

Guest Editorial Preface

Special Issue on Student-Generated Multimedia: A Shift in the Educational Paradigm for the 21st Century

Laurel Evelyn Dyson, University of Technology Sydney, Sydney, Australia

Hardy Ernst, University of Queensland, Brisbane, Australia

From the Information Superhighway of the 1990s to Web 2.0 in the 21st Century, there has been a major change from expert-generated content to user-generated content. This paradigm shift has its parallel in education, with students increasingly involved in student-generated multimedia projects in which they produce videos, podcasts, digital stories, games, screencasts, photographs, slowmations (slow animations), and a host of other digital content as a way of engaging with the curriculum and their peers. Convergence, as exemplified by mobile technologies such as the smartphone and iPad or tablet PC, has been a major enabler of this phenomenon, as has the development of free file-hosting sites such as YouTube, Flickr and Pinterest.

This Special Issue explores student-generated multimedia, its benefits for learning, and strategies and issues with its implementation. Adopting an evidence-based approach, it examines the multifaceted characteristics of this pedagogy, in which audio-visual elements, the construction of artefacts, collaborative processes, peer learning and authentic contexts all contribute to rich learning and aid in sense-making for the students. This Special Issue further contributes to the current discussion about bring-your-own-device (BYOD) approaches in education, and the affordance of technologies for student-generated multimedia.

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The opening article leads with a controversial and challenging suggestion that assumptions regarding the superiority of student-generated multimedia approaches over traditional written assessments are not always valid. In fact, poorer learning outcomes were the result when university students in a health science subject were required to create a slowmation for one of their assignments. Redesign of the assignment found that improved performance only came with offering a choice between written and multimedia assessment. Student focus-group feedback revealed that students adopt deliberate, individual learning strategies. The authors propose that student agency and individual preferences need to be recognized.

The second article presents digital storytelling as a way of introducing structured inquiry to novice science learners. Using the video camera of tablets as an observation tool, primary school students in Finland recorded a chemical reaction and edited their videos. The authors note the value of image capture in allowing students to revisit their experiment during the editing process and so deepen their understanding. However, the quality of videos and the depth of conceptual learning varied and therefore the authors advocate some changes to the process, which should be of interest to practitioners.

The authors of the third article put forward a radical revision of student-generated multimedia, that is, blended media. In this, students produce a “media collage”, which comprises a combination

of content created by themselves and that selected from the almost limitless range of ready-made media available on the Internet. Interviews with pharmacology students and an examination of their blended media showed high levels of engagement with the subject content and the development of digital literacies and media-making skills. The study is important for breaking down the dichotomy between student- and expert-generated media, and demonstrating the feasibility of a BYOD approach with minimal multimedia training for this cohort of learners.

In the fourth article the views of Malaysian academics on student-generated multimedia are analyzed. The author argues forcibly for the creation of multimedia content by Malaysian university students as a way of filling the gap in local content to support mobile learning and as a more engaging way of studying local culture. Countries with small populations, such as Malaysia, are being swamped by content from the English-speaking world, mainly the USA and UK, and there is little financial incentive for mobile content providers to develop multimedia products for such markets. The author demonstrates a positive shift in attitudes once an intervention had occurred in which students used their mobile devices to produce a range of multimedia in the subjects taught by the academics.

The final article examines the important issue of graduate attribute – soft skill – development in university students, and offers student-generated multimedia as one solution. The authors describe the design, evaluation and redesign of an assignment in which accounting students produced a screencast explaining a basic accounting concept to their peers. Evidence from student surveys and academic evaluation of the screencasts verified that the assignment extended students multimedia skills beyond their existing digital practice. Students also valued the opportunity for creative thinking and innovation, and for teamwork, while the researchers noted evidence of self-directed learning. The assignment provided an engaging and sustainable learning activity, of relevance both to researchers and practitioners.

CONCLUSION

The shift from students as consumers to creators of content in their private lives, and the changing nature of this content from text-based to multimedia, demand a radical change in educational practice. As the articles in this Special Issue demonstrate, this change has well and truly begun. Authentic learning activities and assessment tasks that require students to produce multimedia address the need for them to be expert communicators, and not just in the traditional forms of writing and speaking, but using the communication tools and new media of our age.

Students entertain, and habitually expect, to engage with learning resources anytime, anywhere and with any device. This compels us to further the integration of learning into an increasingly mobile society. By recognizing the near ubiquity of Internet-enabled handheld devices, we are leveraging student-owned technology for academic benefit, and creating active, high-impact and engaging learning opportunities. It is notable that four out of the five articles in this Special Issue adopted a BYOD approach. Only the school-based activity used tablets provided by the school to overcome potential issues of equity or damage to student devices.

Student-generated multimedia offers a path to educational reform, moving to a model in which students are at the centre of learning and in which their practice in the educational system reflects their current practice and interests outside the institutional environment. Furthermore, such tasks, when well designed, promote intellectual rigor, logical reasoning and critical thinking, preparing our students for their role as productive members of the workforce and as citizens exercising their democratic rights in the 21st Century.

Laurel Evelyn Dyson

Hardy Ernst

Guest Editors

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Hardy Ernst is a lecturer in the School of Biomedical Sciences at The University of Queensland, Brisbane, Australia. His interests lie in discipline-based Scholarship of Teaching and Learning where he has a consistent record of grants, publications and awards for teaching excellence. He is internationally recognized for his work on active learning, and in the development of mobile learning applications in the biomedical sciences. His work has previously been published in journals such as Advances in Physiology Education and the American Journal of Pharmaceutical Education.