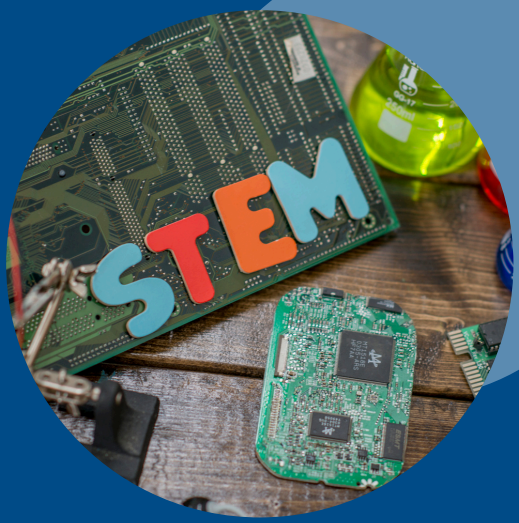


1 EiE & STEM Programs

These programs focused on STEM education during school hours and after-school settings, with a select few operating in the summer. These programs primarily utilize the Engineering is Elementary (EiE) initiative from the Museum of Science. EiE is designed to enhance engineering learning for elementary students through hands-on, inquiry-driven activities and narratives that develop critical thinking and problem-solving skills. Programs were adaptable to local contexts, with some opting for alternative STEM activities like Python, Lego Robotics, and initiatives for girls in STEM.

2 PREP Summer Programming

At the conclusion of the academic year, multiple AUSI programs continue to provide students with programming that resembles their after-school activities. However, some programs are available solely during the summer vacation. These programs typically feature a highly organized multi-year framework. In these initiatives, students engage in a considerable portion of each day in both educational and social activities. The multi-year design enables students to return in the following summers to further their learning experience and build strong connections and friendships with both adults and peers.



EiE & STEM Programs

EiE and STEM programs addressed STEM education both during school hours and in after-school settings. The majority of these programs utilized the Engineering is Elementary (EiE) initiative from the Museum of Science to guide student activities. EiE is a holistic STEM educational program aimed at enhancing engineering and technology learning for elementary students. It offers a variety of innovative, research-backed curricular materials, professional development tools, and resources for teachers to incorporate engineering concepts and practices into their classrooms and informal learning environments, such as after-school programs. EiE curriculum fosters the development of critical thinking and problem-solving skills by enabling students to apply engineering principles to real-life challenges through hands-on, inquiry-driven activities and captivating stories.

AUSI programs had the freedom to modify the implementation of EiE programming to reflect local contextual factors. This adaptability was evident in the EiE units selected by the sites and the chosen lessons and activities within each unit.

Programs that did not incorporate EiE content devised their STEM-related activities using a range of resources. These programs consisted of, but were not limited to, learning Python, Lego Robotics, Scratch, and groups focused on STEM for girls. Additionally, other school-year initiatives provided by AUSI included mentoring, monitoring, and extra academic assistance for students facing challenges in STEM subjects.

