

Abstract:

Information Systems (IS) education needs to focus on meaningful learning because it is essential in cultivating students' problem solving and critical thinking skills. In formative assessment of the meaningful learning, we need to provide feedback to guide and enhance learning. In this study, we propose a conceptual model of meaningful learning. The model justifies the values of Concept Mapping (CM) as a formative assessment tool because of its effective dual role as both assessment artifact and communication artifact. The model suggests four potential feedback focal areas for effective feedback. We conducted preliminary experiments to validate CM's utility as a communication tool. The CMs constructed by the students provide new lens for instructors to gauge students' meaningful learning, and, more importantly, to provide detailed and precise feedback on students' learning effectiveness. The major contribution is the adaptation of a widely used thinking tool for meaningful learning and its assessment in IS education, which is validated by models based on learning theories and cognitive science.

Citation:

Wei, W., & Yue. K., Formative Assessment of Meaningful Learning in IS Education Using Concept Mapping. Proceedings of the EDSIG Conference, Austin, Texas, Volume 3, n4312, November 2017.