Impact of Learner Generated Digital Content on Knowledge Acquisition and Representation

[1]Dorothy Cooshna-Naik, [2]Jamalkhan Fardeen Khan
[1]University of Mauritius, [2]John Kennedy College (Mauritius)
d.cooshna@uom.ac.mu, fardeen.jamalkhan@umail.uom.ac.mu

Abstract

Classroom instruction and learning continue to change dramatically with emerging technologies. Today's technology-rich environment provides access to content on any subject matter in various forms. However it is important for the students to learn how to use the information accessed and construct knowledge instead of blindly 'taking in' the information without understanding. The educator role is redefined from the 'know-it-all' to that of a 'learning director', 'facilitator', 'orchestrator' whereby he guides the students through this process of co-constructing and dissemination of knowledge. It is urgent for the Mauritian education system to move from the culture of 'spoon feeding' and 'rote learning' which still predominate to a constructivist model of teaching and learning. In this paper, we examine the benefits and limitations of learner generated digital content on acquiring knowledge of Biology concepts. We also evaluate to what extent this type of digital content impact on the students' grades, attitudes and perception. Research shows that student involvement, hands-on projects and team work are successful pedagogical approaches (Kayes & Kolb, 2005).Project Based Learning was favored for this study which involved 36 'O' level students from a boy's State Secondary School and the subject chosen was Biology. Four groups were formed and each one of them was empowered to produce digital content in the form of video podcasts/enhanced podcasts to illustrate their understanding of 'Ecology' related issues. Each group was responsible to address one specific concern which they researched, reflected on, analyzed and presented the information in the form of a coherent learning product which could be accessed through iPods, MP3 players and laptops – portable devices which nowadays form an integral part of the 'net generation' students. The emphasis is laid on 'learner generated content', 'Peers produce knowledge' and 'users add value' - which according to Lee & al. (2008) are reminders that appropriate knowledge building activities rely on participants, their knowledge and supporting tools, enabling collaboration and the creation of shared artefacts possible. Several data collection instruments were used. These included questionnaires which were administered to the research sample of students. A 'digital literacy' questionnaire was completed by the participants at the beginning of the study to elicit information on technological ownership and abilities whilst a second questionnaire focused on gathering their views on this new learning method. To obtain further qualitative data, focus group was organized. Finally to triangulate the research data, end of the 'ecology' chapter test marks where digital video content were generated was compared with the end test results of the same group sample for previous chapters which were taught using traditional methods of instructions. Findings revealed that learner generated content has had a positive impact on the grades. Learners demonstrated enthusiasm while generating the content using digital media and also enjoyed the mobile nature of this type of digital content.

References

[1] Kayes, A.B., Kayes, D.C., & Kolb, D.A., (2005). Experiential learning in teams. Simulation & Gaming, 36(3), 330-354
[2] Lee, M., McLoughlin, C., Chan, A. (2008). Talk the talk: Learner-generated podcasts as catalysts for knowledge creation. British Journal of Educational Technology, V 39 (3), 501-521