SNAP THE GAP Mentor Guidelines

Thank you for joining the Snap the Gap team. You are a valuable addition to the Snap the Gap program and your role serves to encourage the young STEM learners by modeling a positive role and mentoring the mentees throughout the program!

Purpose of Program

- This program is made up of about (10) sessions depending on your site. In each session the mentees will be inventing with littleBits and discussing their STEM interests with their mentors. Snap the Gap wants the mentees to walk away with confidence and ideas for what interests you in STEM.
- Snap the Gap has some really fun projects for the mentees coming up. They will receive an introduction to Snap the Gap and littleBits in the Intro Sessions. In upcoming sessions, they will also build electronic robot arms, smart home devices, Rube Goldberg machines, arcade games and more! The program will end with a showcase where Snap the Gap will invite parents and caregivers to come see what the mentees have made.

Purpose of Mentor

- Mentors are an integral component to Snap The Gap's success. Did you know that mentees who have had mentors are 2.5 times more likely to be confident in their ability to succeed in school and careers?
- Snap The Gap mentors are the ultimate champions of STEM and/or STEM professionals themselves. They are curious, inquisitive, and take pride in self-discovery. They embody the growth mindset and are not afraid to dive in and learn along-side their mentees.

Mentoring Requirements

Background Check

All mentors must pass a background check and safety regulations. We ask that the mentor cover the cost of their background check estimated at \$25-\$30 or less. The process for this will be site specific and sent via email confirmation.

Mentor Training

- All mentors should have already signed up to be a mentor on the Snap the Gap page and signed up for a site on the Million Women Mentor - CA site. All mentors have to view the introductory webinar, read over these guidelines and review the other quick start resources we have provided via the SnaptheGap.org under the "Mentor Training" tab. In order to be a successful mentor, we ask that mentors read over these resources carefully. Those resources include:
- Intro to littleBits
- Snap the Gap STEM Kit
- JAM overview
- Snap the Gap Curriculum

Attend an Onboarding Session

Please join one of the following sessions before you begin your program to discuss any questions you may have:

Monday, Aug 26th @5pm PST Wednesday, Sept 4 @5pm PST Wednesday, Sept 18 @5pm PST Wednesday, Oct 2 @5pm PST Wednesday, Oct 16 @5pm PST Wednesday, Oct 30 @5pm PST

**Sessions hyperlinked under Onboarding Sessions on "Mentor Training" tab via the Snap the Gap.org

Kick-Off Event Participation

All mentors must also attend their site's kick off Introduction Session event. At this event, mentors will meet their mentee for the first time. Each date and time vary by site. The mentors will also be facilitating the pre-surveys with their mentees as well.

Weekly Mentoring

- Over the course of the program, mentors will be required to meet weekly with the mentee to complete weekly objectives and to provide face-to-face mentorship. Mentors must complete 10-20 hours of mentoring over the course of 6 12 weeks.
- Please visit the SnaptheGap.org website to familiarize yourself with an outline of the weekly sessions. Link here: <u>https://www.snapthegap.org/weekly-sessions</u>

Note: The mentoring relationship will conclude with your assigned site's showcase session. No additional mentoring or contact with participants outside of assigned sessions will be supported through this program.

Feedback

Additionally, to support program development, mentors will complete a short feedback survey after each mentoring session and provide additional feedback when possible. Suggestions and communication are valued and appreciated!

Session Overview:

Below is a guided overview of the program sessions. The program begins with Introduction Sessions and Guided Invention sessions follow. The last program is referred to as the Showcase Challenge. Please visit the SnaptheGap.org website to familiarize yourself with the outline of the weekly sessions. Additionally, please refer to the outline of each session the day of your program sessions to help you follow along. Link here: <u>https://www.snapthegap.org/weekly-sessions</u>

Introduction Session Breakdown

- The kick off event is the first introductory session of the program. Mentors will meet their mentee for the first time and be able to begin their mentorship process by playing with a littleBits STEM kit. The site coordinator will be responsible for facilitating and coordinating this event and also directing the mentors on what to do next. Here is a guide of what the Kick Off Session will look like but some sites may vary:
- Check In & Pair Off
- Pre-Survey & Get to Know Each Other
- □ Introduce: Snap the Gap & littleBits
- Create, Motion & Modes, & Sensors & Logic
- Reflect & Group Share
- Close
- Log your Session

Check In

This is the area the site coordinators will be checking in mentees and mentors. The site coordinator will pair up the mentee with the mentor.

Pre - Survey & Get to Know Each Other

Before diving into the program, we want to get your mentees honest opinion on how she perceives STEM and STEM careers.

• Follow the script we've written up for this first logistics section in order to ensure that the mentees are not influenced by your overflowing STEM enthusiasm until after the survey. The script can be found on the first session link on the SnaptheGap.org under the "Weekly Sessions" tab.

After the mentees fill out the survey, start getting to know your mentees. Take turns asking each other questions. Example Prompts:

- What do you like to do for fun?
- What is your favorite subject in school? Why?
- What is your favorite book or show? What do you like about it?
- What type of music do you like to listen to?
- What is the last thing you made that you are proud of? (could be a drawing, a story, a game with friends, a secret language, a dessert, a collage, etc..)

