

Kollab Youth

Impact Report Burbank & Greater East Valley



BATTLEBOTS

OCTOBER 22, 2022

Overview

The KOLLAB YOUTH Workforce and Career Development Program was created for high school students ages 14-19. The program aims to help students to discover their unique strengths, interests, and aspirations and to build the skills they need for success in school, career, and beyond. Among other life-changing opportunities, the KOLLAB YOUTH program offers mentorship, field trips, internships, scholarships, and master classes led by industry leaders. KOLLAB YOUTH master class presenters and the KOLLAB YOUTH Advisory Board have curated a dynamic curriculum to support the development of soft, essential, and technical skills that are transferable and lead to lifelong success.

In response to community demand, KOLLAB YOUTH Workforce is expanding its offerings to include an elementary and middle school pilot program. The goal of the middle school program is to facilitate career exploration for underserved youth with a focus on business, STEM, and other emerging 21st century careers that are predicted to be high growth and high wage jobs.

On October 22, 2022, the Burbank and Greater East Valley Boys and Girls Club launched its first offering of the Elementary and Middle School Program with the BattleBots Experience. Centered on creating meaningful engagement for elementary and middle school youth, the program was designed with the following goals in mind:

Goal 1: Provide an Engaging STEM Experience

Goal 2: Increase Exposure to STEM Careers

Goal 3: Connect Personal Strengths to Career

Goal 4: Develop Future-Proof Skills









This report details the progress made towards program goals and impacts of the Experience.

KOLLAB YOUTH drives economic opportunity for the most vulnerable youth—setting them on the path for success in college or trade school, the workplace, and life. The high school program

has proven its value in critical preparation of youth for future jobs and in serving as a catalyst for a successful launch towards their future. Expanding the program to elementary and middle school aged youth allows the program to increase its impact by exponentially increasing the number of Youth served. It also serves as the opportunity to connect Youth with their immense potential and the intentional efforts that will allow them to achieve their dreams.

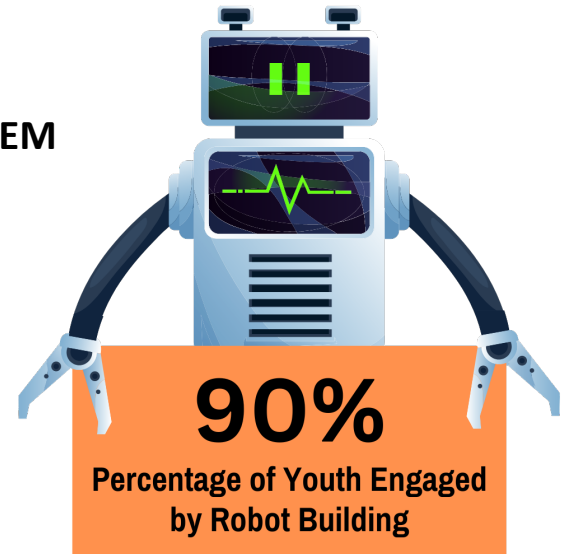
Kollab Youth

Elementary & Middle School Experience

- STEM EXPERIENCE** 
- STRENGTHS & INTERESTS** 
- REFLECTION / METACOGNITION** 
- COLLEGES & TRADE SCHOOLS** 
- SKILL DEVELOPMENT** 
- DIVERSITY, EQUITY, & INCLUSION** 
- PERSONALIZED CAREER EXPLORATION** 
- LEADERSHIP DEVELOPMENT** 

GOAL 1: Provide an Engaging Experience in STEM

According to the Bureau of Labor and Statistics, Science, Technology, Engineering, and Mathematics (STEM) careers earn 82% more than their non-STEM career counterparts. STEM fields have a projected growth rate of 10% - 30% over the next ten years. Given the high demand and high wage opportunities that exist in STEM, it is essential that Youth are given the opportunity to explore career connections in STEM areas.

