



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

Following the success of this initial offering, the Burbank and Greater East Valley Boys and Girls Club initiated the second KOLLAB YOUTH Elementary and Middle School Experience: App Design.

This report details the outcomes of both experiences and illustrates the wealth of benefits to a growing generation of young people. 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.



KollabYouth

Elementary & Middle School Experience

**STEM
EXPERIENCE**



**STRENGTHS
& INTERESTS**



**REFLECTION /
METACOGNITION**



**COLLEGES &
TRADE SCHOOLS**



**SKILL
DEVELOPMENT**



**DIVERSITY, EQUITY,
& INCLUSION**



**PERSONALIZED
CAREER EXPLORATION**

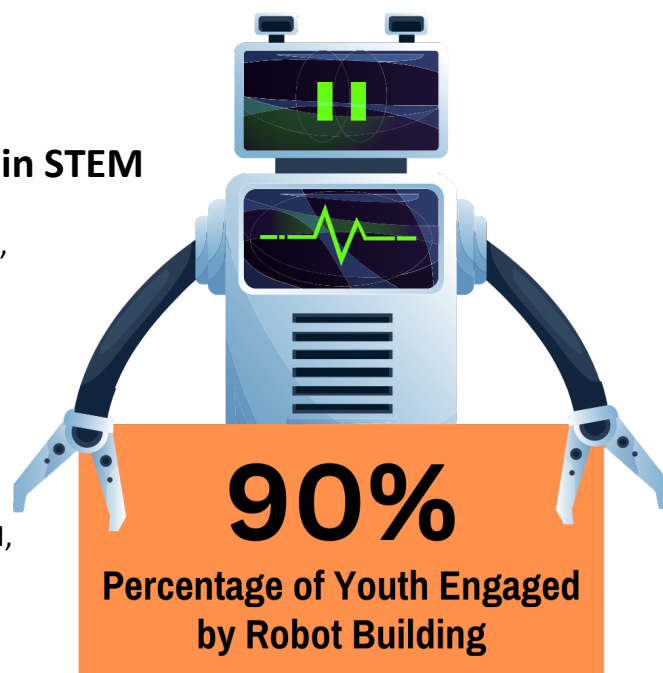


**LEADERSHIP
DEVELOPMENT**



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.

In the App Design Experience, youth play an online game that activates learning and provides background knowledge about existing apps. This shared experience provides foundational and

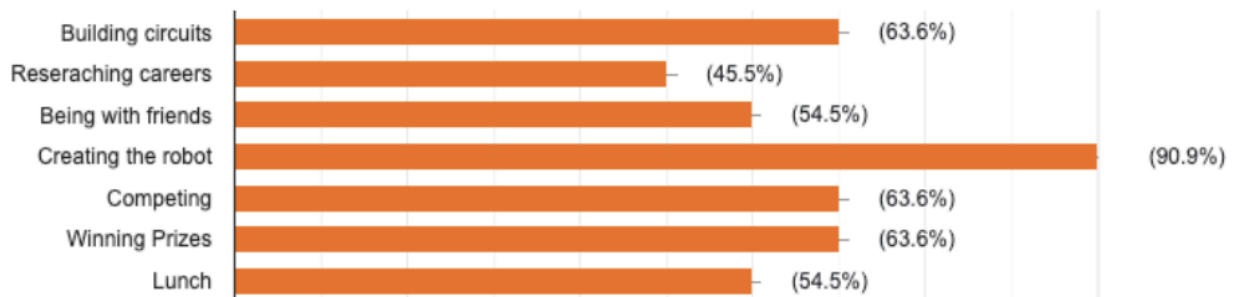
contextual knowledge that youth will use throughout the day. It also fosters the collaboration and team building necessary for co-developing apps.

After a group analysis of what makes favorite apps enjoyable, youth are walked through the design and coding of their very first app. Youth create screen designs with images, text, buttons, and other design elements. Next, they add code to bring their screen designs to life in an interactive working app. This first experience in app design covers the fundamentals required to continue building and developing apps. From here, students are encouraged to develop a second app based on their own unique passions. For those youth that are ready for a higher level of technical complexity, resources and assistance are available.