EiE & STEM Programs

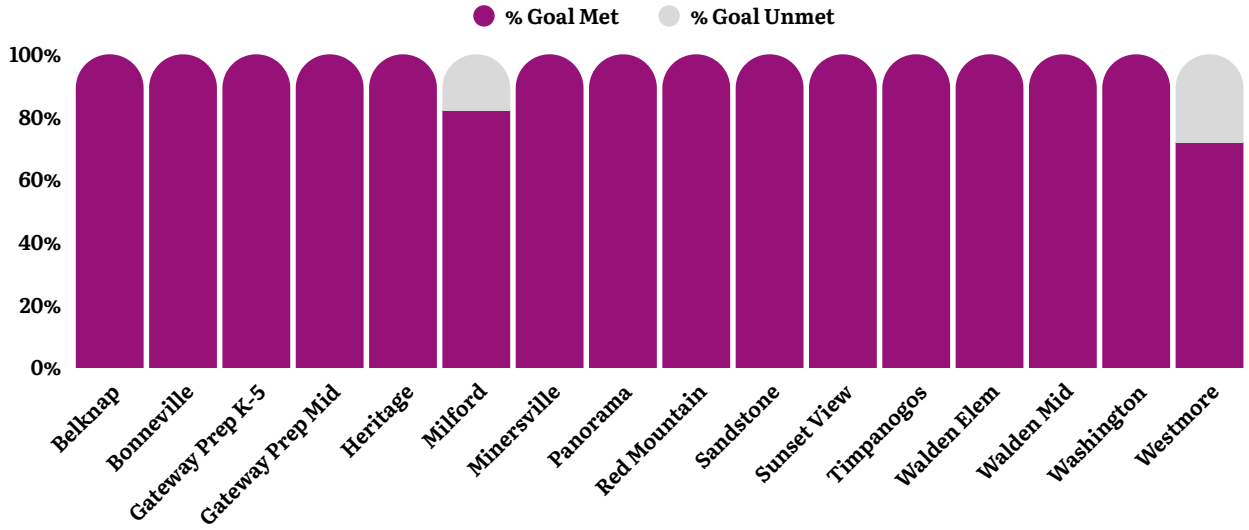
Different evaluation methodologies considered various contexts, content types, and durations. The main evaluation metric was derived from student evaluations conducted by program facilitators. These evaluations included eight categories for assessment, such as

- Engineering Roles/Careers
- Engineering Design Process
- EiE Unit Content Areas
- EiE Group Work (social-emotional skills)
- STEM Subject Academic Performance
- Positive Attitudes Toward STEM Subjects
- Confidence in Approaching STEM Subjects
- General Group Work (social-emotional skills).

Throughout the program, facilitators observed the students and assigned a summative rating of 1-10 for each category. A student was determined to have met the goal if their post-program rating from the facilitator increased by one or more points on the 10-point scale in any of the evaluation categories. For additional information about the evaluation rubrics and rating methodology, please refer to Appendix A.

EiE & STEM Programs

The evaluation data, specifically from the EiE and STEM programs, consists of information from 1,287 students participating in 16 out of 32 different programs. This data serves as evidence supporting the quality of these programs. Notably, 95% of the students demonstrated improvement by meeting the established criteria in one or more areas. On average, 97% of students at each site achieved the goal, with only two sites reporting less than 100% of their students meeting this objective. The graph below illustrates the site-specific results. These findings validate the effectiveness and benefits of the programs, highlighting their positive impact on academic engagement and the enhancement of social-emotional skills.



A closer examination of the specific items on the evaluation rubric provides valuable insights into how students were affected. An analysis of the percentage of students meeting the goals in each category indicated only slight variations in evaluations. All four of the site-specific rubric items showed 95% of students meeting the goal. All but one EiE rubric items had 93% of students meeting the goal. Only the "EiE Unit Content Area" differed with the lowest percentage, with 80% of students meeting the goal.

