EVALUATION REPORT 2021

INTRODUCTION

Tech Kids Unlimited (TKU) continues its commitment to evaluate all annual programming in conjunction with Dr. Ariana Ricco, a developmental psychologist and independent evaluator. Dr. Riccio has worked with TKU since 2016 to design data collection measures that capture participant growth in areas important for **technology learning as digital citizens and student social and emotional growth.** TKU **serves a diverse population of students ages 7-21** with **various learning needs and differences such as autism, ADHD, nonverbal learning disabilities, auditory and sensory processing difficulties, and challenges with executive functioning** among others. TKU classes provide a unique opportunity for learning and have a multidimensional impact on participating students' growth.

This evaluation summarizes student outcomes in **technological knowledge and student social gains** for youth (7-13 years) and teen/young adult (YA) (14-21 years). All classes and workshops were held online using Zoom for a second year due to COVID. This report includes evaluations of all of TKU's programs and concludes with narratives and testimonials from students, parents and staff members to provide first-hand accounts of **TKU's impact on students** and the broader TKU community.

Words used by TKU students to describe their experiences.

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SUMMER 2021 WORKSHOPS

Tech Kids Unlimited structures summer learning as 8 weeklong, 5-day instructional workshops each focused on a specific technology theme. To meet the needs of students amidst the COVID pandemic, TKU continued to offer fully online workshops for a second year. Students chose from morning or afternoon workshops, which ran for 2.5 hours a day and youth and teens/young adults were separated based on their age and needs. Workshop themes included Digital Animation, Data & Design, Making Art with Artificial Intelligence, and Podcasting, among other topics.

Data were collected for 51 unique youth and 74 unique teen/young adult participants across 8 weeks of programming for a total of **125 students who engaged with TKU programs in Summer 2021.** Overall, **147 individual youth seats and 217 teen/YA seats were filled in all workshops**. Students completed a survey each Friday to share their experiences while parents and educators were surveyed about student strengths, challenges, successes, and skill improvements at the end of the summer.

YOUTH QUESTIONNAIRE RESULTS

According to student's own reports at the end of each week:
- 78% of youth felt that they improved their computer skills
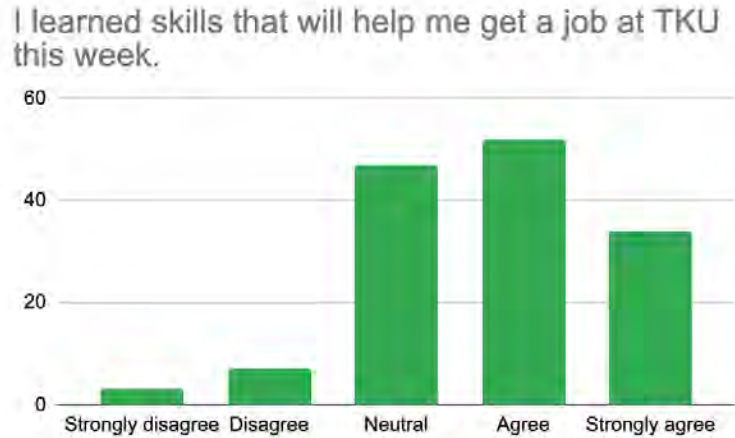

I improved my computer skills this week.

- 50% of youth felt they got better at working with others after a week
- 78% of youth felt they would like to return to TKU in the future
- **82% of youth felt they enjoyed their experience at their TKU online workshop**

TEEN/YOUNG ADULT QUESTIONNAIRE RESULTS

According to student's own reports at the end of each week:

- **73% of teens said they improved their computer skills**
- 60% of teens said they learned job skills

I learned skills that will help me get a job at TKU this week.

- 42% of teens said they made new friends or got closer to old friends
- 55% of teens said they got better at working with others after a week
- 81% of teens said they would like to return to TKU in the future
- 86% of teens said that they enjoyed their experience at their TKU online workshop

PARENT FEEDBACK ON THEIR CHILD'S GROWTH

According to the parent report at the end of the summer:

- **_79% of parents believed their child gained technology skills_**
- 59% of parents believed their child gained social-emotional skills
- 65% of parents believed their child learned problem solving skills
- 70% of parents believed their child gained confidence in themselves