Introduce: Snap the Gap & littleBits

During this time, the site coordinator will introduce the program starting off with explaining what Snap the Gap is and also giving the mentors time to watch a littleBits video as well.

- Show the mentees the one-minute "Welcome to littleBits" video on the SnaptheGap.org page under the first Introduction session under Weekly Session tab to provide context and get the mentees excited.
- Finally, the site coordinators will distribute the kits to the mentees and the mentees will have a chance to label them.

Create

Mentors will be instructed to move into the hands-on activity with the provided STEM kits or engage with other STEM related articles and events of your choosing. We hope that the mentors can connect these STEM topics to their mentee's daily life.

- Start building inventions given on <u>SnaptheGap.org</u> under "Weekly Sessions".
- The site coordinator will walk around to make sure the pairs have found the videos or need some help facilitating the mentor and mentee interaction.

Reflect & Group Share

At the end of the session, the program will be concluded program by having mentees showcase their final invention and with questions about what they learned or what was difficult.

• Depending on the size of the group, site coordinators will have mentees discuss with their mentors or with everyone.

Close

To close the sessions, mentees will be instructed to deconstruct their design and put all of their stuff away in their designated labeled box.

- Make sure mentees power off the Power Bit and disconnect the battery.
- Make sure to take pictures of what mentees have made.

Log your Session

And finally, after each session, we ask that mentors fill out the <u>Session Feedback Form</u>. Your feedback is essential to help us improve the program.

• Link Here: https://ucdavis.co1.qualtrics.com/jfe/form/SV_ahqH9DfMshanhrL

Guided Invention Session Breakdown

Below is a guided overview of the Guided Invention sessions. Each session will have a different and specific invention to be built each time but the flow of the session should look the same.

- Check In
- □ Inspire & Introduce
- Create, Play, & Remix
- Reflect & Group Share
- Close
- Log your Session

Check In

This is the area the site coordinators will be checking in mentees and mentors. Then mentors should complete the following:

• Check in with your mentee, also make sure she signed up with JAM.com (DIY.org).

Inspire & Introduce

Aftering checking, mentors will be given inspiration videos or prompts via the SnaptheGap.org/weeklysessions page to inspire the mentees with what they are building that day or in general.

• Finally, the site coordinators will introduce the session and distribute the kits to each of the mentees.

Create, Play, & Remix

Mentors will be instructed to move into the hands-on activity with the provided STEM kits or engage with other STEM related articles and events of your choosing. We hope that the mentors can connect these STEM topics to their mentee's daily life.

- Start building inventions given on <u>SnaptheGap.org</u> under "Weekly Sessions".
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Showcase Challenge Session Breakdown

Overview:

- The final 2-3 sessions of your program will consist of a "Carnival Challenge." The first two sessions focus on creating and remixing unique carnival games with littleBits. In the third session, you will host a Carnival Showcase where mentees, mentors, and parents will take turns playing each other's games.
- In addition, parents and caregivers will be invited to partake in the final Carnival Showcase session.
- Please follow the session guides on the Weekly Sessions tab under "Showcase Challenge." This session guide provides a detailed outline for the "Carnival Challenge" but feel free to improvise or put your own spin to things. If you have an idea for a challenge or prompt that will get mentees excited, go for it! If something is not working well, change course and experiment another path forward. If you do change things up, we would love to hear what has been successful for you!
- The challenge session will look similar to the other sessions but please follow along on the SnaptheGap.org for more details. Here is an outline of what the Challenge Sessions will look like but some sites may vary:
- Check In & Pair Off
- □ Introduce & Inspire
- Create
- Reflect & Group Share
- Close
- Log your Session

Steps in Goal Setting

Have the mentee identify some positive things they would like to accomplish. Help your mentee select one or two realistic goals to work on. You want your mentee to set their sights high but also be assured of some success.

- 1. Brainstorm ways to reach the goal.
- 2. Choose an Idea.
- 3. Explore your Bits and Materials .
- 4. Sketch out Your Idea (save for next session).
- 5. Create first prototype (time permitting).
- 6. Make a plan for next session.

Core Guiding Principles

- Through the Snap the Gap program, the mentees will gain valuable skills such as critical thinking, confidence, leadership, and communication, as well as experience the joy of being an innovator.
- Snap the Gap mentors should guide the mentees towards these principles throughout their time with their mentee.

Mentor Role Overview

As a mentor, there are 3 areas of focus for your interaction with your mentee. You should be a teacher, a positive role model, and a challenger.

- **Positive Role Model:** Demonstrate exemplary behavior and offering values that will increase chances for success and happiness.
- **Teacher/Trainer**: Provide learning opportunities and offer your experience as a guide. This includes taking full advantage of the inventor kit and other opportunities. Encourage themes such as creativity, invention, problem-solving, exploration, and confidence. Providing encouragement to the mentee as she embarks on new experiences.
- **Challenger:** Encourage a growth mindset towards the mentee to maximize their potential. A growth mindset establishes that one can improve their ability, seeing failure as a learning opportunity rather than an obstacle. This allows for learners to focus on a journey of continual improvement and growth.