Students Meeting Goal
by Rubric Type

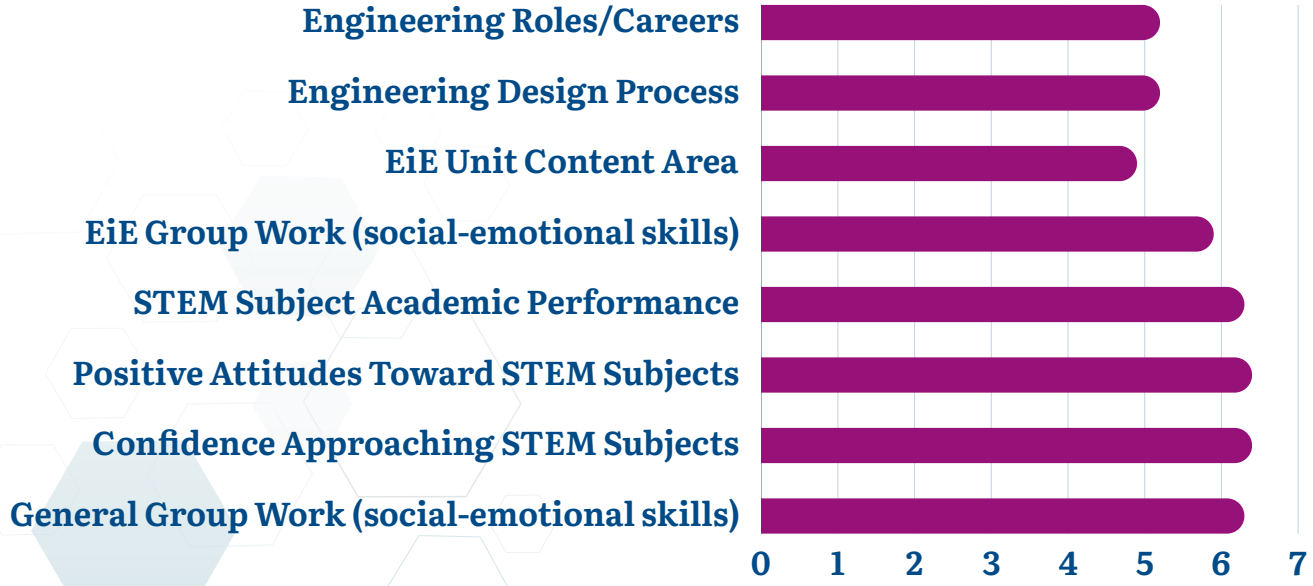
EiE Program Rubric

Engineering Roles/Careers	93%
Engineering Design Process	93%
Unit Content Area	80%
Group Work / Social-emotional Skills	93%

Site Specific Program Rubric

STEM Subject Academic Performance	95%
Positive Attitudes Toward STEM Subjects	95%
Confidence Approaching STEM Subjects	95%
Group Work / Social-emotional Skills	95%

Average Student Rating
by Rubric Item



Summer Programs

JORDAN PREP

SUU PREP

UT TECH PREP

UVU PREP

WSU PREP

B&G CLUBS EIE

Pre-freshman Engineering Programs (PREP)

The Pre-freshman Engineering Programs (PREP) represent specialized educational initiatives that aim to introduce and prepare pre-high school students for the dynamic field of engineering and related disciplines. These programs typically focus on students prior to their entry into the freshman year of high school, with the objective of fostering an interest in STEM subjects.

PREP programs generally incorporate a combination of hands-on activities, workshops, lectures, and collaborative projects, enabling participants to investigate various branches of STEM. Students engage in problem-solving challenges, critical thinking tasks, and teamwork-based projects, thereby gaining a foundational understanding of engineering principles and the engineering design process. Furthermore, PREP programs frequently expose students to contemporary advancements in technology and innovation, promoting creativity and original thought.

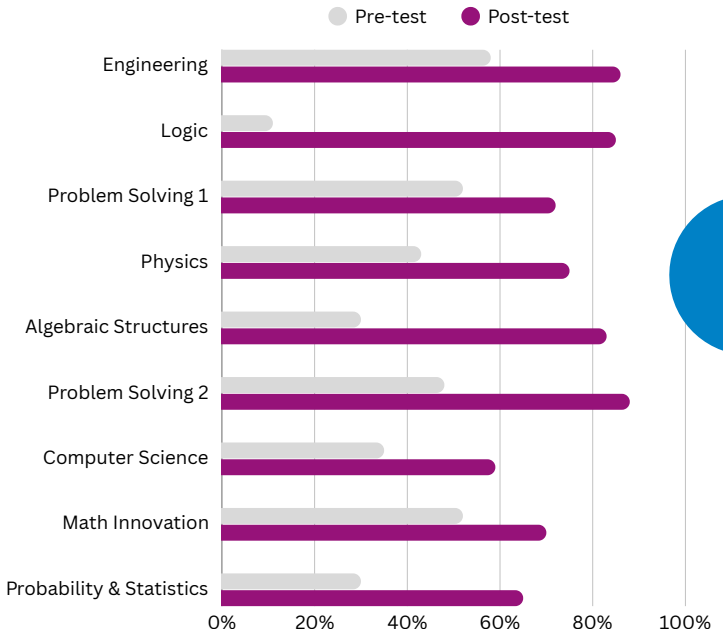
Through participation in these immersive experiences, students cultivate essential skills such as analytical thinking, collaboration, effective communication, and a solid grounding in mathematics and science. Ultimately, the aim of PREP programs is to inspire and equip young learners with the knowledge, enthusiasm, and skills necessary to pursue advanced studies and potential careers in engineering or related STEM fields.