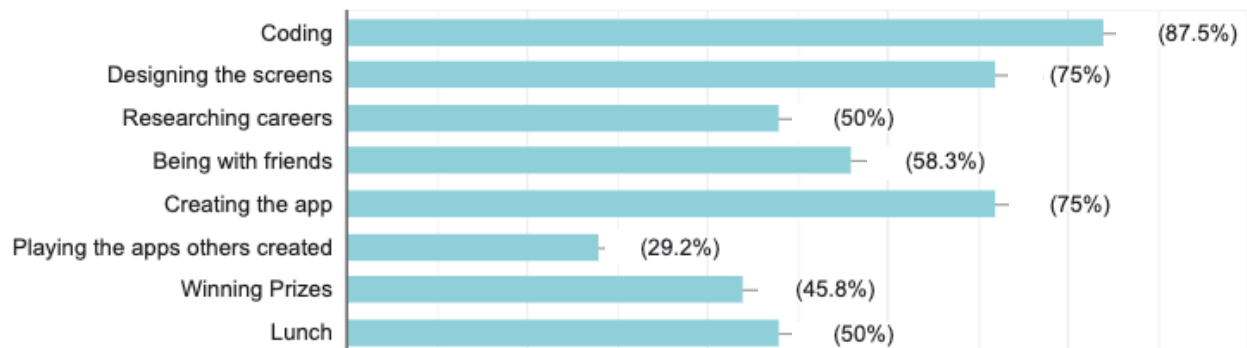
The experience culminates with the publishing and sharing of newly developed apps. Career exploration and reflection on the day's activities highlight the impacts of the day.

What parts of today's experience did you enjoy?

Battlebots



App Design



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.



Imagine & Create APP DESIGN



GRADES 4-8

One-Day App Design Workshop

- Bring innovative ideas to life
- Design & build an interactive app
- Explore careers in Computer Science, Graphic Design and other tech sectors

Phones & tablets encouraged!

Burbank & Greater East Valley Boys & Girls Clubs

300 E Angeleno Ave, Burbank, CA 91502

Saturday, December 3, 2022

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

Includes Breakfast & Lunch

To Register, Email:

schapparro@kollabyouth.org

**Kollab
Youth**



- Innovation & Future-Ready Skills
- App Design & Creation
- Prizes - Including Gift Cards!
- Personalized Career Pathways



CAREER EXPLORATION

Science Technology Engineering Math



Watch This!

Even youth with zero coding experience are able to create real, interactive, published apps in this single day workshop! Why join a KOLLAB YOUTH Elementary and Middle School App Design Experience? Let's ask a participant!



GOAL 2: Increase Exposure to STEM Careers

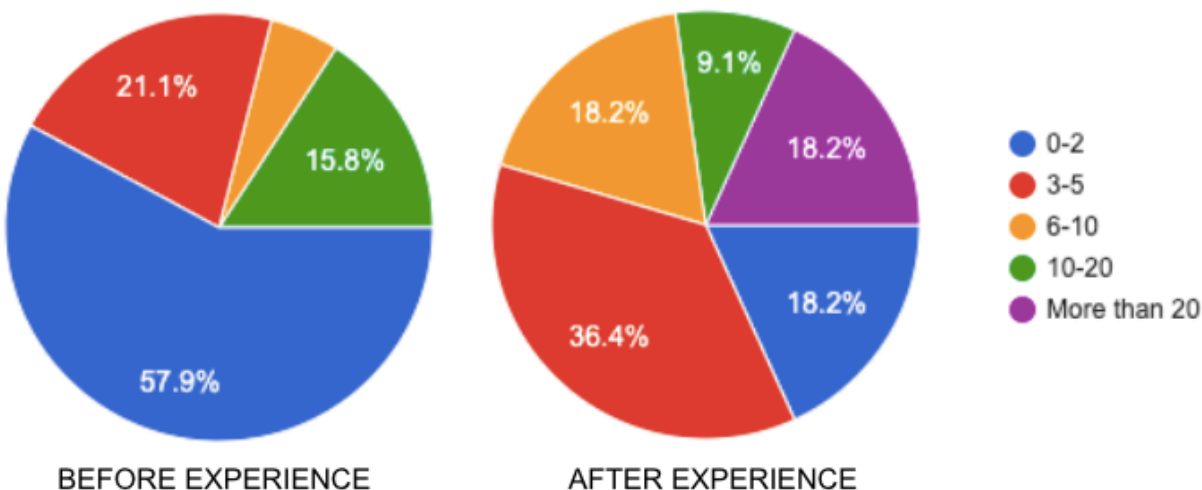
At the conclusion of the STEM activity, Youth decompressed their experience and reflected on the skill areas where they excelled. These unique task skill sets were translated into points of interest for further career exploration.