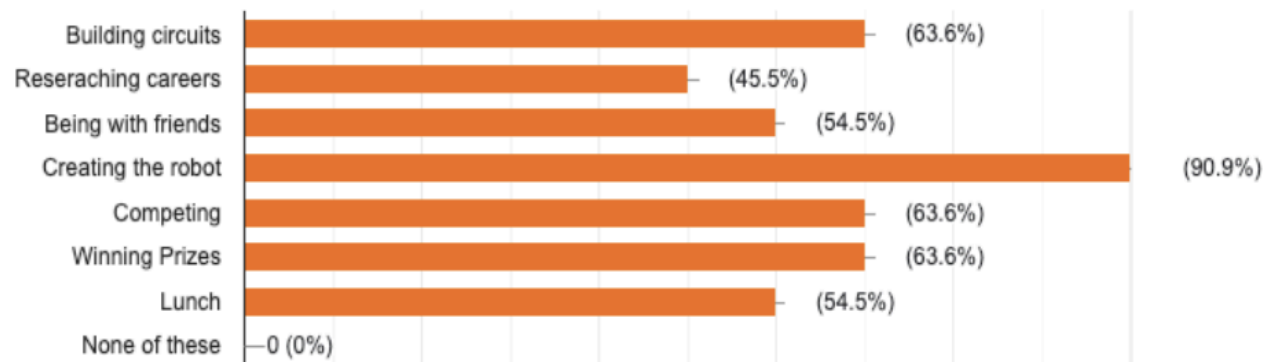


Providing opportunities that allow Youth to utilize their strengths and skills while participating in various STEM activities allows them to make authentic personal connections to potential future pathways. The Elementary and Middle School Pilot Program launched with an engaging STEM experience: BattleBots.

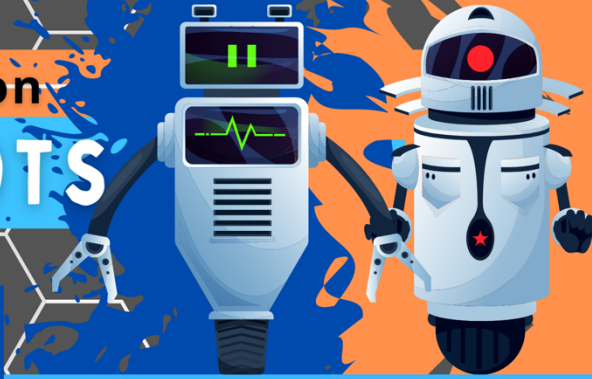
In the experience, Youth created a human circuit to develop understanding of how electricity travels. This direct, shared, common experience laid the foundation for exploring various methods for constructing a robot that could achieve the desired results. Addressing the question: What is a robot? allowed Youth to expand their understanding of robotics across the professional international community. Ultimately, Youth designed and built a robot whose task was to outperform the robots of other collaborating groups.

After establishing their abilities in qualifying round, robots competed in head-to-head competition through a bracketed tournament to uncover the ultimate robot design. At the conclusion of the day, Youth responded to the survey question: What parts of today's experience did you enjoy? An astounding 90.9% responded that they enjoyed building the robot. Of all the days' activities, the least popular was researching careers, and even that caught the interest of nearly 50% of Youth.

What parts of today's experience did you enjoy?



Create a Champion BATTLE BOTS



GRADES 6-8

- Build an electrical robot
- Challenge your friends to a battle
- Discover which robot design survives
- See how robotics can make a fascinating career!

Phones, tablets, chromebooks encouraged

**Burbank & Greater East Valley
Boys & Girls Clubs**

300 E Angeleno Ave, Burbank, CA 91502

Saturday, October 22, 2022

9:00 a.m. - 2:00 p.m.

Includes Breakfast & Lunch

To Register, Email:

schaparro@kollabyouth.org

**Kollab
Youth**

- Creative Design & Innovation
- Robot Building & Tournament
- Prizes - Including Gift Cards!
- Personalized Career Pathways



CAREER EXPLORATION

Science Technology Engineering Math

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Watch This!

Youth worked collaboratively with a partner to create the ultimate BattleBot. Robots needed to meet constraints, survive the qualifying round, and outperform the bots of other teams in an interactive battle. The energy and excitement were palatable.



