# Improving Wisconsin Health Science Education

# Abstract

As a participant in the Community Health Internship Program (CHIP), I interned for the Wisconsin Department of Public Instruction throughout June and July of 2022. My primary project entailed curating and creating 40 high school Health Science resources for the state's WISELearn Portal. As part of the CHIP experience, I also participated in Shadowing Opportunities and Weekly Seminars.

# **Objectives**

- 1. Curating 40 educational resources and creating supplemental materials that align with the Wisconsin high school Health Science standards for the WISELearn Portal
- 2. Learning about social justice issues, health-related issues, and public health resources in Wisconsin through weekly seminars and discussions
- 3. Networking with professionals across the state through shadowing opportunities

# Background

The Wisconsin Department of Public Instruction operates a WISELearn Portal for educators. This portal provides free, highquality, easy-to-use resources that align with Wisconsin standards at the elementary, middle, and high school levels. Several resources added to the WISELearn Portal align with Wisconsin high school Health Science standards to teach students anatomy and physiology, medical ethics, employability skills for healthcare professionals, proper communication techniques in a patient-provider setting, legal responsibilities for healthcare practices, and safety in medical settings. The Department of Public Instruction encourages active educator involvement across the state through uploading new educational resources or rating existing resources (Wisconsin Department of Public Instruction, 2022).



WISELearn Portal

# **WISELearn Project Methodology**

#### **1.Curating Resources**

Select and organize 40 resources that align with Wisconsin high school Health Science standards. The resources include a combination of videos, interactives, infographics, reference documents, and articles.

Interactive: Organ Syst	tems at Work					
Duration: Approximately 55 minutes						
Use this interactive, online activity to explore how tissues and organs function together in related groups called systems. Different organs perform specific roles within a system. All those roles add up to a more general service the system performs for the organism.						
LEARNING OBJECTIVES						
Students examine how different systems of the hum the complexity of the human body and how all its sy- perform properly in multicellular organisms, the bod subsystems, these subsystems are groups of calls the and organs that are specialized for particular body in Developing and Using Models: Avadeling tools are used predictions and explanations; analyze and deemthy fil deas. Models are used to build and reviews scientific engineered systems. Measurements and observatio designs. (NGS SEP)	stems must function together to y is a system of multiple interacting nat work together to form tissues unctions. (NGSS MS-LS1A) sed to develop questions, aws in systems; and communicate explanations and proposed					
Teacher Tips						
<ul> <li>You can have students choose riddles from a s 6 slips. These slips will be drawn at random by o You may want to print out two or three co print two copies of the sheet to distribute</li> </ul>	the students or assigned.					
Familiarize yourself with how to navigate a GC provided map to one of your own community town or city and if they do live in an urban sel	Careers A-Z					
<ul> <li>If you are unable to use tablets or computers be printed on slightly translucent paper or tra</li> </ul>	Your health care career search starts					
<ul> <li>While the model doesn't use audio, some tea</li> </ul>	trusted information from Mayo Clini					
There have been several touring exhibits with variously as <b>Body Worlds</b> and Bodies Reveal of the detailed three-dimensional models that	Career					
	Athletic trainer					
	Audiologist					
	Cardiac sonographer					
	Cardiovascular invasive specialist					
	Cardiovascular perfusionist					
	Central service technician					
	Child life specialist					
	Cytogenetic technologist					
	Cytotechnologist					

## **4. Student-Teacher Evaluations**

Two Wisconsin high school Health Science educators and 14 Wisconsin high school Health Science students reviewed the resources. Teachers reported that the resources were effective at conveying target standards and ideal for measuring comprehension levels. Students reported that resources were engaging, clear, and easy to navigate, which will lead to high retention.



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Work type	Median salary	Higher education required
Patient care	\$48,000	4-6 years
Patient care	\$79,000	8 years
Patient care	\$78,000	2-6 years
Patient care	\$61,000	1-3 years
Patient care	\$128,000	4-6 years
Support and administration	\$42,000	1-4 years
Patient care	\$60,000	4-6 years
Laboratory	\$67,000	4-5 years
Laboratory	\$74,000	4-5 years

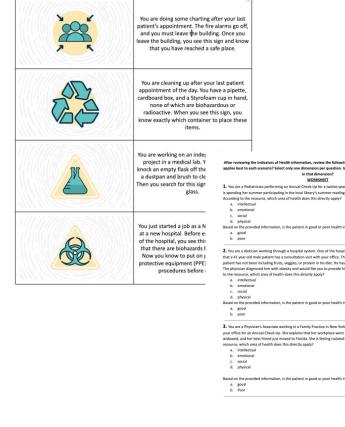
#### 2. Evaluating Resources

Each of the 40 resources was evaluated to ensure that it shows authority, is free from bias, contains current information, aligns properly with standards, is accessible, is inclusive, and aligns with the target grade level.