Prior to the start of the BattleBots 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

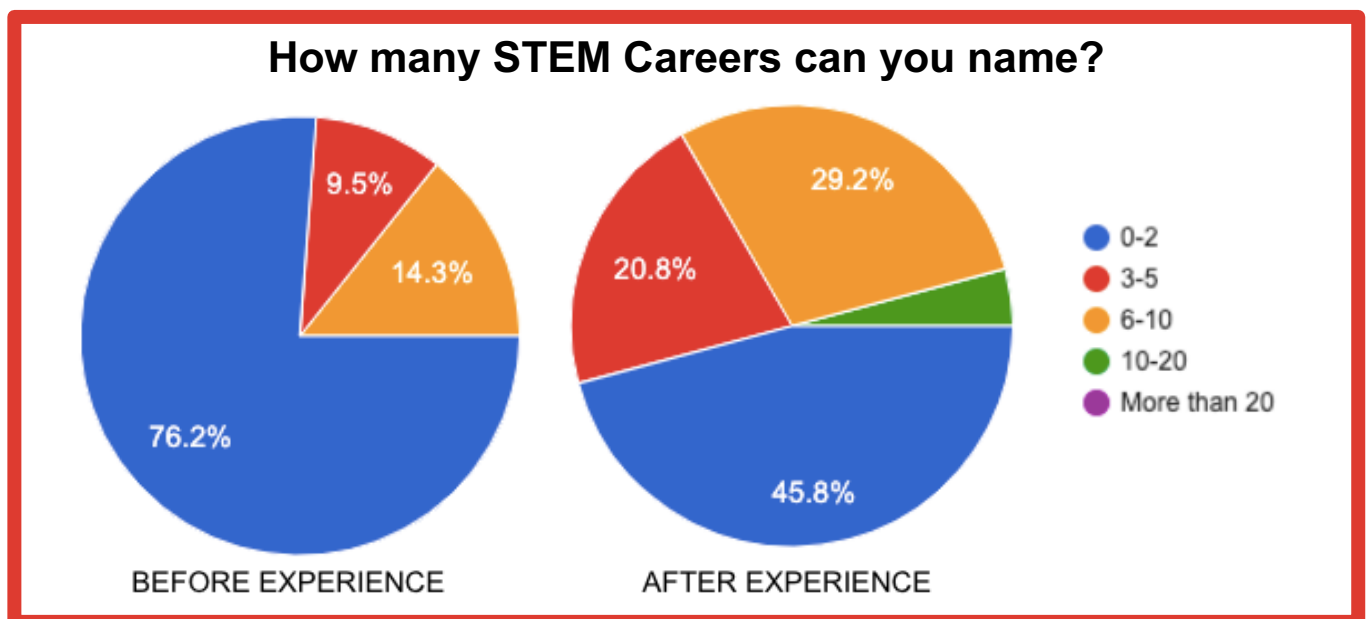
Increasing exposure of the various careers that exist within different industries helps Youth to apply their interest to future career pathways while building understanding about the strengths and skills that are critical to different types of work.

How many STEM Careers can you name?



Prior to the start of the App Design experience, we asked youth the same question: How many STEM careers they could name. At the conclusion of the App Design experience and career exploration exercises, the question was repeated.

- ⚙️ Prior to the App Design Experience, **76.2%** of Youth could name 0-2 STEM Careers
- ⚙️ After the App Design Experience, **54.2%** of Youth could name 3 or more STEM Careers
- ⚙️ Prior to the App Design Experience, **0%** of Youth could name 20+ STEM Careers
- ⚙️ After the App Design Experience, **4.2%** of Youth could name 20+ STEM Careers



The power in this data lies in the personal nature of this discovery. When compiled with the data reflecting the potential for youth's own strengths and skills to match with career options (see Goal 3), we see that the trend is not only for increased exposure to STEM fields, but rather the even more coveted outcome of connecting youth to their own future potential in high-growth, high-demand industries coming to fruition. This unique pairing of STEM exposure and rich personal connection through exposure, skill building, passion, and ability is the single most predictive factor of increased propensity toward career.