GOAL 2: Increase Exposure to STEM Careers

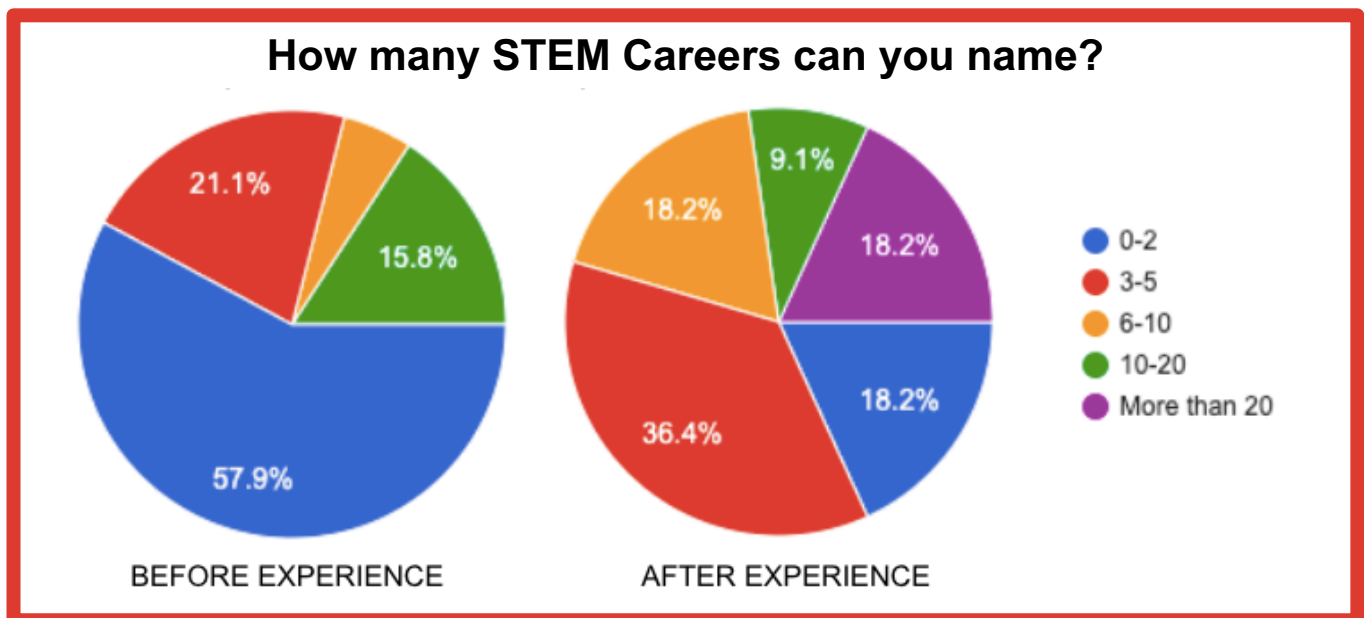
At the conclusion of the STEM activity, Youth decompressed their experience and reflected on the skill areas where they excelled. These unique task skill sets were translated into points of interest for further career exploration.

Prior to the start of the experience, Youth were asked how many STEM careers they could name. After completing the career exploration exercises, the same question was asked of youth.

An analysis of the data revealed:

- ⚙️ Prior to the BattleBots Experience, **57.9%** of Youth could only name 0-2 STEM Careers
- ⚙️ After the BattleBots Experience, **81.8%** of Youth could name 3 or more STEM Careers
- ⚙️ Prior to the BattleBots Experience, **0%** of Youth could name 20+ STEM Careers
- ⚙️ After the BattleBots Experience, **18.2%** of Youth could name 20+ STEM Careers

Increasing exposure of the various careers that exist within different industries helps Youth to apply their interest to future career pathways while building understanding about the strengths and skills that are critical to different types of work.



