Learning Workflow using Learner-Generated Digital Media (LGDM) Assignments

Abstract:
With the implementation of Learner-Generated Digital Media (LGDM) as an assessment tool (Reyna et al., 2017), students are increasingly becoming co-creators of content in Higher Education. To implement digital media assessments, educators require an understanding of the different media types and the skills involved in effective production. This understanding will enable them to effectively allocate student workload and marks for the task. It will also inform the design of marking rubrics that assess digital media as part of communication skills. The digital media type and its complexity will define if the task should be individual or group work. If group work is required, a strategy such as peer review needs to be implemented to ensure every member of the group contributes. Additionally, if educators understand digital media types and the skills required to produce LGDM, they can scaffold student digital media literacy across curricula.

This research proposes a Learning Workflow for Digital Media Assignments (LWDMA) based on two theoretical underpinnings: the Digital Media Literacies Framework (DMLF)(Reyna et al., 2017); and the concept of digital technologies as Technological Proxies (TPs) in the learning process (Hanham et al., 2014). The DMLF identified three domains (conceptual, functional, and audio-visual) which need to be mastered to produce effective LGDM. In contrast, TP theory identifies digital technologies as agents performing important tasks on behalf of the user. Currently, this project is collecting data that will inform the validity of the LWDMA.

Introduction
There is a new trend of engaging students in co-creation of content by using digital media to support their learning experience (Hakkarainen, 2009). Teachers are using these technologies as a valuable tool for motivation, collaboration, expression, and authentic assessment (Hazzard, 2014). However, studies to evaluate the effectiveness of LGDM assignments have not been extensive (Hoban et al., 2015). Also, many educators feel that they do not possess the skills required to implement digital media assignments (Malita & Martin, 2010). The aim of this research is to propose a Learning Workflow for Digital Media Assignments (LWDMA) to support educators and students in the implementation of digital media as an assessment tool in Higher Education.

Theoretical underpinnings
The LWDMA uses two theoretical constructs: the Digital Media Literacies Framework (DMLF)(Reyna et al., 2017); and the concept of digital technologies as Technological Proxies (TPs)(Hanham et al., 2014). The DMLF identified three domains needed for the effective production of LGDM: (1) conceptual; (2) functional; and (3) audio-visual (Figure 1). The conceptual domain is related to content creation (storyboarding) and is the starting point of the LGDM assignment (yellow rectangle). The functional domain is related to Intentional Technological Proxies (ITPs)(devices, software, applications) which perform a task on behalf of the student (light blue rectangle). The audio-visual domain represents the digital media principles which govern the effective production of digital media artefacts (light green rectangle). The LWDMA model presents a taxonomy of digital media types, mapped against the skills required in these three domains.

Methodology
To evaluate the validity of the LWDMA model, our Faculty implemented LGDM group assignments in Autumn 2017 (7 subjects, years 1-3, n =1,500). The evaluation will use a mixed-methods approach (Tashakkori & Teddlie, 2010). A 40-step online questionnaire, marks attained, and group contribution using SPARKPlus application, will be collected at the end of the semester. Additionally, focus groups, student interviews, and educator interviews will be conducted to assess the efficacy of the LWDMA.
Work in progress
At the beginning of Autumn 2017 semester, students were given a topic to research and attended a workshop on storyboarding for digital media creation. Three weeks later, they submitted their storyboards for review/feedback from the unit convenors. Finally, a lecture on digital media principles was delivered, and support material was uploaded into the Learning Management System (LMS). We are aiming to finalise data collection at the end of the semester and analyse it using SPSS and NVivo Software. Students seem to be engaged in their LGDM projects and are willing to learn more about digital media.

References