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

Bio Science

NextGenEd

Forensic science is the application of scientific principles and techniques to identify and analyze physical evidence related to criminal investigations. Forensic science teachers instruct students on the scientific methods used in forensic science and the legal system. They may also conduct laboratory work and analyze evidence.



JOB GROWTH

LOWEST 10% OF EARNERS: \$55,440

AVERAGE INCOME: \$81,910

TOP 10% OF EARNERS: \$125,310

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**

NextGenEd

Medical and health services managers plan, direct, and coordinate medical and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations. They may also be involved in the development of health care policies and procedures.



HEALTH CARE SERVICES INDUSTRY

NextGenEd

ENDOSCOPY TECHNICIAN

NURSE PRACTITIONER

CERTIFIED NURSING ASSISTANT

MEDICAL & HEALTH SERVICES MANAGER

DENTAL ASSISTANT

Each card provides a detailed overview of the occupation, including job growth, earnings, and strengths. The cards are designed to be used as a reference tool for youth exploring career options in the health care services industry.

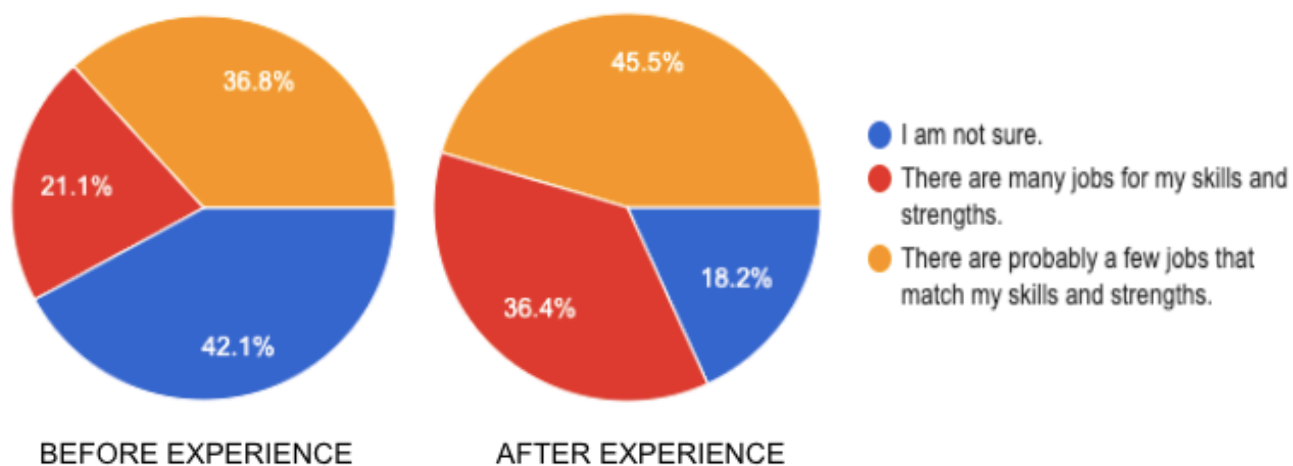
GOAL 3: Connect Personal Strengths to Careers

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.

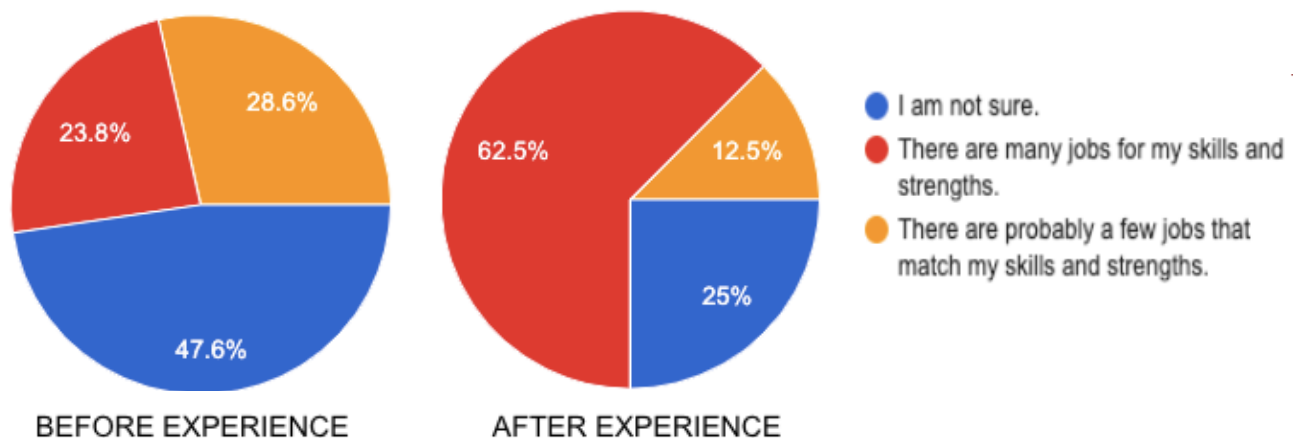
How well do your strengths and skills match with a career?