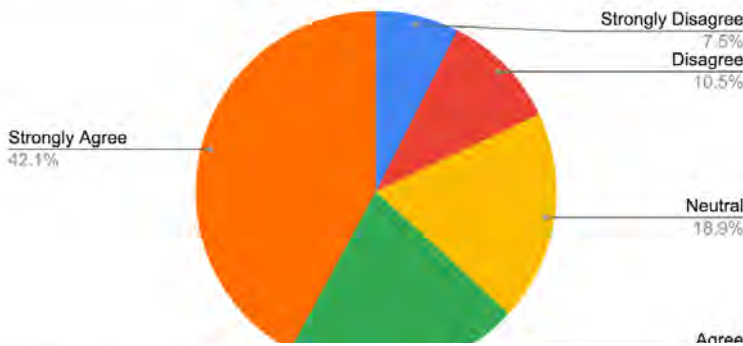## INSTRUCTOR AND COUNSELOR FEEDBACK ON STUDENT GROWTH

According to instructor reports at the end of the summer:

- 89% of instructors believed most of their students improved their computer skills
- 79% of instructors believed most of their students improved their social skills
- **_96% of instructors believed most of their students learned skills to help them get a job_**
- 89% of instructors felt they were able to be effective staff members within an online teaching environment

SUNDAY WORKSHOPS

Tech Kids Unlimited offered 2-hour Sunday workshops, 2-3 times a month, throughout the year. **Workshops were focused on topics like memes, pixel art, photo editing, video editing, animation, and music making** giving students the opportunity to explore and refine their interests and affinities. Data were collected, in the Spring and Fall of 2021, from 228 student participants in the youth and teen/young adult classrooms at the end of 13 out of the 26 Sunday workshops.

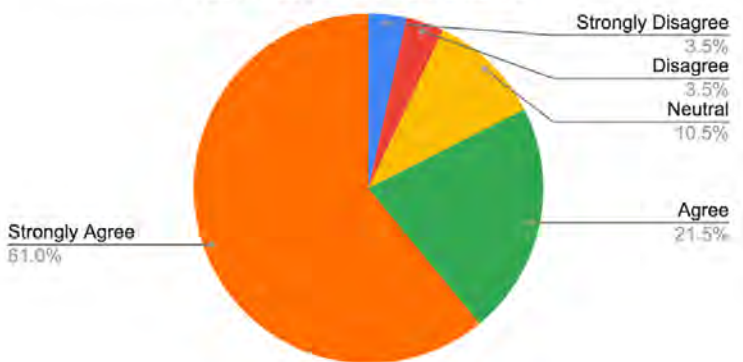Responses to "I got better at working with other people at today's workshop."

- Strongly Disagree 7.5%
- Disagree 10.5%
- Strongly Agree 42.1%
- Neutral 18.9%
- Agree

Responses to "I would like to return to Tech Kids Unlimited in the future."

- Strongly Disagree 3.5%
- Disagree 3.5%
- Neutral 10.5%
- Strongly Agree 61.0%
- Agree 21.5%

- ● ***70% of students believed that they improved their technology skills after a Sunday Workshop***
- ● 55% of students said they felt connected to other students
- ● 63% of students felt they got better at working with others after attending a Sunday Workshop

- ● 67% of students said they gained skills to help them get a job
- ● ***82% of students reported that they would like to return to another Sunday Workshop in the future***

"I think it was amazing and I learned how to animate animals, humans, and clouds. It was super fun!!!!!"- Quote from TKU Student I., Age 9
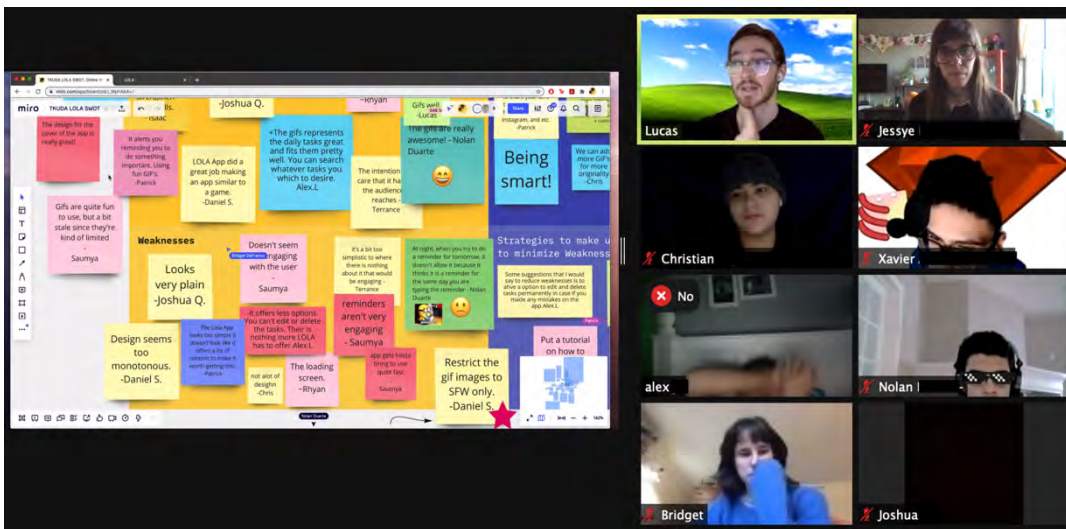
"I think TKU did a great job giving students the opportunity to engage socially in whatever way was comfortable to them (through flexible lessons, through social worker activities, through various communication options). I felt like this created a really rewarding environment, even though we were virtual." – Quote from Master Tech Teacher

