World Academy of Science, Engineering and Technology International Journal of Educational and Pedagogical Sciences Vol:10, No:11, 2016

A Constructionist View of Projects, Social Media and Tacit Knowledge in a College Classroom: An Exploratory Study

Authors: John Zanetich

Abstract: Designing an educational activity that encourages inquiry and collaboration is key to engaging students in meaningful learning. Educational Information and Communications Technology (EICT) plays an important role in facilitating cooperative and collaborative learning in the classroom. The EICT also facilitates students' learning and development of the critical thinking skills needed to solve real world problems. Projects and activities based on constructivism encourage students to embrace complexity as well as find relevance and joy in their learning. It also enhances the students' capacity for creative and responsible real-world problem solving. Classroom activities based on constructivism offer students an opportunity to develop the higher-order-thinking skills of defining problems and identifying solutions. Participating in a classroom project is an activity for both acquiring experiential knowledge and applying new knowledge to practical situations. It also provides an opportunity for students to integrate new knowledge into a skill set using reflection. Classroom projects can be developed around a variety of learning objects including social media, knowledge management and learning communities. The construction of meaning through project-based learning is an approach that encourages interaction and problem-solving activities. Projects require active participation, collaboration and interaction to reach the agreed upon outcomes. Projects also serve to externalize the invisible cognitive and social processes taking place in the activity itself and in the student experience. This paper describes a classroom project designed to elicit interactions by helping students to unfreeze existing knowledge, to create new learning experiences, and then refreeze the new knowledge. Since constructivists believe that students construct their own meaning through active engagement and participation as well as interactions with others, knowledge management can be used to guide the exchange of both tacit and explicit knowledge in interpersonal interactions between students and guide the construction of meaning. This paper uses an action research approach to the development of a classroom project and describes the use of technology, social media and the active use of tacit knowledge in the college classroom. In this project, a closed group Facebook page becomes the virtual classroom where interaction is captured and measured using engagement analytics. In the virtual learning community, the principles of knowledge management are used to identify the process and components of the infrastructure of the learning process. The project identifies class member interests and measures student engagement in a learning community by analyzing regular posting on the Facebook page. These posts are used to foster and encourage interactions, reflect a student's interest and serve as reaction points from which viewers of the post convert the explicit information in the post to implicit knowledge. The data was collected over an academic year and was provided, in part, by the Google analytic reports on Facebook and self-reports of posts by members. The results support the use of active tacit knowledge activities, knowledge management and social media to enhance the student learning experience and help create the knowledge that will be used by students to construct meaning.

Keywords: constructivism, knowledge management, tacit knowledge, social media

Conference Title: ICILMT 2016: International Conference on Innovative Learning Methods and Technologies

Conference Location: Havana, Cuba Conference Dates: November 24-25, 2016