MODULE:

CREATIVITY IN ONLINE SPACES

DRAFT

Youth and Media

Overview:

This module encourages participants to think deeply about the relationship between creativity in their online practices and their interests in science and technology. Participants will reflect on individual differences and cultural differences amongst each other, their online activities, and how creativity plays a role in their online activities. Finally, participants will actively use their creativity in the production of analog or digital media designed to motivate or inspire others to pursue science, technology, education, and math (STEM).

Objectives:

Participants will:
- Consider gender and culture as important individual characteristics
- Gain perspective on the principle of tolerance
- Reflect on creativity online, including opportunities and challenges in relation to STEM
- Create media – analog or digital – that inspires others from particular audiences and/or communities to pursue STEM interests

Age/Grade:

Ages 13-18 years old
Grades 8-12

Audience:

Youths – especially girls – with STEM-related interests
Note: This module can easily be adapted for other audiences.

Duration:

120 minutes
- Likert Scale (20 minutes)
- Sticky Note Activity (15 minutes)
- Creativity Discussion (20 minutes)
- Design Session (45 minutes)
- Closure (20 minutes)

Materials:

- Flipcharts/markers
- Sticky notes (1 pad per every 2-3 participants)
- Handouts (see attached)
- Media equipment (video cameras, still cameras, computer/projector)
- Art supplies

Key Words:

- Science and technology
- Online versus offline
- Creativity
- Inspiration/Motivation

Likert Scale Activity

(20 minutes)

Goal:

Participants explore the differences/similarities between one another, their individual experiences, and their cultures.

Materials:

Cards with statements on them (see below for examples)

Say:

For this activity, we'll be thinking about some of our recent experiences and impressions as females from different backgrounds who are interested in science and technology. I will read a pair of statements or words aloud, and you can move to different sides of the room, depending on how you feel about them, or whether you like them. For instance, I might say cheeseburgers versus hamburgers, and if I really love my burger with cheese, then I'll **move towards** the cheeseburger end, or if I like my burger without cheese, I'll **move further** to the burger end. If I can't decide whether I like my burger with cheese, or I don't eat meat because I'm vegetarian, then I'll **stand in the middle**.

[*During the activity, try to ask the following questions, time permitting*]

Say:

- Why did you choose to stand where you are?
- Discuss with your neighbor your decision to stand here.
- What are some general trends you've noticed?

Possible Statements:

- Chocolate **vs.** Vanilla
- Facebook **vs.** Twitter
- It is common for girls to study science and technology at my school. **vs.** It is uncommon for girls to study science and technology at my school.
- I have mentors or role models who encourage or inspire my participation in science. **vs.** I do not have mentors or role models who encourage or inspire my participation in science.
- I have been underestimated by others in science and technology because of my age. **vs.** I have never been underestimated in science and technology because of my age.
- I feel comfortable talking about science and technology with friends and family. **vs.** I don't feel comfortable talking about science and technology with friends and family.
- I feel comfortable talking about science and technology on the internet. **vs.** I don't feel comfortable talking about science and technology on the internet.

Say:

We can see that we all have different things that we enjoy, as well as different opinions about our experiences. But, we also have lots of things in common, not only with our general interests, but also with our interests in science, technology, and the internet! In our next activity, we will hopefully also see some of the things we have in common, especially when it comes to what we like to do online.

Sticky Note Activity

(15 minutes)

Goal:
Participants explore how their Internet usage relates to their interests or pursuits in science and technology.

Materials:

Sticky notes, flip charts, pens

Say: Let's think broadly about what we do online, including the tools or services you use the most or any online communities you're a part of, and to see how these activities do or don't relate to your interests in science/technology. For this activity, we're going to answer some questions about what we do online.

[*Divide participants into pairs.*]

In pairs, you and your partner will think about the five questions you see posted around the room on the white sheets of paper. I'm also **going to pass out a sheet of paper** that has a copy of all the questions to each group. Please write your pair's responses for each question on a sticky note. For each question, you may have more than one answer, so **please put each answer on a separate sticky note** and feel free to use as many as you need. Then stick your sticky notes to the white sheet with the matching question.

There will be **8 minutes** for you and your partner to answer these questions. Feel free to move around the room and answer as you move from one question to the next. These questions don't need to be answered in any particular order, so feel free to start wherever.

Possible Statements:
- What are your favorite things to do on the Internet?
- Where do you "hang out" in online spaces?
- What challenges have you encountered online?
- What opportunities has the internet offered you?

[*Collect posters at the end of the activity and gather the group together again.*]

Say: What are common answers to each of these questions? Are there any things that you think are missing?

As we can see, we all have many things in common in what we like to do online and how we use the Internet. We've looked at the challenges, benefits, and tools that we use to pursue our interests. Now, let's talk about ways that we're creative and express our interests.

