Learning Circles – A technology-enhanced peer teaching workshop

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This study will explore a potential 21C method of curriculum delivery which includes; learning without a domain expert teacher, team work, peer teaching, technology and user generated content. It examines how the students say they would like to learn, how they try to teach their peers, whether the students were engaged and motivated by this style of learning and whether or not it was an effective method of curriculum delivery. This will take place within the context of a student-led learning experience in which post-primary students are asked to prepare a learning experience for their peers.

Many modern students have technical skills and access to a volume of information that previous generations did not. Prensky (2001) argues that these "Digital Natives" should have some input into how they learn and suggests that they are capable of producing, as well as consuming, digital content. The concept of "Mindtools" argues that students should use technology as a tool to learn with rather than from. By using technology to create digital artefacts, students can be engaged in constructive, productive learning (Jonassen, Peck & Wilson, 1999).

Peer teaching involves students learning from each other, and by teaching, and can be, if properly structured, a powerful learning technique (Goodlad, 1990; Leung, Marsh and Craven, 2009). A powerful demonstration of what students can achieve without a specialist teacher has been given by Sugata Mitra (2010) who conducted studies into what children, working together, but with no expert help, can learn using the internet as their primary source of information. The study is an extreme approach but the unexpected and impressive results demonstrate what can be achieved by motivated learners.

This project involved creating a student-led 21C learning experience. This learning experience allows students to explore how they want to learn. This will involve investigating the role of peer teaching, team-work and learning without a teacher within the context of an activity where students are required to create a learning experience for their peers.

Working in Bridge21 (Lawlor, Conneely & Tangney, 2010), teams of five second level students were each given a topic from the Irish senior cycle curriculum,

asked to learn it, and then prepare a learning experience, on that topic, for their peers. There were adult mentors to support the teams but none of these were experts in the topics being taught.

A mixed methods approach was used to collect survey data, observations, digital and physical artefacts and conduct focus groups. This provided a rich qualitative and quantitative data set in order to explore the students experiences.

The study suggests that students want to learn in a constructivist, “21C learning” manner. It found that they can learn independently and use technology to teach each other in innovative ways, creating new learning experiences and digital artefacts to construct knowledge both for themselves and their classmates. Finally, this study suggests there is potential for learning without a teacher, peer teaching, technology and teamwork to play a role as part of a 21C learning solution in formal education.