Middle School Unit: How can learning about my strengths and interests help develop skills for my future?

Lesson Level Performance Expectations:

Students are introduced to tools and assessments as pieces of their career puzzle that aid in the process of self-discovery. Students will use the results of assessments and information from tools to identify potential STEM careers that fit with their interests, personality types, skills, and abilities.

What We Figure Out: (Learning Objectives)

Students will identify skills they have demonstrated in their STEM lessons/activities needed for various careers of interest. They work together to figure out how these skills can benefit their community and learn how STEM careers create solutions that improve our lives. They discover that the career development process can help them make informed career choices upon graduating from high school.

BUILDING TOWARD

Awareness of personal interests, STEM careers, and career related skills that might help students identify potential career pathways.

TIMELINE

60 minutes for each part (Part 1, 2, and 3). Each part should be done in sequential order, but it is best to space the activity parts throughout the unit vs. doing all three parts back to back.

INVESTIGATING

STEM careers

SENSEMAKING

tudents use tools to figure out how their interests and personality types match with different careers.

CRITIQUING

Students gain experience evaluating their own interests and skillsets based on career preparedness tools and assessments.

GETTING READY: Materials

TEACHER

Teacher Materials

- Slides

STUDENTS

Student/Classroom Materials

- Part 1 Activity Sheet (EN)
- Part 1 Activity Sheet (SP)
- Holland's Six Personality Types
- Part 2 Activity Sheet (EN)
- Part 2 Activity Sheet (SP)
- CTE Career Clusters handout
- Part 3 Activity Sheet (EN)
- Part 3 Activity Sheet (SP)

ACTIVITY

Activity Supplies

- STEM Skills Poster
- Charged Laptops

This material is based on work supported by the National Science Foundation (NSF) under award #DRL - UCAR: 1949322, CU: 1948709, USU: 1949299.

LEARNING PLAN: (for a more detailed description, click on the number to the left)

1. **(5 min)** Introduce students to STEM Career Connections and the benefits of exploring self knowledge.
2. **(55 min)** Students complete Part 1 of the activity: Interest Profiler & Holland Personality Types
3. **(60 min)** Students complete Part 2 of the activity: Career Clusters
4. **(50 min)** Students complete Part 3 of the activity: Career Skills
5. **(10 min)** Revisit learning objectives with students.

LEARNING PLAN

1 (5 min) Introduce students to STEM Career Connections and the benefits of exploring self knowledge

Before beginning this activity with students, you may want to create a place in the classroom to display the STEM Skills poster.

Ask the question of the day: "How can learning about my strengths and interests help develop skills for my future?" This question sets up the reason for time spent with career connection activities and questions. Review slides 3-4 with students. Share the learning objectives with students.

The process: linking personality types and interests to skills used in STEM careers.

Suggested Prompts:

- What are career connections?
- How will we make career connections in our STEM class?
- What tools will we use to make career connections?

LEARNING PLAN

2 (55 min) Students complete Part 1 of the activity: Interest Profiler & Holland Personality Types

Introduce the interest profiler and Holland Personality types to students. Review slides 5-7,

Provide students access to the Part 1 Student Activity Sheet and the Hollands' Six Personality Types handout. Go over how to use the O*Net Interest Profiler from the MyNextMove.org website and discuss each of the Hollands' Six Personality Types using the handout.

Have students discuss with a partner one or more personality traits that they hope to demonstrate through their work in STEM class (Slide 8).

Give students time to complete the Part 1 Student Activity Sheet on their own. Tell them that after they complete the Interest Profiler, they will be able to research some careers that match their interests, and that while they will focus on STEM careers they should also list any careers they are interested in, even if they are not related to STEM.

If time remains after students have completed the Part 1 Activity Sheet, hold a discussion to share what students have learned and start to make connections to the world around them. Focus on the skills students identified that are needed for the careers they are interested in. Ask students to think about where they have seen examples of some of the STEM careers they learned about today in their community, and how these jobs and skills are important.

Ask students if they came across STEM occupations that they were unfamiliar with. Explain what those jobs are, if applicable. Make a list of the STEM jobs we have learned about today.