In 2025, AUSI supported five PREP programs, each tailored to serve a distinct demographic of students while adapting its offerings to meet specific needs. Nonetheless, there exists a strong commitment to collaboration among Utah's PREP sites, which continuously strive to enhance student experiences and outcomes. Detailed site-specific information and evaluation results are provided as follows for each AUSI-supported PREP site.

UTAH VALLEY UNIVERSITY PREP

UVU PREP is a free STEM summer program designed for middle and junior high school students, offering three summers filled with intensive academic instruction, hands-on educational activities, demanding homework tasks, career exploration speakers, and field excursions.

This program is available for incoming 7th, 8th, and 9th graders (those transitioning from 6th, 7th, and 8th grades) who show an interest and aptitude in the fields of Science, Technology, Engineering, and Mathematics, enabling them to engage in an advanced curriculum in preparation for high school and future education. The UVU PREP initiative aims to create opportunities for underrepresented and first-generation students to explore STEM studies and careers.





UVU PREP
LEARN • EXPLORE • DISCOVER • ACHIEVE

In 2025, UVU PREP impacted a total of 255 students, encompassing both first-year participants and returning students in their second and third years. All nine course pre- and post-test scores from 2025 demonstrated considerable progress from the start to the finish of the six-week program. Individual course growth ranged from 18% to 74%. On average, across all courses, UVU PREP students demonstrated a 36% increase in their academic ability during the summer program.

UTAH VALLEY UNIVERSITY
PREP

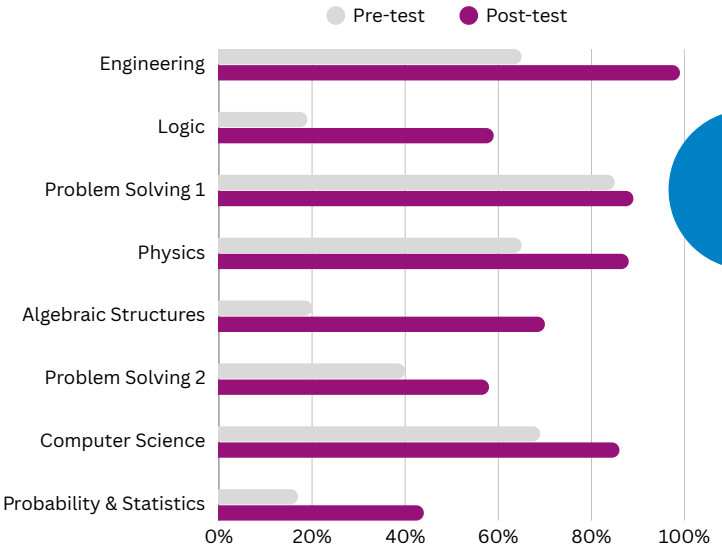
UVU PREP students also participated in the student attitudes towards STEM retrospective survey (see Appendix B). The top five STEM attitude gains in 2025 were:

Survey Prompt	% Increase
I expect to do well in next year's science class.	20%
I am good at science.	19%
When something is hard, it makes me want to work more on it, not less.	19%
I keep trying to improve myself, even when it takes a long time to get there.	18%
Learning science can help me get a good job.	18%

WEBER STATE UNIVERSITY PREP

WSU PREP describes itself as a free 6-week summer camp designed to prepare incoming 7th, 8th, and 9th-grade students in science, technology, engineering, and mathematics (STEM) by offering an accelerated curriculum preparing them for high school and college.