	Mark "yes" or "no" in the columns below									
Site Link:	Shows Authority	Free from Bias	Current Information	.GOV/.EDU/.O	Advertiseme		Health Science Education Standards Allign	Accessibility	Inclusive	Appropriat for Grade Level
https://serp media.org/sci gen/l6.3.html	Yes	Yes	Yes	.ORG Domain	No Advertisements	Yes (CC - BY - NC- SA)	HSF1.a.6.m: Describe the functions of each organ system.	Yes	Yes	Yes
https://colleg e.mayo.edu/a cademics/exp lore-health-c are-careers/c areers-a-z/		Yes	Yes	.EDU Domain	No Advertisements	Yes (CC - BY - NC- SA)	HSF4.b.1.e: Identify different kinds of medical jobs.	Yes	Yes	Yes
https://www. cdc.gov/hai/p dfs/ppe/ppe- sequence.pdf	Yes	Yes	Yes	.GOV Domain	No Advertisements	None listed on infographic	HSF7.b.2.m: Demonstrate how to apply and remove safety gloves, safety glasses and gowns used in healthcare settings.	Yes	Yes	Yes
https://www. grcc.edu/facu lty-staff/hum an-resources/ professional-	Yes	Yes	Yes	.EDU Domain	No Advertisements	Yes - © GRCC 2022	HSF9.a.6.m: Identify indicators of intellectual, emotional, social, and physical health.	Yes	Yes	Yes
https://guide s.hshsl.umar yland.edu/c.p hp?g=76220 &p=530365	Yes	Yes	Yes	.EDU Domain	No Advertisements	Yes - Copyright ©	HSF6.b.4.m: Explain how diversity influences beliefs and behaviors about medical care.		Yes	Yes
https://medic alterminology blog.com/bre aking-down- medical-term s/	Yes	Yes	Yes	.COM Domain	Yes!	Yes - Copyright MedTerm Instructional Design 2021	HSF2.b.1.e: Identify roots, prefixes and suffixes in words related to healthcare.	Yes	Yes	Yes

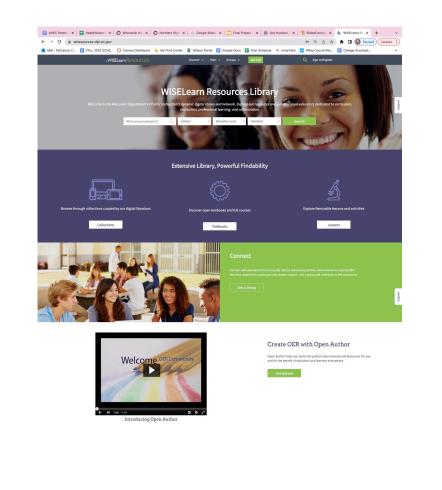
#### 3. Creating Supp Materia

Created interactive supplement original so supplements include activities, compreher games, and annotat



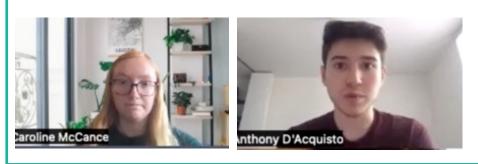
#### 5. WISELearn Upload

All 40 resources were approved by WISELearn. Teachers can access the resources at https://wlresources.dpi.wi.gov/.



### 6. Project List and **Professional Webinar**

The Project List is a summary of all 40 resources including resource links, standard area, academic skill, written description, video description, and supplemental materials. The Professional Webinar is a recorded introduction to the project, providing step-by-step instructions on locating the newly uploaded WISELearn resources. The Project List and Professional Webinar are intended to help educators find resources easily for classroom use.



	Shadowing Opportunities
plemental ls activities to ources. These e matching ision checks, tion guides.	<ul> <li>AHEC Team Project Coordinators Meeting         <ul> <li>Discussed current programs such as the PULSE Program, Wausau Upward Bound, and Aging Mastery Program in Spanish.</li> </ul> </li> <li>WI HSEA Executive Committee Meeting         <ul> <li>Discussed scholarship competition and the upcoming health conference.</li> </ul> </li> <li>HOSA Executive Council Meeting         <ul> <li>Student HOSA officers discussed their tasks, provided project updates, assigned new tasks, and held a formal business meeting.</li> </ul> </li> </ul>
	Weekly Seminar Sessions
is all leads information, review the following scanarios. While dimension of health is following any association of the source of health is following any association of the source of health is the s	<ul> <li>Public Health Programming, Partnerships, and Practice Alignment by Kaleen Kahl</li> <li>Community Health Priorities and Collaborations by Hannah Schommer and Tracey Ratzburg</li> <li>Interprofessional Education, Collaboration, and Practice Transformation by Ashley Morales, DNP</li> <li>Homelessness and Social Determinants of Health by Sandy Brekke</li> <li>Cultural Humility by Marc Perry</li> </ul>

Dementia Friends Training by Ellie Webb

#### Impact

- Improvement of Wisconsin Health Science education by the addition of free, robust classroom resources to WISELearn Portal
- Stronger network of healthcare practitioners, public health experts, health education specialists, and college-aged students

## References

*Get involved*. Wisconsin Department of Public Instruction. (2022, February 1). Retrieved August 26, 2022, from https://dpi.wi.gov/wiselearn/get-involved