Youth explored Career Cards that described key tasks of an occupation, desirable strengths, and job growth potential. From there, Youth researched one or more careers that matched with their personal profile. In-depth information was found on large scale posters around the workspace. To meet the needs of diverse learners and learning abilities, collections of on-the-job and day-in-the-life videos sorted by industry sector were provided. Due to time constraints, Youth were asked to focus on one or two Career Cards. Many of the Youth spent a significant amount of time reviewing and reflecting on Career Cards before making a careful choice. One Youth requested a set of Career Cards to take home. Although the cards were meant for reuse in future experiences, the Youth's enthusiasm warranted ownership of a set.

FORENSIC SCIENCE TEACHER



NextGenEd

Bio Science

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JOB GROWTH

LOWEST 10% OF EARNERS \$55,440	AVERAGE INCOME \$81,910	TOP 10% OF EARNERS \$125,310
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You like to collect, identify, classify, and analyze physical evidence related to criminal investigations.

ATTENTION TO DETAIL SELF CONTROL INITIATIVE STRESS TOLERANCE ANALYTICAL THINKING FLEXIBILITY

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ENDOSCOPY TECHNICIAN

Health Care Services

Maintain a sterile field to provide support for physicians and nurses during endoscopy procedures. Prepare and maintain instruments and equipment. May obtain specimens.

ON THE JOB

- Clean, disinfect, or calibrate scopes or other endoscopy instruments.
- Prepare saline or water according to endoscopy procedure requirements.
- Assist physicians or registered nurses in the conduct of endoscopy procedures.

STRENGTHS

KNOWLEDGE	SKILLS	ABILITIES
<ul style="list-style-type: none"> English Language Customer Service Teaching Course Design Public Safety 	<ul style="list-style-type: none"> Problem Solving Technical Reading Critical Thinking Analyzing Solutions 	<ul style="list-style-type: none"> Communication Steady Hands Physical Coordination Concentration

EDUCATION

High School Diploma Certificate After High School	My Next Move (Visit): Surgical Technologist Medical Assessor/Preparer
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JOB GROWTH

LOWEST 10% OF EARNERS \$32,054	AVERAGE INCOME \$46,550	TOP 10% OF EARNERS \$70,840
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NURSE PRACTITIONER

Health Care Services

Manage a full range of acute, chronic, or chronic illness, independently or as part of a healthcare team. May focus on health promotion and disease prevention.

ON THE JOB

- Monitor complex and detailed results of patient health care plans and progress.
- Develop treatment plans, based on scientific rationale, medical theory, and professional practice guidelines.
- Provide patient care, administration needed to promote health.

STRENGTHS

KNOWLEDGE	SKILLS	ABILITIES
<ul style="list-style-type: none"> Medicine Diversity English Language Biology Psychology Customer Service 	<ul style="list-style-type: none"> Listening Asking Questions Technical Reading Problem Solving Making Plans Social Skills 	<ul style="list-style-type: none"> Comprehension Multi-tasking Analytical Thinking Patience Recognition

EDUCATION

High School Diploma Master's Degree Nurse Practitioner	My Next Move (Visit): Registered Nurse Clinical Nurse Specialist
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JOB GROWTH

LOWEST 10% OF EARNERS \$79,470	AVERAGE INCOME \$120,680	TOP 10% OF EARNERS \$163,350
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CERTIFIED NURSING ASSISTANT

Health Care Services

Provide or assist with basic care or support under the direction of nurses licensed nursing staff. May include medication administration and other health-related tasks.

ON THE JOB

- Take or monitor vital signs, patients.
- Answer patient call signs, report signs, tests, or laboratory results to supervising patients' needs.
- Feed patients or assist patients to eat or drink.

STRENGTHS

KNOWLEDGE	SKILLS	ABILITIES
<ul style="list-style-type: none"> Customer Service Management English Language Therapy Coaching Public Safety 	<ul style="list-style-type: none"> Listening Fast Interacting Asking questions People skills Coordination Helpfulness 	<ul style="list-style-type: none"> Speaking Communication Physical Strength Physical Activity

EDUCATION

High School Diploma Certificate After High School	My Next Move (Visit): Nurse Care Aide Health Care Aide
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JOB GROWTH

LOWEST 10% OF EARNERS \$30,230	AVERAGE INCOME \$37,450	TOP 10% OF EARNERS \$49,040
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MEDICAL & HEALTH SERVICES MANAGER

Health Care Services

Plan, direct, or coordinate medical and health services in hospitals, clinics, managed care organizations, public health agencies, or other organizations.