TKU DIGITAL AGENCY

SPRING, SUMMER & FALL 2021

The Digital Agency (DA) is an after school program for teens/young adults that mimics a real workplace. A total of 48 spots were offered in the Digital Agency across the Spring, Summer, and Fall 2021 cohorts with nine students repeating their involvement with the agency throughout the year. **The focus of this program was on completing digital projects for real clients and all participants were paid a stipend for their contributions.**
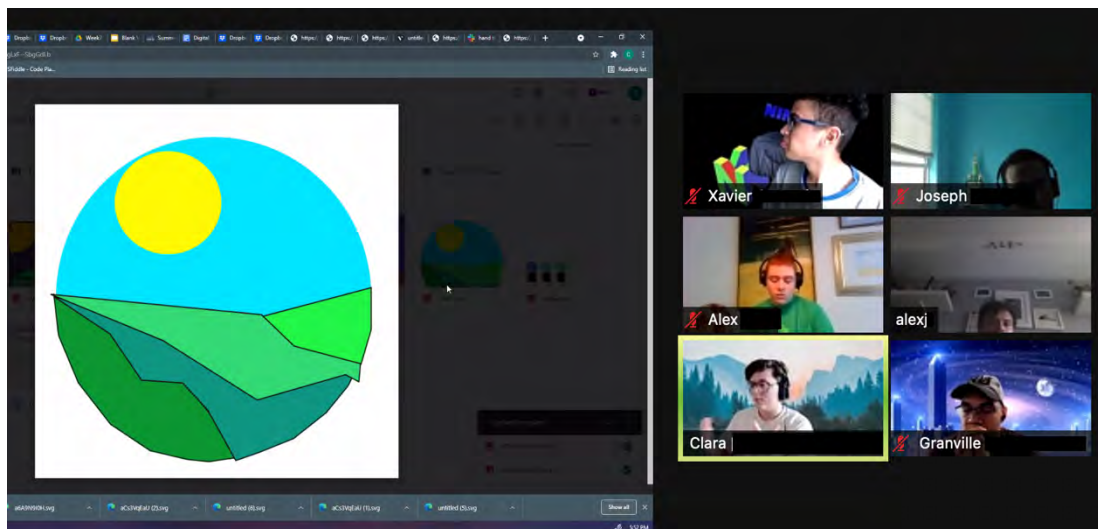
In the Spring 2021 cycle of the TKU Digital Agency from February-May 2021, 15 agency members focused on a SWOT analysis (strengths, weaknesses, opportunities, threats) for TKU's own mobile application, LOLA. Using the online video editor WeVideo, agency members also began the scripting, sequencing, and asset design process to create a promotional video for the Digital Agency to help recruit new clients.

Students use a Miro Board to provide feedback on the LOLA app strengths and weaknesses.

The Digital Agency continued with online instruction in the Summer of 2021, with 13 students and 2 client projects: web ads for Gezoont.com, a service directory for people with disabilities and their families, and the design of a new logo for The Berk Foundation. Agency members improved their proficiency with Pixlr and Vectr to design professional-grade graphics and ad content for each client. **Members learned the foundations of design and the design process including color theory, balance, sizing, and designing for readability.**

"I liked that we got to do some video creation and make the almost final decision for an app that TKU made." - Quote from I., Age 17

Students shared artwork in the beginning stages of logo design.

In Fall 2021, TKU modified the program; increasing weekly sessions from 10 sessions to 12 and adding more client projects. The cohort was divided into 2 groups of 10 students each. Members worked on the logo for The Berk Foundation and a website for The Child Welfare Fund. They were led by two educators and supported by 2 social workers. To emulate a real-world employee review process, agency members completed a midpoint self-evaluation and then reflected on their evaluation with a social worker.

