

Health Science



Career Cluster Teacher Guide

Resource Description

Materials and Resources

- When we think of the medical field, we often think of doctors and nurses, however, there are several other careers that play a vital role in the health and science career cluster. There are also numerous specialty fields, therefore, requirements for education vary. The healthcare field allows you to work with people on a daily basis.
 - Teacher guide
 - <u>http://mygpsforsuccess.com/health-science/</u>
 - Cluster student viewing guide
 - KWL Chart
 - Display paper or individual sheets
 - Pen/Pencil
 - 1:1 computer or laptops; or group students if limited resources

Vocabulary & Definitions

Medical: of or relating to the science of medicine, or to the treatment of illness and injuries Vaccine: a substance used to stimulate the production of antibodies and provide immunity against one or several diseases Contagious: spread from one person or organism to another by direct or indirect contact Illness: a disease or period of sickness affecting the body or mind. **Dispense:** distribute or provide to a number of people. Diagnose: identify the nature of (an illness or other problem) by examination of the symptoms Laboratory: a room or building equipped for scientific experiments, research, or teaching, or for the manufacture of drugs or chemicals. Stable: not deteriorating in health after an injury or operation. Technician: a person employed to look after technical equipment or do practical work in a laboratory. Allergy: a damaging immune response by the body to a substance, especially pollen, fur, a particular food, or dust, to which it has become hypersensitive.



Objectives

1. Have the following displayed on an easel, whiteboard, or individual sheets of paper for students to review and write down their responses:

You've broken your leg in the park! What needs to happen from the time you break your leg to your full recovery? Who do you need to get help from?

- 2. Have some students share responses.
- 3. Make a class list of responses and then open the floor to additional responses after the list is constructed.
- 4. Facilitate student discussion about the importance of health science, how many people it takes to take care of the population, and other pertinent facts about the field of health care.

Objectives

The student will be able to:

- <u>Identify</u> the central aspects of the Health Sciences Career Cluster including career paths, skills & interest, and education level
- <u>Explore</u> different careers within the Cluster
- <u>Analyze</u> what is known, wondered, and learned (KWL) about the career cluster to begin conceptualizing an individual career map



Anticipatory Set

1.	Divide students into pairs – each student gets a	
	KWL Cluster Chart.	
	Verbal instructions:	

- *Review the discussion from the bell ringer about the Health Science Career Cluster.*
- With your partner, list at least 5 items you know about job details, necessary skills, etc. in the "Know" Section.
- 2. Have two pairs of students join one-another to form a four-person group **Verbal instructions:**
 - Compare and discuss each list.
 - With your group, list at least 5 things you want to know about the Health Science Cluster in the "<u>W</u>onder" Section.
- 3. Have groups share their new list with the class.

Introductory Questions

Introductory Questions:

Ask the following questions to the whole class with for students to write down their answers and/or discuss with a partner. Have 2-3 students share their answers:

- If you were a patient at a hospital, what kinds of jobs would you see people doing?
- What jobs would you not see but you know that they exist?
- What would you want to know about the people taking care of you?



Learning Task & Exploration Activity

Exploration Activity	1. Introduce the <u>Health Science Career Cluster</u> <u>Video</u> .
	Video Introduction: The field of Health Science is one of the fastest growing career fields in the world. Health Science encompasses hundreds of different careers including many you may not have thought about as being typical medical careers.
	 View the <u>Health Science Career Cluster Video</u> (7:12). Have students complete the Student Viewing Guide as they learn about the Career Cluster.
	3. Students will fill out the "Career Cluster Research" section of the viewing guide and explore the Health Science webpage on <u>http://mygpsforsuccess.com/health-science/</u>
Closing	 Have students complete the "Learned" Section of their KWL with at least 3 pieces of information they learned about the cluster. Students may share out in class as well as discuss with a partner once they have finished.
	 Engage students in a whole class or small group discussion using the <u>Discussion Questions</u> section of this instructional plan – students may use their KWL chart as reference.



Discussion Questions

- 1. Thinking back to the bell ringer, did you want to add anything to what you described for the "broken leg" scenario?
- 2. What do you believe is the most difficult part of the Health Sciences Career Cluster? Why?
- 3. Can you have a career in Health Science without a college degree? What are some of the opportunities at various education levels?
- 4. What are some of the primary health care organizations in our area?
- 5. Do you think health science is a good field to go in if you would like a stable career? Why or why not?
- 6. How would you define this Career Cluster?
- 7. What surprised you about this Career Cluster?
- 8. What career pathways were represented in this video?



Suggested activities to increase student learning and exposure to this Career Cluster.

- Contamination Activity
 - All but one of the students receive a plastic cup filled half full with an unknown, clear substance (water). The remaining student receives a cup filled half full with vinegar. The vinegar represents illness.
 - The teacher explains that throughout the day you come in contact with many people, even if you don't necessarily see them and that is how illness is spread. (for example, touching a door knob after someone else previously has touched it.)
 - The teacher gives students "X amount of time" to move around the room. While moving around the room, students should be pouring small amounts of their liquid into their classmates' cups.
 - At the end of the time, the teacher walks around adding a small amount of baking soda into each cup. The baking soda will cause a reaction in every cup that has been contaminated by the vinegar (illness).
 - Discuss with the students what happened, how diseases work, hygiene importance, and how important health care workers are
- <u>Field Trip</u>: to a hospital or other health care facility
- Have each student <u>select a career from this Career</u> <u>Cluster</u>. Students will research the career and present information to the class in the form of an oral presentation, poster, PowerPoint, video or Prezi presentation. Information to research and share might include: salary, education required, typical day schedule, roles and responsibilities, positive aspects of the job and challenges associated with the job.
- Have each student make a <u>list</u> of the Career Readiness Skills that are his/her personal strengths, as well as a list of the skills and behaviors required for a career as an educator. Students compare the lists to determine what Career Readiness Skills need to be strengthened.



Extended Learning Suggested activities to increase student learning and exposure to this Career Cluster. Have students complete a job application and/or job interview with a local employer. • Help students construct a resume for a specific career in this Career Cluster. Arrange for students to meet with the school counselor to discuss classes that would help prepare a student for careers in this Career Cluster and certifications that can be obtained during high school that would be of value. Have each student identify a postsecondary institution that is offering certifications or degrees that are required for working in this Career Cluster. He or she should obtain and complete admissions and scholarship applications for the school or program. Notes to Educator This packet includes suggested activities questions, and materials to enhance student understanding of this career cluster. Each component may be used individually or modified to fit the needs of your classroom. More information on this Career Cluster can be found at: http://mvgpsforsuccess.com/health-science/ In addition, GPS For Success has an array of resources, including: Interest Profiler: online quiz to assist students in categorizing their interests by possible careers those interests apply to. Scholarship opportunities Information on internships • Sample resumes and cover letters Interview preparation materials Opportunities for students with disabilities