ON THE JOB

- Develop and maintain record management systems to track and process data.
- Direct, supervise and evaluate work activities of medical, medical, dental, and other personnel.
- Assist director in management of medical or dental organization.

STRENGTHS

KNOWLEDGE	SKILLS	ABILITIES
<ul style="list-style-type: none"> Management Customer Service Team Accountness Compliance English Language 	<ul style="list-style-type: none"> Communication Problem Solving Reading Systems Thinking Analyzing Solutions 	<ul style="list-style-type: none"> Speaking Listening Reasoning Problems Marking, Measuring Learning Details

EDUCATION

Associate's Degree Bachelor's Degree	My Next Move (Visit): Medical Services Supervisor Health Information Specialist
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JOB GROWTH

LOWEST 10% OF EARNERS \$60,700	AVERAGE INCOME \$101,340	TOP 10% OF EARNERS \$205,620
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DENTAL ASSISTANT

Health Care Services

Perform limited dental procedures under the direction of a dentist. May perform administrative duties such as scheduling appointments, maintaining records, billing, and coding.

ON THE JOB

- Prepare patient, use the instruments, set up instrument trays, prepare materials, or make dental during dental procedures.
- Assist dentists in management of dental or dental organization.

STRENGTHS

KNOWLEDGE	SKILLS	ABILITIES
<ul style="list-style-type: none"> Customer Service Management Medicine/Dentistry Electronics 	<ul style="list-style-type: none"> Listening Active/Passive Observation Problem Solving Talking 	<ul style="list-style-type: none"> Comprehension Fine Motor Skills Steady Hands Light Marking/Measuring

EDUCATION

High School Diploma Certificate After High School	My Next Move (Visit): Dental Hygienist Dental Assistant
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JOB GROWTH

LOWEST 10% OF EARNERS \$16,040	AVERAGE INCOME \$47,140	TOP 10% OF EARNERS \$60,460
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GOAL 3: Connect Personal Strengths to Careers

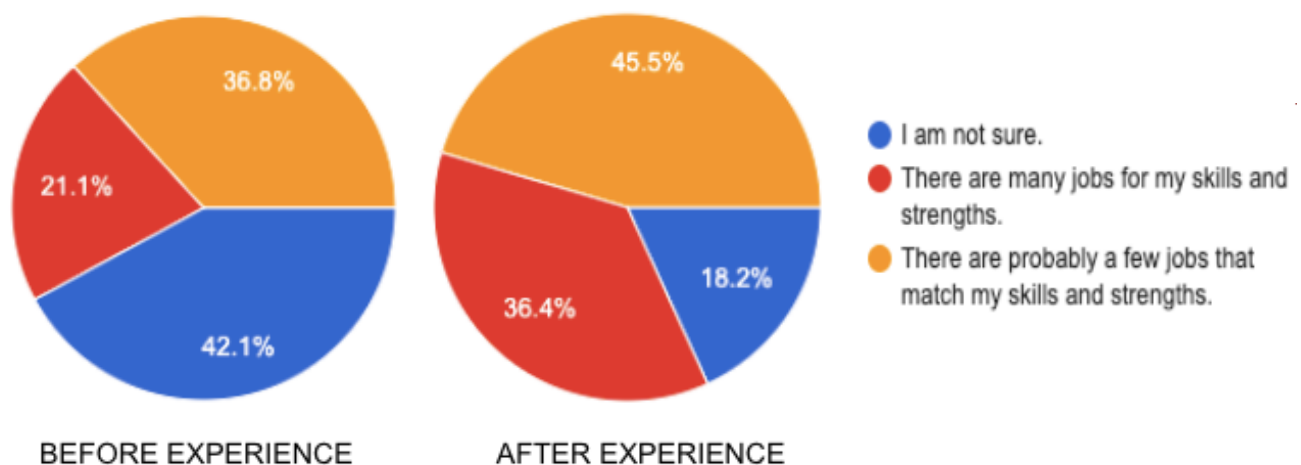
Fostering authentic personal connections to careers begins with allowing Youth to discover their own strengths. As Youth decompressed their day