WSU PREP provided services for 151 students during the 2025 summer. Of these students, 40% were in their first year, 37% in their second year, and 23% in their third year. WSU increased academic achievement and engagement across all levels of experience, not only in students new to the program. This growth was demonstrated by academic gains from pre-test to post-test administrations. Across all nine courses, students had gains ranging from 4% to 50%. On average, students elevated their performance 27%.





WSU PREP
Learn + Explore + Discover + Achieve

WSU PREP concentrated specifically on fostering student STEM identity, promoting a growth mindset, and expanding opportunities for future educational and career paths.

WSU PREP defined STEM identity as "the way students perceive their capabilities, how they view themselves, and who they aspire to become in the fields of science, technology, engineering, and math." The idea of a Growth Mindset comes from Carol Dweck's research. People with a Growth Mindset are generally convinced that their abilities, skills, and intelligence can be developed through effort.

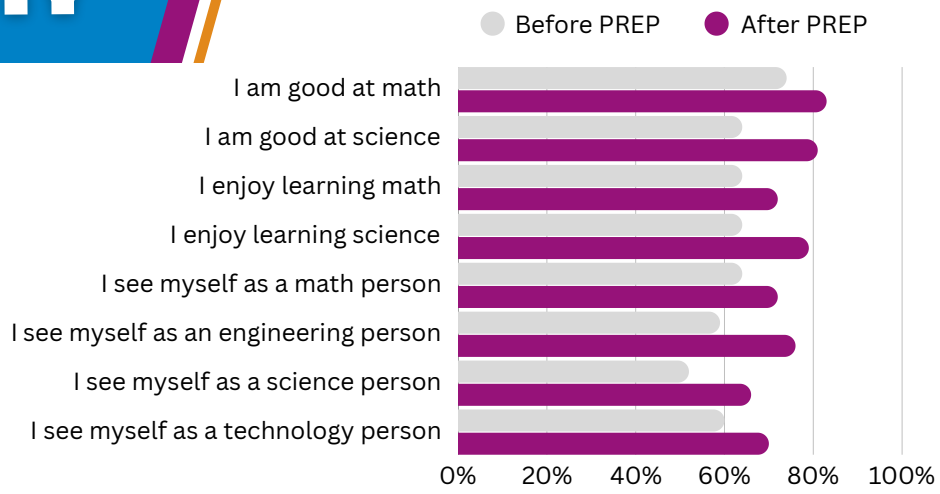
WEBER STATE UNIVERSITY
PREP

WSU PREP students also participated in the student attitudes towards STEM retrospective survey (see Appendix B). The top five STEM attitude gains in 2025 were:

STEM IDENTITY

12%

Ave. Growth



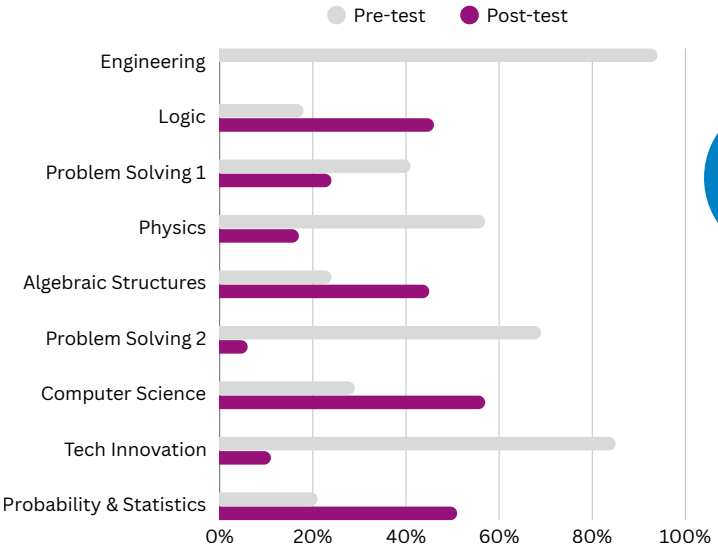
GROWTH MINDSET

Survey Prompt	% Increase
I like activities that challenge my thinking ability	12%
I like work that I can learn from even if I make a lot of mistakes	13%

UTAH TECH UNIVERSITY
PREP

The Utah Tech University (UT) Precollege Program (PREP) is a free six-week summer program designed for high-achieving students in 6th, 7th, and 8th grades with an interest in science, technology, engineering, and mathematics (STEM). The program particularly encourages applications from underrepresented females and first-generation students.

