

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Peer Discussion in Multimedia Learning Environments

Permalink

<https://escholarship.org/uc/item/5xf6v732>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

Authors

Ibrahim, Dania
Geller, Emma H

Publication Date

2023

Peer reviewed

Peer Discussion in Multimedia Learning Environments

Dania Ibrahim

University of California San Diego, La Jolla, California, United States

Emma Geller

University of California San Diego, San Diego, California, United States

Abstract

Peer Instruction is a classroom activity that requires students to answer challenging conceptual questions and discuss their thought processes with peers. Studies show significant benefits of Peer Instruction on student performance when students engage in discussion with peers. However, not all learning environments are conducive to peer discussion, particularly the types of remote instruction that became common during the COVID-19 pandemic. Can Peer Instruction be used effectively in remote learning environments? The following study explores the effect of peer discussion (over Zoom) – and of the Peer Instruction routine, more generally – in a remote course. We found significant benefits of Peer Instruction and peer discussion on course assessment performance, particularly when students attended class synchronously. This suggests that Peer Instruction can be used effectively in remote courses, especially when students are able to engage in synchronous discussion.