"I liked how we were able to collaborate a lot more than we used to, and I think we definitely got work done in the process." - Quote from T., Age 16
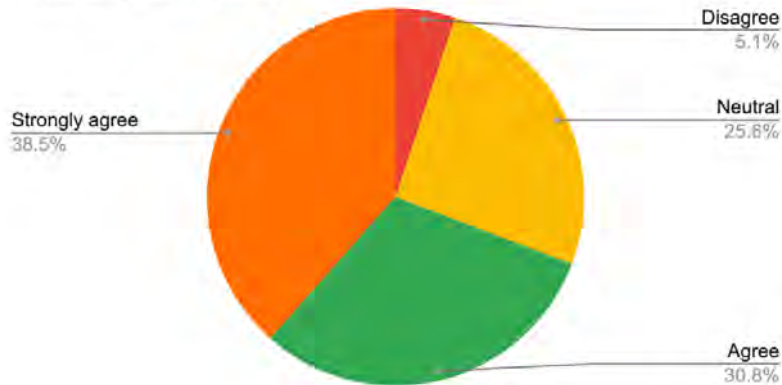

Staff share DA expectations with students along with strategies for independent work and problem- solving.
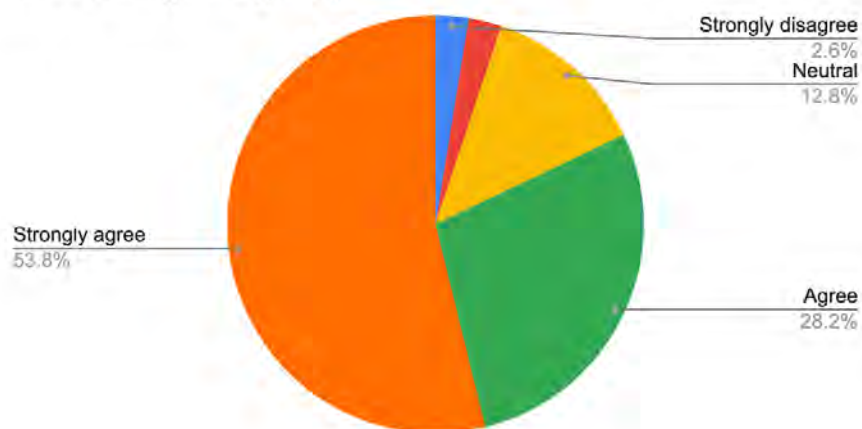
Participating students were surveyed at the end of their cohort in June, September, and December 2021. A total of 39 out of 48 Digital Agency participants completed the online survey.

Responses to "I improved my teamwork skills at the TKU Digital Agency."

Disagree
5.1%

Strongly agree
38.5%

Neutral
25.6%

Agree
30.8%

● Most Digital Agency participants believed they improved their teamwork skills after a semester working with the agency (70%).

● Most participants felt they could see themselves working in the tech industry after their experience working with Digital Agency (66.7%).

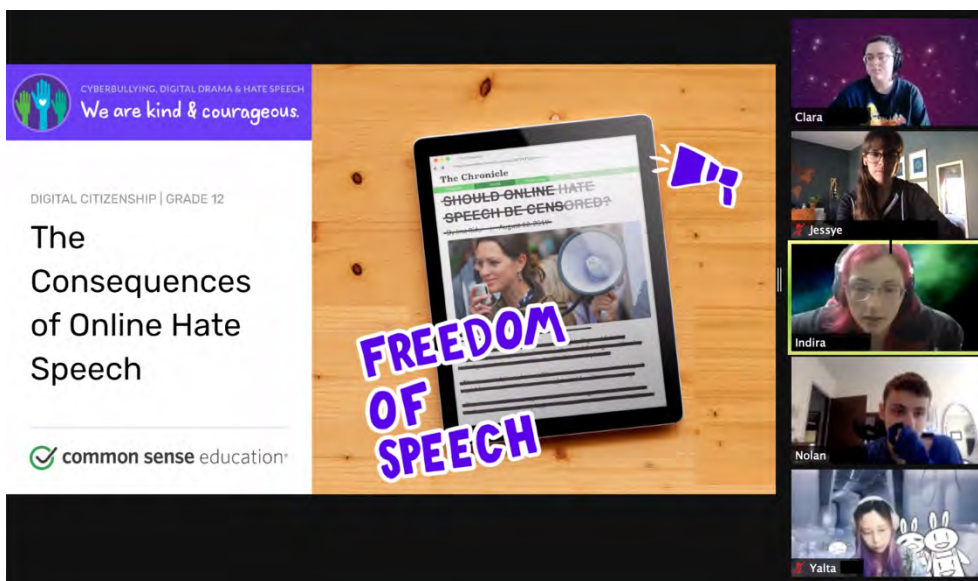Responses to "I feel accomplished after spending time at TKU Digital Agency"

Strongly disagree
2.6%
Neutral
12.8%

Strongly agree
53.8%

Agree
28.2%

● **Digital Agency participants reported feeling accomplished** after spending time with TKU Digital Agency (82%).

