

uBEATS Teacher's Guide:

Oral Health Literacy

This teacher guide is a supplementary text to support the use of the uBEATS “Oral Health Literacy” module for grades 11-12.

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.
- 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

- Define health literacy.
- Understand the scope of implications of limited health literacy.
- Recognize behaviors that may indicate limited health literacy.
- Implement strategies for effective patient communication and understanding.

Introduction

Health literacy is defined as the ability to find, understand, and act on health information. This represents the interaction between patients and the health care system. While the ability to read is the strongest correlate to overall health status, low health literacy can affect anybody regardless of age, race, education level, or income. In fact, even highly educated and literate patients can have difficulties with understanding and acting on medical information.

Prior Knowledge

Before beginning this module, the teacher should understand the Next Generation Science Standards (NGSS) featuring [Three-Dimensional Learning](#).

ETS2. Links among Engineering, Technology, Science, and Society. [A Framework for K-12 Science Education](#)

New insights from science often catalyze the emergence of new technologies and their applications, which are developed using engineering design. In turn, new technologies open opportunities for new scientific investigations. Together, advances in science, engineering, and technology can have—and indeed have had—profound effects on human society, in such areas as agriculture, transportation, health care, and communication, and on the natural environment. Each system can change significantly when new technologies are introduced, with both desired effects and unexpected outcomes.



Science and Engineering Practices [NGSS](#)

Obtaining, evaluating and communication information

Crosscutting Concepts [NGSS](#)

Patterns

Key Terms/Vocabulary

Health literacy, oral health literacy, patient communication, medical information, jargon, active listening, low health literacy, medication errors, compliance with medical instruction.

Science Standards

- Nebraska's College and Career Ready Standards for Science 2017 [Nebraska Science Standards](#)

SC.HSP.17.1.C Evaluate a solution to a complex real-world human health problem.

- National Consortium for Health Science Education [NCHSE](#)

Foundation Standard 9: Health Maintenance Practices

9.1.3. Describe public health strategies for the prevention of disease.

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 reflect on their own level of understanding during recent visits to a doctor or dentist.

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



- “Health Literacy,” including “Oral Health Literacy,” can be an issue for all medical patients, no matter how educated they are.
- Every medical field involves specialized vocabulary with which a patient might not be familiar.
- Whereas a patient may not admit to problems with understanding, the medical professional should look for non-verbal warning signs: incomplete or inaccurately filled out forms; frequently missed appointments; frequent medication errors or a lack of knowledge about their medications; claims of compliance, however, evidence of non-compliance; and apparent withdrawal or lack of interest during explanations.
- To promote better understanding, the medical professional should:
 - Create a welcoming environment free from judgment.
 - Be an active listener.
 - Slow down. Give your patient a chance to comprehend what you are telling them.
 - Use plain, non-medical language whenever possible. Also, it is suggested that all reading material be at or below a sixth-grade reading level.
 - Use pictures, images, or visual aids to help explain concepts to your patients.
 - Instead of overwhelming a patient with too much information, focus on the concrete steps and information that a patient needs to know when they leave the appointment.
 - Take extra care with numbers and numerical concepts, especially when explaining medications.
 - Use the “teach back” technique to ensure the patient understands what they need to. This is done by asking the patient to explain back to you, in their own words, what you have shared with them.

Enrichment

Explore [Health Literacy: Hidden Barriers and Practical Solutions](#) (Department of Health and Human Services, Agency for Health Research and Quality). [Health Literacy](#)

Read [Health Literacy: The Gap between Physicians and Patients](#). (American Family Physician. 2005 Aug 1;72(3):463-8. PMID: 16100861.) [Physician-Patient Gap](#)