UNDERGRADUATE STUDENTS PERCEPTIONS OF EMBEDDED LEARNING ACTIVITIES IN A HUMAN NUTRITION OPEN EDUCATIONAL RESOURCE TEXTBOOK

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USE OF THEORY OR RESEARCH

Open Educational Resource (OER) adoption has become widespread across post-secondary education.

The innovation of OER includes the ability to create embedded learning activities through an open-source H5P tool.

https://h5p.org

Additional research is needed to explore student perceptions of embedded learning activities.
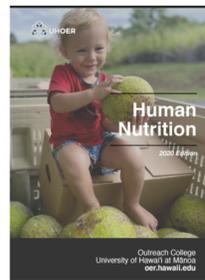
OBJECTIVE

To determine if undergraduate students perceive that embedded learning activities aid their understanding of the Human Nutrition OER textbook.

TARGET AUDIENCE

Introductory nutrition course students at two public universities during spring 2021

CURRICULUM DESCRIPTION

A new edition of the Human Nutrition OER textbook that had embedded learning activities was implemented in introductory nutrition at 2 public universities in the Spring 2021 semester.

http://pressbooks.oer.hawaii.edu/humannutrition2/

Human Nutrition
Outreach College
University of Hawai'i at Mānoa
oer.hawaii.edu

6 sections total

181 Total Embedded Learning Activities

122 Flash Cards to Reinforce Terminology

55 Drag and Drop to Reinforce Learning Objectives

EVALUATION METHODS

Students rated the *quantity of learning activities, whether learning activities helped to learn course materials, and how often they completed the learning activities* via online survey approximately 1 month prior to finals. Responses were aggregated across all sections and campuses and summarized descriptively. This study was deemed exempt by both institutions' IRB.

RESULTS

Of the *324 students* enrolled at both public universities, *175 (54%) completed* the online survey with the majority of responses (90%) coming from one public university

111 students (63%) were 20 years of age or younger with 70 students (40%) completing between 33-60 credits

70 students (40%) reported using the textbook to study for an exam 2 hours or less

136 students (78%) rated the quality of the textbook as excellent/above average

88 (50%)
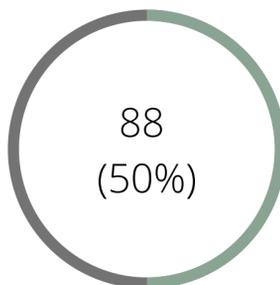
Number of Students who Agreed/Strongly Agreed that there were an **Adequate Number of Learning Activities**.

92 (53%)
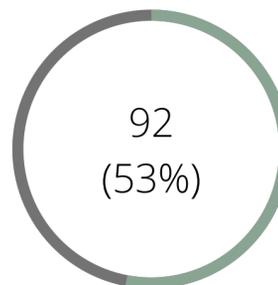
Number of Students who Agreed/Strongly Agreed that the **Drag and Drop Activities Helped Them to Learn the Material**.

104 (59%)
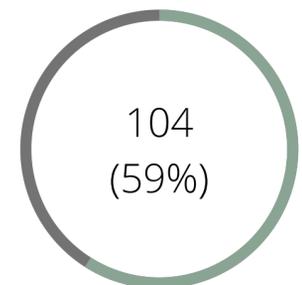
Number of Students who Reported **Doing the Learning Activities Some or Most of the Time**

CONCLUSION

Of the students who responded to the survey, half of them valued the embedded learning activities within the OER textbook. However, *only 2 of the over 50 available H5P content specific types of tools available were used.* Further exploration on the influence on grade performance and the types of embedded learning activities that resonate best with students is needed.