2021 INTERNSHIP INITIATIVES

CTI: CREATIVE TECH INTERNSHIP

The Creative Tech Internship (CTI) program (initially launched in 2017) enrolled a cohort of 15 interns this academic year. ***This program is designed to act as a bridge between school experiences and workplace environments. Interns learn soft skills while working in a mock office environment, learning new technology, practicing social-emotional and transitional life skills.*** Students were supported by a social worker who assisted around learning appropriate workplace behaviors, managing interpersonal relationships, and organizing numerous tasks on schedule. Many received high school course credit for attending this full-day Friday program.

Students learned about proper conduct online and in the workplace while completing an online web course as a group.

Projects included updating an existing website for Shop the Spectrum, completing a unit on media literacy to be better informed about deciphering political content, collaborating with IDM Grow (an integrated research program based at the intersection of biology and urban design at NYU Tandon) to consult on NYU graduate student projects to provide feedback on product design and function, and produced posters for the group's promotion. CTI interns also completed lessons in financial literacy to help them prepare for their financial futures and finished a work readiness course to learn how to make resumes, prepare for interviews, and update their LinkedIn profiles. Interns also entered the Games for Change and NPR Student Podcast competitions and had multiple Career Spotlight guest lectures from self-advocates, technologists and others.

In June 2021, the 2020-2021 interns were interviewed via a focus group conducted by the evaluator to assess learning outcomes.

Job skills that CTI interns learned this year

"How has this experience been meaningful to you?":

● "My experience has been interesting. I've enjoyed the social groups and the projects that we have done. For example, **I found it very meaningful when we were creating a podcast. I think that was my biggest achievement here."**

"How did this internship prepare you to get a job?":

● "A project that we just did recently was working with some college students at NYU and we paired up with a partner. **We just helped them create their own project which was very teamwork based. That taught me more about working with a partner than I knew before."**

"What did you learn about yourself as a CTI Intern?":

● "**Over this year, I've learned that I'm good at advocating for myself** and that I like working with people better than working independently in some situations."

"Thank you for having me back at the program this year. I have learned a lot and enjoy meeting and listening to interesting and creative people. I had new experiences, built new skills, and worked on some old ones. I appreciate it." - Quote from M. (Age 21), CTI participant
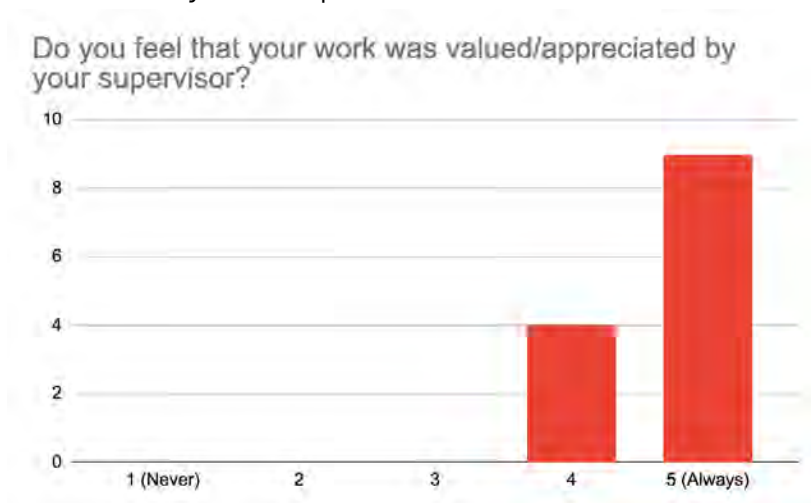
"I feel like the skills we were sharing with the students aligned with most of their interests and were useful for their futures. They enjoyed seeing what they could make." – Quote from TKU Counselor