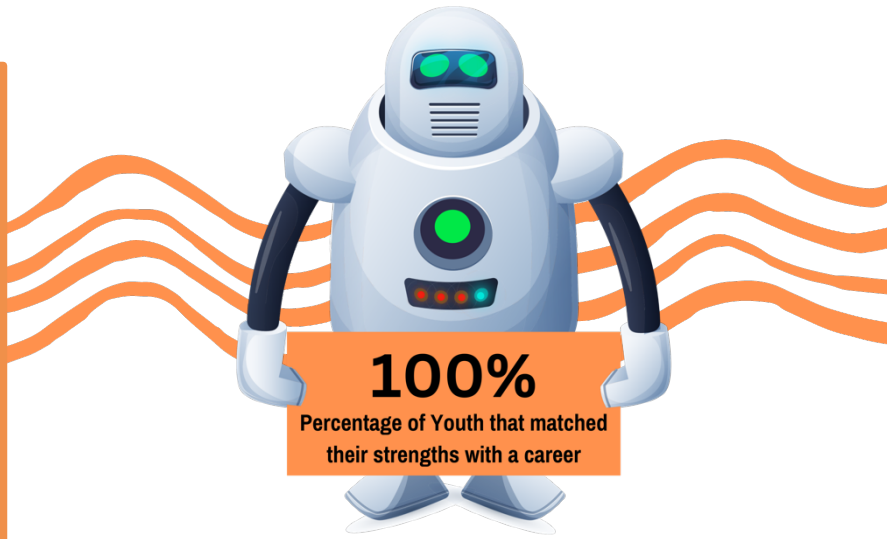
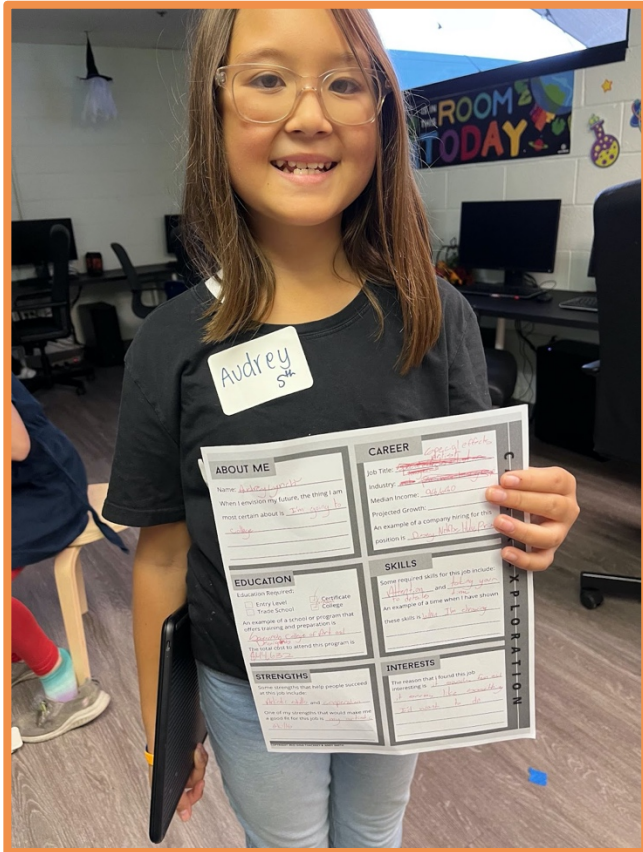
An analysis of the data revealed:

-  Prior to the BattleBots Experience, **42.1%** of Youth indicated they were not sure how their strengths and skills match with a career.
-  After the BattleBots Experience, **81.8%** of Youth indicated they knew of at least a few careers that match with their strengths and skills.
-  Prior to the BattleBots Experience, **21.1%** of Youth indicated they knew of many careers that match with their strengths and skills.
-  After the BattleBots Experience, **36.4%** of Youth indicated they knew of many careers that match with their strengths and skills.