Mentor Role Expectations

The following are some basic expectations of our Snap the Gap mentors:

- 1. **Be reliable.** Be punctual and dependable communicate about issues such as tardiness or rescheduling. Try not to cancel on scheduled dates. Trust is crucial in your relationship and nothing undermines trust faster than missing appointments.
- 2. **Be consistent.** Short, regular contacts of time and attention towards the mentee can often accomplish more than long, inefficient sessions.

- 3. **Ask questions.** Everyone involved in the project is part of a team. We can help each other and help our mentee by asking questions that promote critical thinking and making connections with the activity.
- 4. Praise your mentee. Take every opportunity to give positive and encouraging feedback to your mentee that awards their growth mindset. Avoid using language such as "You are so smart." instead use language that awards how they pushed themselves to reach a conclusion such as "Wow, you worked so hard, I am proud of you!".
- 5. **Use your imagination.** Simple ideas are often the most fun and educational.
- 6. **Respect cultural differences**. Your mentee and their family may embrace different traditions and values than you. Be open-minded and understanding.
- 7. **Set limits.** Establish norms of proper conduct without being harsh. Feel free to reject unreasonable demands by your mentee. Discuss with them the basis of your differences.
- 8. **Meet program requirements.** Fill out all program forms in a timely manner. If you need assistance or advice in difficult situations, ask your site coordinator.

About Young Adolescents

Through the Snap the Gap program, we feel it is important the mentors recognize and are aware of the growth and changes their mentees may be going through.

General Characteristics

- The primary challenges of adolescence:
 - The development of personal identity and establishment of independence and autonomy in the context of the sociocultural environment.

Physical Characteristics

- Female growth begins and peaks earlier than males
- Reproductive system begins to develop

Socio/Emotional Characteristics

- Self:
 - Preoccupation with rapid body change
 - Self-absorption, self-consciousness
 - Diminished self-esteem
- Family
 - Redefining relationship with family; moving toward more independence while still looking to family for guidance and values
 - Few major conflicts over parental control
- Peers
 - Increasing importance
 - Seeking to become part of group to hide insecurities from rapid changes

- Comparing own normality and acceptance with same-sex peers
- Moving toward more intimate sharing of feelings
- Sexuality
 - Defining self in terms of maleness and femaleness
 - Learning how to relate to opposite sex

Cognitive Characteristics

- Beginning to move from concrete thinking (what is) to abstract thinking
- ("formal operations"—what might be true if...)
- Cannot always perceive long-range implications of current decision
- Expanded interests; intense, short-term enthusiasm

Influences on Youth

In order to understand and empathize with what is going on with some mentees, mentors should have some idea of the environment (both neighborhood and family) in which their mentees live, typical behaviors of that age group, and pressures that they face. The following are key factors influencing the behavior of today's youth.

- Poverty
- Tobacco, Drugs, Alcohol
- Injuries
- Violence
- Suicide
- AIDS/STDs
- Sexuality/Teen Pregnancy
- Peer Pressure
- Technology
- Cyber-Bullying

Program Policies

Site Coordinator

Each site will have a site coordinator. The site coordinator is responsible for the care of the mentees (i.e., mandated reporters) and the facilitation and coordination of the program. If you have any questions at the time of your sessions, please contact and connect with your site coordinator.

Confidentiality

As a mentor, you may learn private and personal information about your mentee and their family. It is important to keep such information private and not discuss it outside of the program. However, if there is a matter that you are concerned about with your mentee, please contact the site coordinator.

Emergencies

In the event of an emergency or a sign that an adolescent needs outside help:

- Always contact the site coordinator.
- If it relates to your mentee, call the parent or guardian and/or call emergency medical personnel (if appropriate)

Parental Permission

Families have signed consent forms to allow their children to participate in the program.

Contact Us

Website

https://stemstrategies.ucdavis.edu/snap-gap http://SnaptheGap.org

Phone

(530) 754-0660

Email

snapthegap@ucdavis.edu

Useful Websites

Mentoring Best Practices, Resource, and Research

Adolescent Development: https://www.annualreviews.org/doi/full/10.1146/annurev.psych.52.1.83

MENTOR/National Mentoring Partnership: *www.mentoring.org*

National Mentoring Resource Center: https://nationalmentoringresourcecenter.org/

Mentor Everywhere: https://mentoreverywhere.com/resources/ TED - How To Be A Good Mentor playlist: https://www.ted.com/ playlists/400/how_to_be_a_good_mentor

Million Women Mentor Resources: https://www.millionwomenmentors.com/resource-view

Book: Teach to Work

Alper, P. (2017) *Teach to Work: How a Mentor, a Mentee, and a Project Can Close the Skills Gap in America.* New York, NY: Bibliomotion, Inc.

Book: The Elements of Mentoring:

Johnson, W.B., Ridley, C.R. (2018) *The Elements of Mentoring.* New York, NY: St. Martin's Press.

Source: Big Brothers Big Sisters Handbook for Mentors