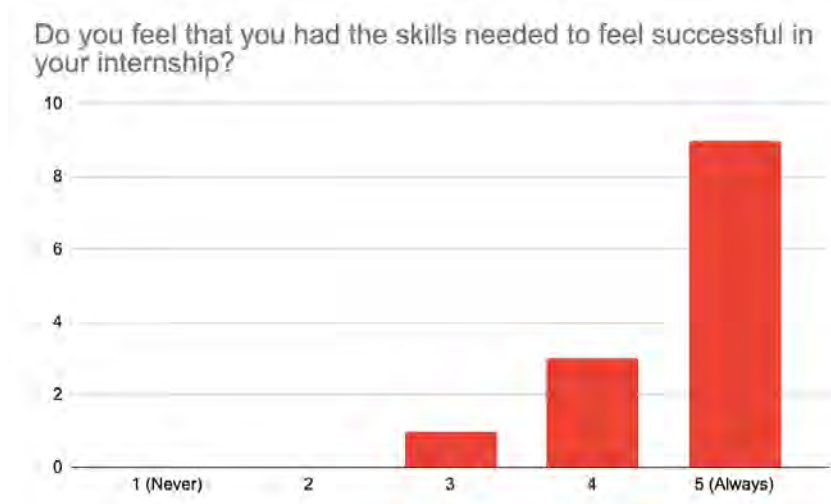## CRISP: CAREER READINESS INTERNSHIP SUMMER PROGRAM

Now in its second year, the Career Readiness Internship Summer Program (CRISP) is a fully immersive internship program for advanced TKU students and alumni who are ready and willing to enter the workforce. Fourteen interns were placed at various external virtual internship sites based on their skills and interests. ***This program included numerous guest speakers and covered topics related to interview skills, resume and cover letter writing, interpersonal skills, professional communication, and time management.*** With dedicated days for group meetings to improve workforce readiness skills, interns had the opportunity to apply these skills at their internship sites in real time.

Interns felt their work was valued by their supervisors:

Interns indicated that the career readiness portion of the CRISP program was beneficial to them:

Do you feel that you had the skills needed to feel successful in your internship?

When asked "How do you feel you have grown over the past 5 weeks?" interns noted:
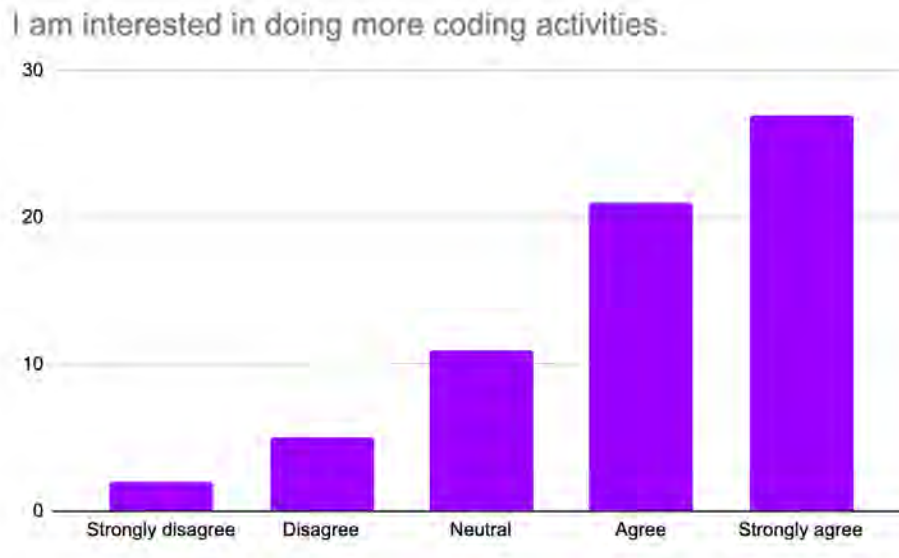- "I feel that I can manage time much better."
- "I have learned more programming skills, as well as some communication. I also learned how to approach a project that is open-ended."
- "I've learned how to be more responsible, how to prepare and how to be engaged in work."
- ***"I've learned a lot about being busy, and how tough life can be at times. But, in the end you have to get stuff done, no excuses. I have learned a lot about skills necessary for the moment and in the future."***

"And I think TKU was valuable, because it gave me sort of basic internship skills and communication skills. And just, you know, helps me with getting the first internship, that's going to help me get a foot in the door in the future" – Quote from TKU CRISP Intern E., Age 20

"This experience has taught me various things like self-advocacy, financial planning, gender equality, the use of gender pronouns, and also other subjects like sexual harassment, how to build a website, how to build portfolio, workplace ethics, etiquette, and how to write professional emails. That's not all of them, but that's the ones I could put into a paragraph. Overall, I have learned and experienced a lot and I'm definitely grateful." – Quote from TKU CRISP Intern L., Age 19

ADDITIONAL 2021 PROGRAMS

"TKU CODES" FEBRUARY HACKATHON

Tech Kids Unlimited continued to provide the community with 2 day-long Hackathon events for youth, tweens, and teen/young adults in February and November 2021. Both programs were held in 2 online sessions in the morning and afternoon. **Educators noted a tremendous amount of engagement among students in the social justice-oriented themes presented during the workshop.** A total of 98 students (34 youth, 33 tweens, and 31 teen/young adults) attended the morning and afternoon sessions in February and an online survey was completed by 66 participants.