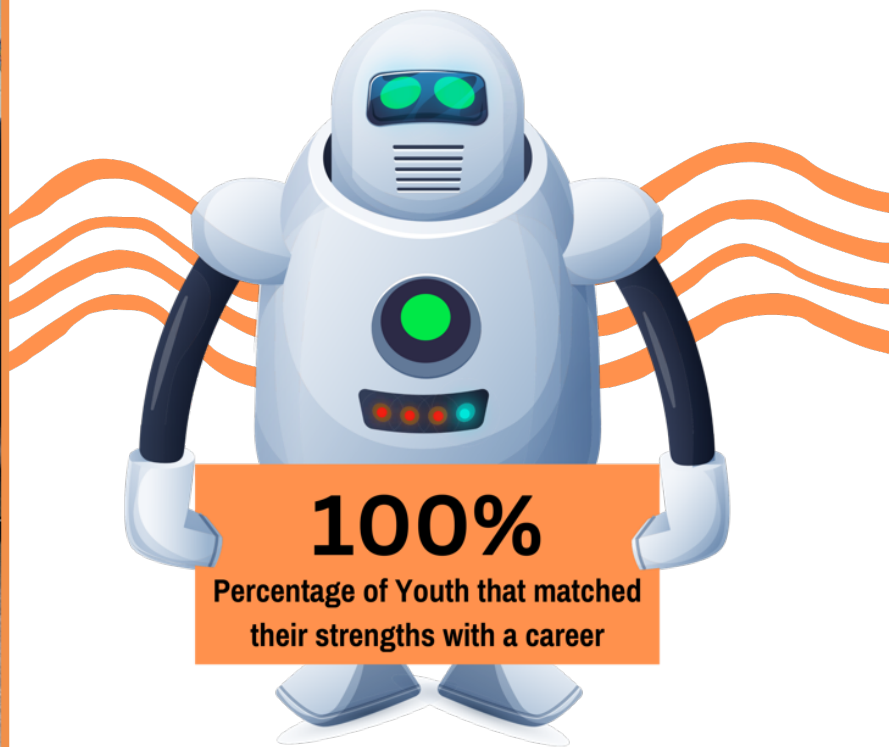
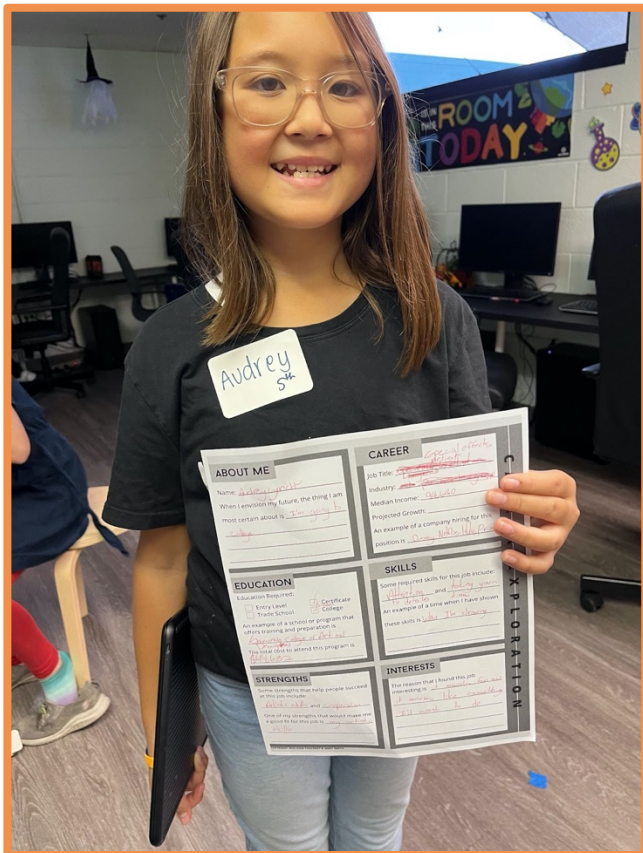
Similarly powerful results were yielded through the post App Design reflection survey.