UT PREP aims to inspire and equip high-achieving students for academic success and future careers in STEM fields. Over three summers, UT PREP offers challenging academic instruction. Participants enhance their problem-solving abilities and form friendships through engaging courses, thrilling field trips, and informative career presentations.





A total of 135 students took part in the extensive summer program in 2025. Throughout this time, students showed improvements in both their academic performance and involvement. Course academic gains ranged from 6% to 57%. The average academic growth across all courses was 32%.

Beyond academic progress, UT PREP also assessed students' attitudes toward STEM using a retrospective survey featuring a series of prompts. The survey results clearly demonstrated an increase in students' positive attitudes towards STEM subjects directly attributable to their participation in UT Tech PREP. Highlights from the STEM attitudes survey are presented on the following page.

UTAH TECH UNIVERSITY PREP

These top six survey prompts showcase the most significant gains in positive attitudes. The growth in responses to several of these prompts underscores the program's effectiveness in helping students cultivate essential practices for maintaining a robust and positive academic engagement.

Top STEM Attitude Gains

Survey Prompt	% Increase
Others see me as a science person	21%
I expect to do well in next year's science class	18%
When something is hard, it makes me want to work more on it, not less	18%
I see myself as an engineering person	17%
I am interested in careers that use science-related skills or knowledge	17%
I enjoy thinking about new solutions to problems	16%

% of Students Responding with a 9 or 10

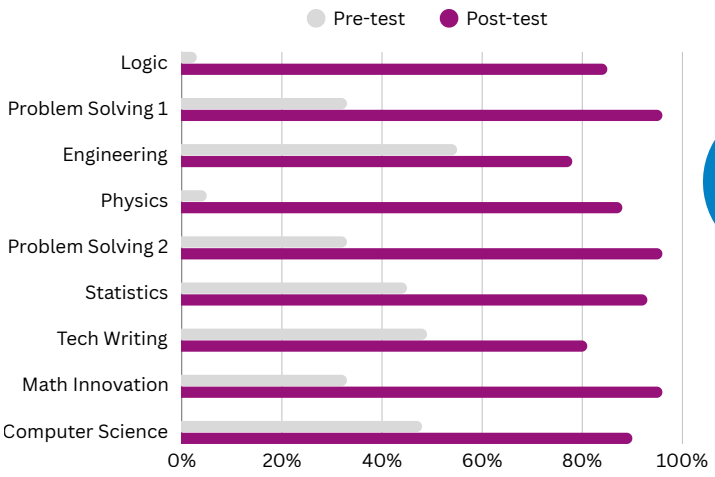
(on a scale of 1-10)

Survey Prompt	% 9 or 10
Learning math can help me get a good job	79%
Learning science can help me get a good job	66%
I expect to do well in next year's math class	63%
I am good at math	60%
I expect to do well in next year's science class	59%

JORDAN PREP

Jordan PREP (Pre freshman Engineering Program) was held at the JATC Jordan Academy for Technology and Careers (JATC) North Campus, located on the Salt Lake Community College (SLCC) Jordan Campus. Jordan PREP is a free, six-week summer program recognized for its academic challenges, aimed at developing students' analytical abilities and inspiring their interest in STEM careers.

Throughout four summers, students engage in various subjects such as engineering, problem-solving, logic, physics, algebra, computer science, statistics, technical writing, and business. The program also includes motivational career speakers and Friday STEM field trips designed to inspire students. In their fourth year, participants complete a capstone project of their choice, which they design and execute. For juniors and seniors, the PREP program provides the opportunity to pursue college-level courses at SLCC, emphasizing the attainment of a one-year degree in Engineering Technology that leads into a four-year bachelor's program.