Youth at TKU Codes share their code with students and teachers to work on bugs.

Students agreed that they practiced using code in a new way at the Hackathon:

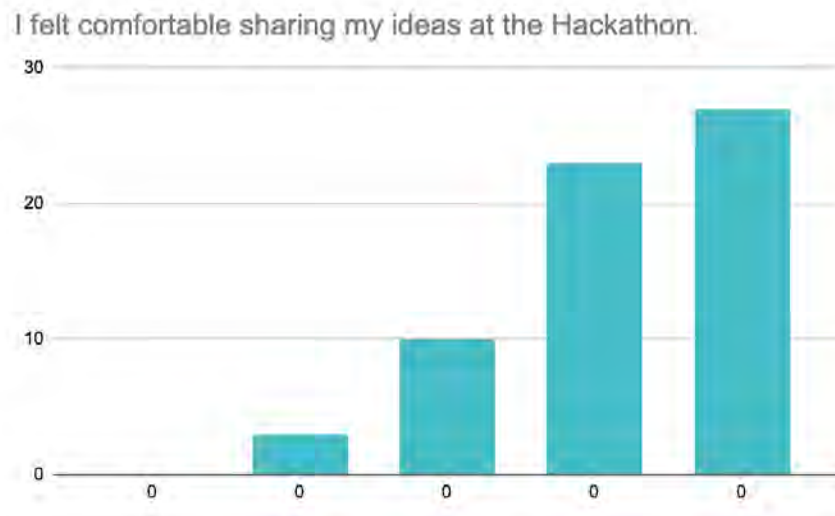*I practiced using code in a new way today.*

When asked whether they agree or disagreed with the statement, "I am interested in doing more coding activities" students also demonstrated an increased interest in coding:

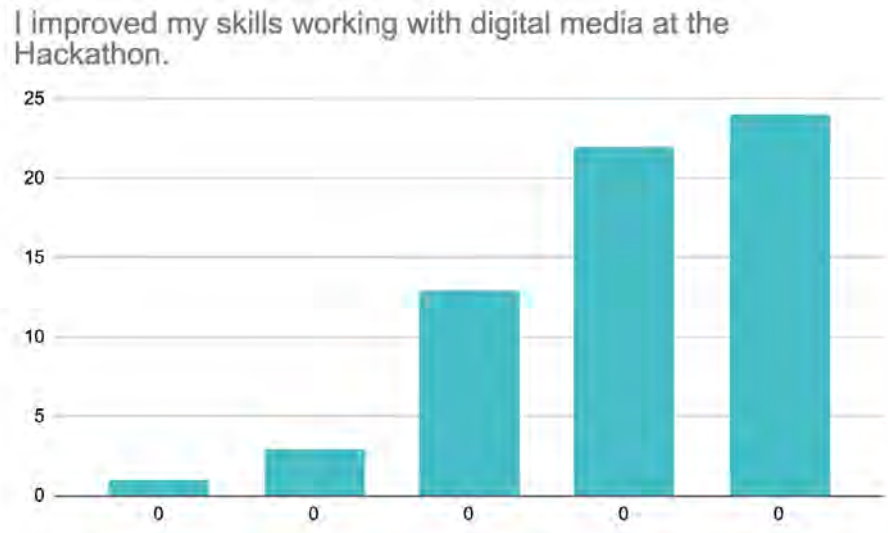I am interested in doing more coding activities.

TKU'S "BE KIND OF THE MIND" NOVEMBER HACKATHON

TKU hosted a second Hackathon event in November 2021 focused on mental health awareness. A total of 86 students (25 youth, 29 tweens, and 32 teen/young adults) attended the morning and afternoon sessions and 63 participants completed an online survey.

Students overwhelmingly agreed that they felt comfortable sharing their ideas:

I felt comfortable sharing my ideas at the Hackathon.

Students agreed that they improved their skills working with digital media:

I improved my skills working with digital media at the Hackathon.

In accordance with the mental health awareness theme, **73% of attendees felt they could spread awareness about the importance of mental health** after attending the Hackathon.

Youth participated in a facilitated brainstorming activity to help them discover new topics for podcasting.

When asked what they learned about mental health participants said:
- **"I learned that your mental health is just as important as your physical health."**
- "Our mental health affects our behavior every day."
- "I learned that it's important to make self-care part of my daily life."
- "It is good to remember to take care of yourself physically and mentally."