Understanding one’s individual strengths and skill sets establishes the self-awareness required to make authentic connections and informed decisions about future careers. In this experience, Youth participated in an activity that engaged unique strengths, skills, and interests. Youth walked through exercises that helped them translate these strengths and skills into tasks done in various work roles in industries of personal interest. Discovering that the exact thing you are good at is vitally necessary is a powerful element in unlocking a pathway to future work. The more Youth experience these connections, the more viable a sustainable pathway becomes.

How well do your strengths and skills match with a career?





The process in which Youth aspire to career requires a path of self-discovery. Each KOLLAB Youth Elementary and Middle School Experience has been designed to engage students in a STEM experience that highlights their individual strengths and skill sets. Youth led through exercises that help them determine how their strengths, skills, and interests appear in different work scenarios. In this way, Youth make authentic personal connections to career. This provides context and deeper meaning to the research portion of the experience day.

What did Youth take away from this experience?

I will walk away with a new knowledge of engineering. This might not be much, but it is a lot for me because I am looking forward for engineering

I am wondering what other jobs I could do. I could be a different type of engineer.

What else would you like to learn to do? Engineering a car.

Because I love creating with my imagination because it just gives me less stress doing something creative.

Now I want to learn how to make something even bigger than what I made today. Maybe even incorporate other parts or how to make a robot that can tell me when my mom is coming.

GOAL 4: Increase Exposure to STEM Careers

Each step in the activity was designed to reinforce the development of essential soft skills. In today's rapidly evolving workforce, the critical factor leading to long term career success is mastery of 21st Century employability and life skills. The ability for young people to transfer these critical skills regardless of the environment demonstrates the flexibility and agility that is necessary to meet the demands of an ever-changing work landscape.

In the BattleBots activity, Youth built and practiced skills that reinforced their successful outcomes. Youth then analyzed their aptitude for certain skills and researched how they related to specific careers of their interest.



Teamwork

Collaboration



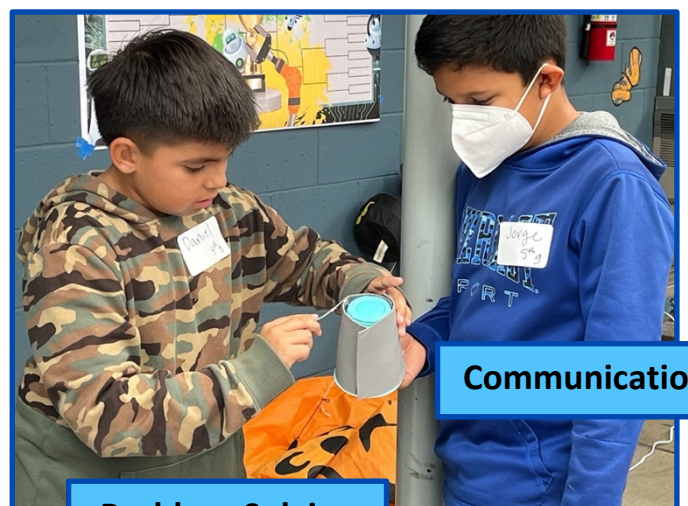
Perseverance

Critical Thinking



**Responsible
Decision-Making**

Creativity



Communication

Problem-Solving



Conclusion

Since its inception, the KOLLAB YOUTH program has achieved many successful outcomes. Youth have been empowered to design their future through mentoring, skill building, and tangible experiences. As the program expands to serve Elementary and Middle School Youth, larger data sample sizes increase the ability to form deep correlative relationships between KOLLAB YOUTH activities, experiences, career exposure, and the inspiration they serve to provide as students define their own path to the future.

For more details about the KOLLAB YOUTH Workforce Development Program or to join the efforts in this amazing work, please contact:

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