JORDAN PREP

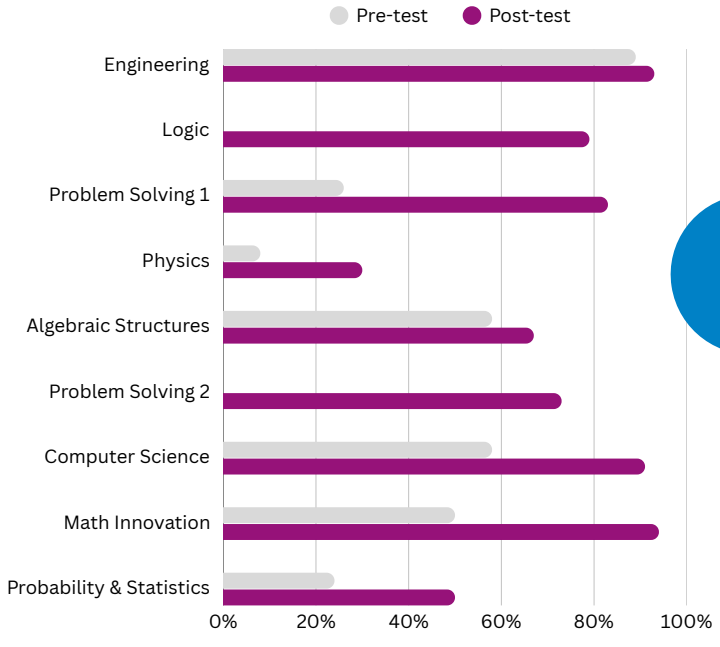
In 2025, Jordan PREP served 158 students. Approximately 60% of students participating in the program came from economically disadvantaged homes. Completing the six-week program requires extended academic engagement and persistence. On average, students participating in Jordan PREP increased their academic performance in all nine courses. Students achieved an average score increase of 54% between pre-test and post-test administrations.

SOUTHERN UTAH UNIVERSITY
PREP

Southern Utah University (SUU) PREP is a no-cost summer academic initiative that offers three summers of intensive academic training, practical educational projects, demanding homework tasks, and daily career exploration for students in 7th, 8th, and 9th grades.

The program is designed for students with an interest in Science, Technology, Engineering, and Mathematics (STEM). SUU PREP aims to create chances for high-achieving students to pursue studies and careers in STEM fields. Additionally, students from underrepresented backgrounds and those who are first-generation college students are strongly encouraged to apply.

The goal of SUU PREP is to strengthen and inspire a diverse group of middle-school students to develop their academic skills and fascination with science, technology, engineering, and mathematics (STEM), helping them to tackle the challenges associated with earning a STEM degree.







In 2025, SUU PREP served 22 students across three cohorts (Years 1, 2, and 3). Completing the six-week program requires extended academic engagement and persistence. On average, students participating in SUU PREP increased their academic performance by 38% between pre-test and post-test administrations.

Significant growth was observed across the curriculum, with the highest gains in Problem Solving 1 (+57%) and Problem Solving 2 (+73%). These findings demonstrate the program's effectiveness in building foundational STEM skills for middle school students.

Appendix A

2024 EVALUATION RUBRICS

Each year, a third-party evaluator conducts a program evaluation for the AUSI program. This evaluation seeks to gather and report evidence of the effectiveness of programs sponsored by AUSI.