"I really enjoyed this week's edition of TKU. I learned a lot of new things about coding. I had always wanted to learn code, but never had the chance to. This was my first time using code from a blank slate, and being able to type it in, as I had been using Scratch before to code with blocks. I am very fortunate to have come here." – Quote from TKU Student K., Age 13
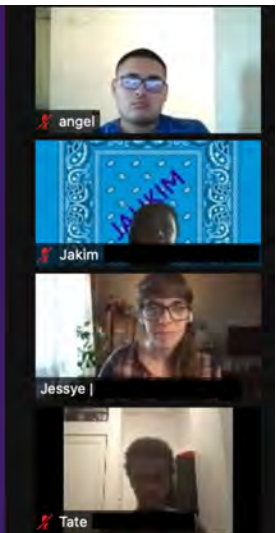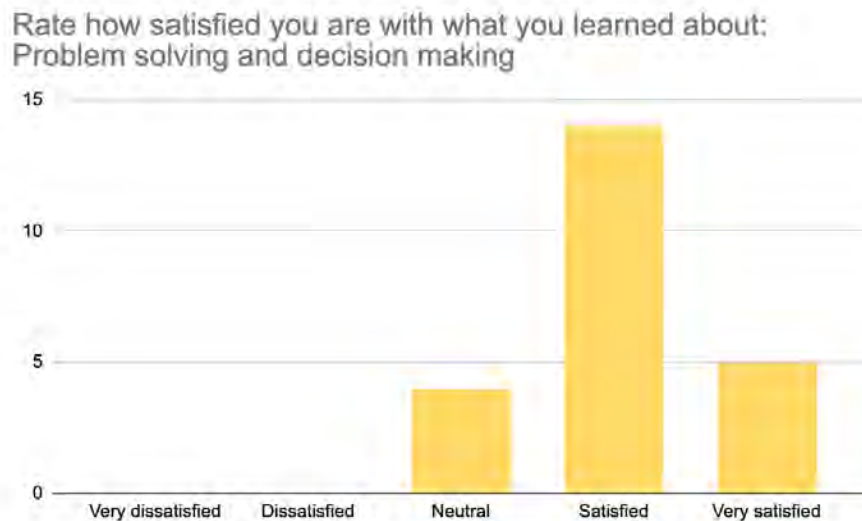
COLLEGE ACCESS PROGRAM

The TKU College Access Program (CAP), now entering its fourth year, provides a supportive environment for students to explore college options and build college readiness skills. In 2021, the CAP program was offered in Spring and Fall cohorts. Both iterations of the 2021 program met online on select Friday afternoons for 6 weeks, 1.5 hours per session. TKU served a total of 34 students (14 in Spring/ 20 in Fall). **The CAP program focused on topics including managing stress, self-advocacy and receiving accommodations, social life at college, choosing a college major, and choosing a college that's right for you.**
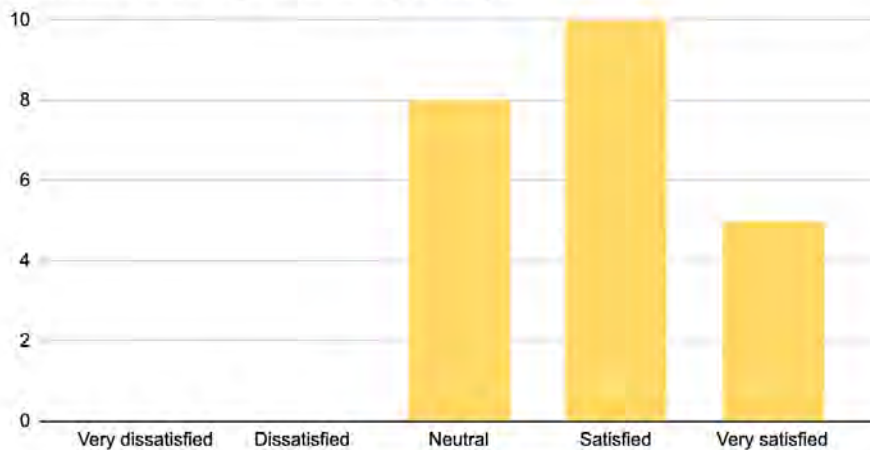

Data presented for 23 CAP participants who completed the post-program survey.
Rate how satisfied you are with what you learned about each topic:

Rate how satisfied you are with what you learned about:
Self-Advocacy: learning how to obtain accommodations

Rate how satisfied you are with what you learned about: How to choose a college that is right for you

"I think TKU is amazing! I love the fact that I get to learn new softwares in animation and gaming, meeting new people and much more." Quote. From - M., Age 19