- ⚙️ Prior to the App Design Experience, **47.6%** of Youth indicated they were not sure how their strengths and skills match with a career.
- ⚙️ After the App Design Experience, **75%** of Youth indicated they knew of at least a few careers that match with their strengths and skills.
- ⚙️ Prior to the App Design Experience, **23.8%** of Youth indicated they knew of many careers that match with their strengths and skills.
- ⚙️ After the App Design Experience, **62.5%** of Youth indicated they knew of many careers that match with their strengths and skills.

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.

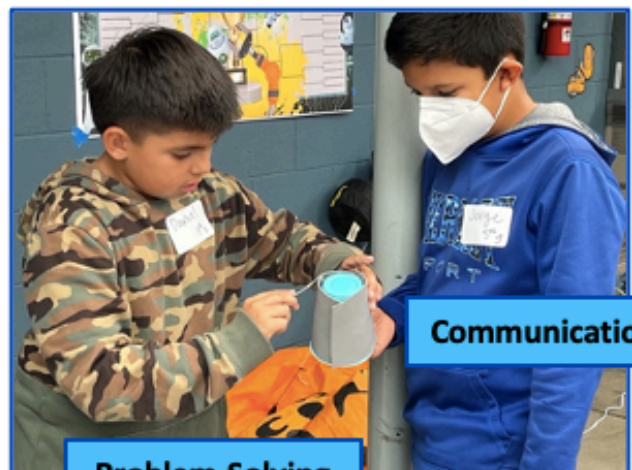
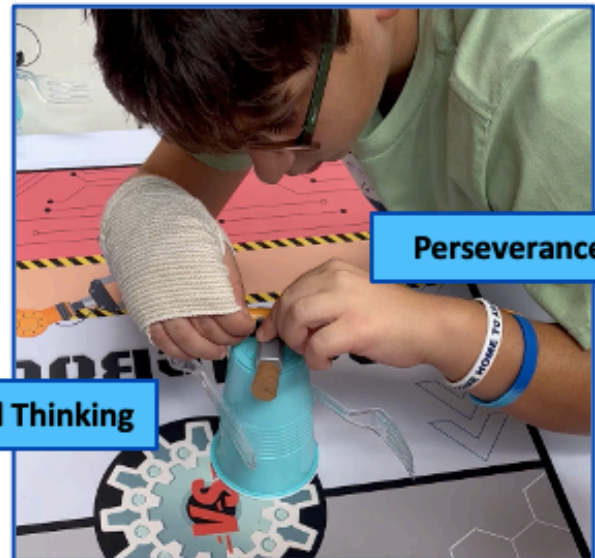
Because I love creating with my imagination because it just gives me less stress doing something creative.

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.

Throughout the BattleBots Activity and the App Design Workshop, Youth built and practiced essential skills. Discovering how critical thinking, perseverance, collaboration, creativity, problem-solving, communication, and responsible decision-making skills support successful outcomes. Youth were guided through post activity reflections to analyze their aptitude for certain skills and research how they related to specific careers of their interest.





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. The expansion of the program to serve Elementary and Middle School youth is proving to be the future of youth workforce development. Exposing youth s to how their personal strengths and interests intersect with career opportunities from an early age sets them on a pathway to success. Supporting that journey with the development of critical skills removes barriers to achieving their goals.

While inspiring younger students to pursue their passion and understand how that passion translates to career opportunities is only one aspect of the successful extension of the KOLLAB YOUTH program. Increasing offerings and exposure to Elementary and Middle School youth provides a natural increase in the number of youth participants in the high school program

subsequently driving an increasingly motivated and driven cohort of youth propelled to success and an organic pipeline for years to come.

As the continues to expand, 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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Kollab Youth