Creativity Discussion
(20 minutes)

Goal:
Participants explore all the various ways they are creative and express themselves online.

Materials:
Flipcharts/markers, handouts (with questions)

[*Divide participants into groups of 4-5.*]

Say:
For this next activity, we will have **12 minutes** to explore the ways in which we are creative online. Think broadly about not just what you create online (emails, messages, comments, images, posts, etc.), but also how you create, and what the opportunities and challenges are to being creative. By creating, we can share things about ourselves with others.

Each group will get a poster and some markers, and you should choose one person to be the scribe, and to write down what your group discusses. At the end, each group will report back to everyone with a summary.

Possible Questions:
- What is creativity?
- What are the different ways people are creative online and how do you express yourself online?
- What are the challenges to being creative online?
- What do you like about being creative online?

[*Ask participants to share out with everyone.*]

Say:
Now that we've examined the tools that we use, our common interests, and all of the ways we are creative, we're going to actually *be* creative and try to express our interests in science and technology in order to inspire others to pursue their own interests.

Design Session
(45 minutes)

Goal:
For participants to demonstrate their creativity and share their ideas with others.

Materials:
Art supplies, media equipment, etc.; handouts with project descriptions

[*Ask students to divide into groups of 3-4.*]

Say:
Through our discussions and reflections, we should recognize that by being tolerant and appreciative of people's differences, you can communicate with others and share your interests. The goal of this activity is for you to find a way to express your interests in science and technology. How can you communicate that interest to others? How can you inspire your peers to pursue *their* interests in science and technology?

You have **30 minutes** before we will share out with everyone. Here are your project options:

Possible Projects:
(A) Create-an-Avatar
- Create an avatar (a role model or a superhero) that represents a person who engages in creative ways with science and technology. How can this avatar inspire or motive others to go further with science and technology? How can they show that science and technology are really cool?
- *Participants will receive a large sheet of paper and some art materials.*
- **Takeaway**: Everyone has interesting perspectives to contribute, and being interested in STEM as a youth can be cool and inspiring.

(B) Create-an-App
- Come up with a way to use an existing online service or social network online to help other youths share their experiences with science and technology. Do you want to create a new tool or feature for a current social media application, or do you want to create a whole new way to interact with others interested in science and technology? Use art supplies to design the web tool's functions, design, characters, desktop, features, icons, buttons, etc.
- *Participants will receive paper and some art materials.*
- **Takeaway:** We can use the internet to reach others, spreading knowledge and encouraging people to follow their interests.

(C) Create-a-Story
- Create a story about youths who are interested in science and technology. How do these youths overcome challenges? What are opportunities that science or technology have for them? Write a skit, make a movie, create a photo series, or make a fake Facebook profile!
- *Participants will have access to media equipment, including still/video cameras.*
- **Takeaway:** We can use storytelling and new media to reach out to others, spreading knowledge and encouraging people to pursue their interests in STEM.

[*Ask participants to share out.*]

Wrap-Up
(20 minutes)

Goal:
To wrap up the discussion and answer any lingering questions.

Materials:
None.

Say:
- What did you like most from today?
- What did you take away from today?
- Did anything surprise you about today?
- How has today changed the way you think about creativity online?
- How do you think you can inspire your peers to pursue their interests in science and technology? Why do you think this is important?

[*Summarize the goals/expectations of the day.*]

Thanks for participating and being so engaged today!

Creativity

Think broadly about not just what you create online (emails, messages, comments, images, posts, etc.), but also how you create, and what the opportunities and challenges are to being creative. By creating, we can share things about ourselves with others.

- What is creativity?
- What are the different ways people are creative online?
- How do you express yourself online?
- What are the challenges to being creative online?
- What do you like about being creative online? How is it different from being creative offline?

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Design Session

Create-an-Avatar

Create an avatar (a role model or a superhero) that represents a person who engages in creative ways with science and technology. How can this avatar inspire or motive others to go further with science and technology? How can they show that science and technology are really cool?

Takeaway: Everyone has interesting perspectives to contribute, and being interested in STEM as a youth can be cool and inspiring.

Create-an-App

Come up with a way to use an existing online service or social network online to help other youths share their experiences with science and technology. Do you want to create a new tool or feature for a current social media application, or do you want to create a whole new way to interact with others interested in science and technology? Use art supplies to design the web tool's functions, design, characters, desktop, features, icons, buttons, etc.

Takeaway: We can use the internet to reach others, spreading knowledge and encouraging people to follow their interests.

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Create a story about youths who are interested in science and technology. How do these youths overcome challenges? What are opportunities that science or technology have for them? Write a skit, make a movie, create a photo series, or make a fake Facebook profile!

Takeaway: We can use storytelling and new media to reach out to others, spreading knowledge and encouraging people to pursue their interests in STEM.