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People, Partnerships and Pedagogies

Harnessing H5P for Asynchronous Active Learning

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Active learning, as defined by Bonwell and Eison (1991), involves students in *doing things* and *thinking about what they are doing*. Extensive research has highlighted the numerous benefits of active learning, including increased attendance rates (Kozanitis & Nenciovici, 2022), improved learning outcomes (Ruiz-Primo et al., 2011), reduced achievement gaps for underrepresented students (Haak et al., 2011; Theobald et Al., 2020), higher-order thinking skills, and enhanced student performance (Freeman et al., 2014). In comparison to traditional lectures, any form of active learning has proven to be beneficial to student learning (Schneider & Preckel, 2017). However, most research on active learning has focused predominantly on face-to-face synchronous classrooms, with little attention to active learning in online asynchronous environments. This presents an opportunity to explore design solutions that promote active learning in these asynchronous settings where students lack real-time interactions with educators and peers.

The advent of HTML5 (HyperText Markup Language version 5) or H5P has the potential to revolutionise active learning in online learning settings. As a free and open-source content creation tool, H5P offers various interactive and engaging content types that enable students to interact directly with course material in meaningful ways. This interactivity encourages students to participate actively in their learning process rather than passively obtaining information from lectures.

Drawing from two case studies conducted at an Australian university, this presentation highlights how H5P can be used to enhance active learning in online asynchronous courses. The first case study investigates the design of H5P training modules for a platform that supports researchers in humanities and social sciences in their sensitive data access management. This platform is part of a nation-wide project involving 12 partnering institutions and government agencies in Australia. The second case study explores the implementation of H5P learning activities in a Vietnamese language course over three years. In both cases, H5P is used as a plug-in within the Moodle learning platform.

Data collection for these case studies included interviews with educators and learning designers, Moodle reports, and participant feedback surveys. The findings from the thematic analysis and the learning analytics revealed substantial benefits of using H5P for active learning, along with the technical and pedagogical challenges encountered during the design process. The presentation features exemplary cases and insights from the case studies to suggest H5P design solutions that foster active participation, reflective thinking, and knowledge construction for students in online asynchronous settings.

Keywords: H5P, Active Learning, Asynchronous Learning, Digital Pedagogy

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