

A Focus on STEM Careers



Grade(s): 7-9

Subject: Healthy Living

Time: 60 min class

Curriculum Outcomes:

- 7.12 - Identify relationships between their strength, skills, abilities, and interests and their educational plans.
- 7.13. 8.5, 9.9 - Select items for and maintain a LifeWork Portfolio.
- 8.4 - assess their strengths, skills, abilities, and interests in relation to employability skills.
- 9.9 - develop a plan to acquire the skills and credentials that will lead to their career goals.

Skills:

- Identify gender stereotypes and how they can affect course and career selection.
- Identify various STEM careers and the skills required to be successful/enjoy these careers

Rationale/Purpose:

This lesson is meant to make students aware of the gender stereotypes that exist in certain careers, especially careers in the Science, Technology, Engineering, and Math (STEM) fields. By the end of the lesson, students should be aware that career aptitude depends on skills and interests and not gender or race. Students will also be exposed to many different types of STEM careers.

Lesson Summary Chart:

Time	Instructional strategies	What the teacher will do	What students will do	Ready-to-use support materials *
10 min	Introduction	Ask students to close their eyes, and picture a scientist. Instruct students to draw what they see and to be specific; include location, clothing etc. Collect a few of the drawings and tape them to the board	Draw a scientist Compare drawings with other students	
15 min	Class Discussion	Facilitate class discussion	Listen and provide input	Suggested Questions for Class Discussion

This lesson plan serves as a guide for teachers. It was created by WISEatlantic.
www.WISEatlantic.ca



<p>30 min</p>	<p>Activity/Watching Videos</p>	<p>www.WISEatlantic.ca/videos.asp and show the class a few of the role model videos</p> <p>Ask students to choose a STEM career that interests them, have them come up with 10 interview questions they would ask someone with that career if they had the opportunity to interview them.</p> <p>Collect these questions for marking.</p>	<p>Watch videos</p> <p>Create list of 10 interview questions</p>	<p>www.WISEatlantic.ca/videos.asp</p> <p>Transcripts of videos also available in PDF form</p>
<p>5 Min</p>	<p>Exit slip</p>	<p>Hand-out slips of paper to students. Instruct them to reflect and write down one thing they learned from the lesson</p>	<p>Reflect, and write down one thing they learned from the lesson, pass to teacher on way out of classroom.</p>	

Materials:

- Computer, internet
- LCD projector

Assessment Strategies:

- Exit slips

Follow-up activities:

- Have students actually interview someone in the career they chose, using the questions they created in class. Students can create a video or podcast of the interview to share with the class.

Additional Resources:

- WISEatlantic is able to do role model online webinars that take place in your classroom. We organize the role models (you can suggest specific careers you would like to have featured) and on a specified date we will arrange to have your class linked online to listen to role models discuss their careers with your class. Students will also have the opportunity at the end of the webinar to ask (pre-approved) questions of the role models. All the role models are women because we want to break down the existing stereotypes in the STEM fields. These webinars are done through Blackboard Collaborate software, all you need is a computer with a LAN internet connection, speakers, a projector, and a microphone to sign-on.

Suggested Questions for Class Discussion

Follow-up to 'draw a scientist' activity

1. Once the student's pictures of scientists are collected and placed on the board, ask the class questions such as:
 - What is similar about the drawings?
 - What is different?
 - Who is missing from the pictures of scientists? (trying to get females, as well as minority groups)
 - How many of you pictured a male scientist? A Caucasian scientist?
 - Why do you think that is?
 - Ask students what other careers might have gender stereotypes, make a list on the board.
 - Where do you think these stereotypes come from?
 - Do you think your image of a scientist is a reflection of this profession?

2. Discuss with your class why businesses and academic institutions would want to hire all sorts of different people as scientists, how would this benefit the business or research community?
 - Labour shortage solution, especially in STEM jobs.
 - Broader talent base
 - Increased innovation capacity, when the workplace reflects the diversity of the population innovation increases (different perspective, etc.