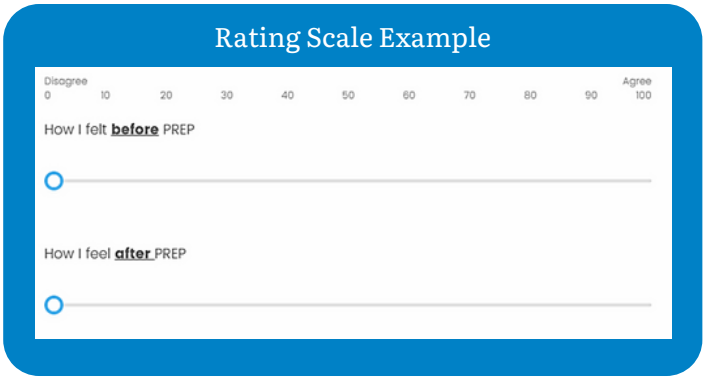
In addition, this evaluation report is used to help AUSI maintain and secure new funding resources and help program administrators improve programming. The rubrics in this document are designed to help gather data that will be used in this evaluation.

Engineering is Elementary & Engineering is Everywhere												
Rate each student on a scale from 1-10 on your observed increase in their awareness, understanding, or engagement in the following areas.	No Increase					Moderate Increase					Significant Increase	Not Applicable
Rating	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**NA**
Engineering Roles/Careers												
Engineering Design Process												
EiE Unit Content Area												
Group work (Social-emotional skills)												

Site Developed or Selected Programming												
Rate each student on a scale from 1-10 on your observed increase in their awareness, understanding, or engagement in the following areas.	No Increase					Moderate Increase					Significant Increase	Not Applicable
Rating	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**NA**
STEM Subject Academic Performance												
Positive Attitudes Toward STEM Subjects												
Confidence Approaching STEM Subjects												
Group work (Social-emotional skills)												

Appendix B

STUDENT ATTITUDES TOWARD STEM SURVEY INSTRUMENT



Survey Questions

S1: I am good at science
S2: Learning science can help me get a good job
S3: I will study science in college
S4: I enjoy learning science
S5: I like doing science-related activities
S6: I see myself as a science person
S7: Others see me as a science person
S8: I expect to do well in next year's science class
M1: I am good at math
M2: Learning math can help me get a good job
M3: I will study math in college
M4: I enjoy learning math
M5: I like working with numbers
M6: I see myself as a math person
M7: Others see me as a math person
M8: I expect to do well in next year's math class
TE1: I see myself as an engineering person
TE2: Others see me as an engineering person
TE3: I see myself as a technology person
TE4: Others see me as a technology person

GM1: I like activities that challenge my thinking abilities
GM2: I like work that I learn from even if I make a lot of mistakes
GM3: When something is hard, it makes me want to work more on it, not less
GM4: I keep trying to improve myself, even when it takes a long time to get there
GM5: I enjoy thinking about new solutions to problems
C1: I am interested in careers that use science-related skills or knowledge
C2: I am interested in careers that use math-related skills or knowledge
C3: I am interested in careers that use technology-related skills or knowledge
C4: What job would you like to have when you grow up?_____
C5: Why would you like to have this job?
_____

Appendix C

AUSI Pre-Post Survey

Survey Directions

Thank you very much for taking this survey today! Your opinion is important to us and we appreciate your time.

This survey is designed to find out about you, your feelings, your opinions and your experiences. Your answers will help make the Boys & Girls Clubs more interesting and enjoyable for you and others like you, so please answer honestly.

Your answers will be used to better understand Boys & Girls Club members and to improve program quality.

Instructions:

1. This is not a test. There are no right or wrong answers.
2. If you don't find the answer that fits exactly, use the answer that comes closest.
3. If you need help with a question, ask the staff member helping you.
4. Your participation is voluntary and will not affect your membership in the Club.

Remember, there are no right or wrong answers - only your opinion and your experiences.
Thanks again for your time!

Survey Questions

1. I enjoy learning about STEM.
2. It is important for people to understand STEM.
3. STEM club is fun.
4. I would like to learn more about STEM.
5. I learn interesting things in STEM club.
6. STEM club helps me to understand today's world.
7. STEM helps make people's lives better.
8. I learn about important things in STEM club.
9. STEM is useful in solving the problems of everyday life.
10. I try to do my best in STEM club.
11. I would like to work in STEM when I grow up.
12. I am good at STEM because...

Response Options



SOUTENIR SERVICES

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