Suggested Prompts:

- What are some of the jobs that you learned about today?
- Where have you seen examples of some of the STEM careers you learned about in our community? How are these jobs and skills important?
- What is an example of a STEM job that you learned about today that is important in our community?
- Did you come across STEM occupations that you were unfamiliar with?

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LEARNING PLAN

3 (60 min) Students complete Part 2 of the activity: Career Clusters

Remind students of their work identifying interests and careers that match those interests from Part 1. Have them look at their Part 1 activity sheet and review the work they did exploring careers and skills using slide 10.

Share the objectives for Part 2 on slide 11 and provide students access to the Part 2 Student Activity Sheet and the Colorado Career Cluster handout. Explain the career cluster model (slide 12) and how learning about different career clusters that interest you can help you focus on developing your own career goals.

Give students time to complete items 1-3 of the Part 2 Student Activity Sheet on their own. Tell them that they will need to reference their Part 1 Student Activity Sheet about the interests they identified.

Have students discuss with a partner how jobs within one of the career clusters might benefit our community (Slide 13) and complete item 4 on the activity sheet together. Have students complete the final items on the activity sheet.

If time remains after students have completed the Part 2 Activity Sheet, hold a discussion to share what students have learned and start to make connections to the world around them. Focus on the careers they identified and how they are important for their community. Ask students to think about where they have seen examples of some of the STEM careers they learned about today in their community.

Suggested Prompts:

- How do the different career clusters relate to the work we have been doing in our STEM class?
- What are some common skills that you are noticing are used within each career cluster?
- What career did you choose to focus on today, and why did you choose that career?
- What are some examples of these types of careers in our community?

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LEARNING PLAN

4 (50 min) Students complete Part 3 of the activity: Career Skills

Hang the STEM Skills poster before beginning Part 3, if it is not already displayed.

Remind students of their work learning about career clusters that match their own interests from Part 2. Have them look at their Part 2 activity sheet and review the work they did exploring careers and how they benefit their community using slide 15.

Share the objectives for Part 3 on slide 16 and provide students access to the Part 3 Student Activity Sheet. Orient students to the onetonline.org website and go through the directions as needed to ensure students will be successful using the search to select skills and occupations that match those skills.

Give students time to complete items 1-4 of the Part 2 Student Activity Sheet on their own.

After students have completed items 1-4, hold a class discussion calling attention to specific STEM skills that have been in use during your STEM project or class work and asking students to call out any connections to skills they have just researched in Part 3 and skills they have been using in class.

Reference the STEM Skills poster and ask students to work with a partner to brainstorm how acquiring different kinds of skills could benefit them in the future (slide 17). Have students complete item 5 on the activity sheet together. Have students complete the final items on the activity sheet.

If time remains after students have completed the Part 3 Activity Sheet, hold a discussion to share what students have learned and start to make connections to the world around them. Pose questions to get students discussing how STEM skills are used in their own lives, in their classwork, as well as in various careers. Reference the STEM skills poster (and perhaps ask students if they can think of any other skills that are not included on the poster - make a list of these skills on the board). Ask students to look at the list of skills and think about which ones they connect to different careers,

Point out that lots of careers use science, technology, engineering, and math skills. And skills that help you in STEM careers are also beneficial to other career paths too.

Suggested Prompts:

- What types of skills do you think people who work in STEM careers use?
- Do you have to have a specific skill set to work in a STEM career? Do only people in STEM careers have these skills?
- When have you had the opportunity to use one or more STEM skills in our class so far?
- How have you been able to use your own strengths and interests in our class so far?
- Are there any other skills that you would consider STEM skills that are not listed on the STEM Skills Poster?

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LEARNING PLAN

5 (10 min) Revisit learning objectives with students

Review the learning objectives for all three parts of the activity, connecting reflections to the learning objectives (see Page 1 of this document) when possible.

Ask students to take personal stock of how they feel about their own path towards a future career - do they feel a bit more knowledgeable about how they might choose a career for themselves? How do they feel that focusing on self awareness has benefitted them?

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