

uBEATS Teacher's Guide:

Careers in Rehabilitation Therapy

This teacher guide is a supplementary text to support the use of the uBEATS "Careers in Rehabilitation Therapy" module for grades 6-12.

To help students develop the knowledge necessary for an incredible future in health care, we created UNMC Building Excellence in Academics Through STEM (uBEATS), an online health science resource for Nebraska students.

UNMC uBEATS modules are short (15 minutes or less), interactive online health science modules to supplement curriculum taught in grades 6 – 12. These do not replace curriculum, but they are a supplement for teachers and students incorporating evidence-based information and UNMC expert guided material. Each module is chunked into sections with formative and summative assessments with immediate feedback provided.

Tips on how to utilize uBEATS modules:

- Internet access is required to view uBEATS modules.
 - o For those who have access to one-to-one technology, modules can be used in or outside of the classroom as a topic introduction, extension, or review. For classrooms without individual student devices, modules can be used in whole group instruction. Formative assessment questions can use the teacher's preferred call-and-response method and summative assessment questions can be displayed on the board and answered individually by students or printed and distributed to students after viewing the module.

Objectives

- 1. Identify the different careers in rehabilitation therapy.
- 2. Explore pathways to different jobs and degrees in rehabilitation therapy.

3. Assess the salary range, duties, education level, and completion time for OT, PT, and SLP careers.

Introduction

Take a minute to consider all the activities you have done throughout your day so far, such as moving out of bed, getting dressed, brushing your teeth, eating breakfast, saying hello to family and friends, traveling in a car or bus and now sitting while working on the computer to complete this e-module.

Now imagine how you would complete these tasks if you lost muscle strength, the ability to talk, see or hear, or the ability to move your arms or legs. This would obviously change how you completed these tasks, and it would be challenging as you have likely done certain tasks for the past several years in a certain way.

This is where the rehabilitation team can help solve this dilemma as they work with individuals to enhance their lives, reach their goals and participate in daily life activities, occupations, moving, speaking and eating. The rehabilitation team includes occupational therapists, physical therapists, and speech-language pathologists. Let's learn about each of these careers and what roles they play in patient care.

Prior Knowledge

Before beginning this module, the teacher should understand the Next Generation Science Standards (NGSS) featuring <a href="https://doi.org/10.1007/jhses-2016/2016-10.2007/jhses-2016-1

Disciplinary Core Ideas—Engineering, Technology, and Applications of Science. A Framework for K-12 Science Education

Students should learn how scientific knowledge is acquired and how scientific explanations are developed. The second is that students should learn how science is utilized, in particular through the engineering design process, and they should come to appreciate the distinctions and relationships between engineering, technology, and applications of science (ETS).

National Academies of Sciences, Engineering, and Medicine. 2012. A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas. Washington, DC: The National Academies Press. https://doi.org/10.17226/13165.

Science and Engineering Practices NGSS

- 1. Asking questions (for science) and defining problems (for engineering)
- 6. Constructing explanations (for science) and designing solutions (for engineering)

Crosscutting Concepts NGSS

- 2. Cause and Effect
- 6. Structure and Function
- 7. Stability and Change

Key Terms/Vocabulary

Rehabilitation therapy, occupational therapy (OT), physical therapy (PT), speech-language pathology (SLP), audiology, job shadow, technologist, high school diploma, associate degree, undergraduate degree, master's degree, doctoral degree, licensure exam, pediatrics, adult, older adult, hospital, outpatient clinic, nursing home, home health.

Science Standards

2024 Nebraska College and Career Ready Science Standards Nebraska Science Standards

• SC.HSP.17.1. Gather, analyze, and communicate evidence of the connection between health science careers and engineering.

National Consortium for Health Science Education NCHSE

- 1.1 Human anatomy and physiology
- 1.2 Diseases and disorders
- 2.1 Concepts of effective communication
- 3.1 Healthcare delivery systems
- 4.1 Personal traits of the health professional
- 4.2 Employability skills
- 4.3 Career decision-making
- 4.4 Employability preparation
- 8.1 Healthcare teams

Extensions of the lesson

To help students become more familiar with the Key Terms of this module, the teacher can use the vocabulary list for a classroom Word Wall or integrate the vocabulary into review sessions.

Encourage students to check current events for the latest news involving rehabilitation therapy.

As student misconceptions become apparent, the teacher may need to reinforce these concepts:

- "Occupational therapy does not focus on the job site or workplace. It helps people
 perform the everyday <u>"occupations" of life</u>, ranging from eating and bathing to living
 independently and managing a household.
- Occupational therapists, physical therapists, and speech-language pathologists often
 work as a team with an individual patient. Each health professional helps to provide a
 different aspect of care to ensure the whole person is being treated. They must work
 together effectively as they can sometimes overlap, and team communication is vital.
 - An OT focuses on occupations of daily living, from eating and dressing to independent living, such as grocery shopping and working.
 - A PT helps to improve movement and function by increasing strength, balance, flexibility, and endurance.
 - An SLP can help with swallowing, communication, and cognitive tasks, such as improving attention or memory.
 - All these tasks can improve a person's ability to perform life roles, such as being a student, parent, or grandparent.
- Pay varies depending on years of experience, geographic location, and practice setting.

Enrichment

- Take some time to explore UNMC's <u>Careers in Healthcare</u> to find out which career possibilities catch your attention.
- Use the UNMC's <u>Careers in Healthcare</u> handbook to compare OT, PT, and SLP careers. Click on each of the three careers listed on page 2 of the handbook to read about the <u>Nature of the Profession</u> and the <u>Annual Mean Wage</u>. Which of these three careers seems more suited to you than the others?
- Use the <u>Occupational Outlook Handbook</u> of the U.S. Bureau of Labor Statistics to find additional information about the Rehabilitation Therapy professions.