Assessment in a Digital Age: Rethinking Multimodal Artefacts in Higher Education

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Abstract: Higher education institutions increasingly expect students to work effectively and critically with multiple modes, semiotic resources, and digital tools. However, assessment practices are often insufficient to capture how the complex, collaborative nature of multimodal artefacts represents disciplinary knowledge. Drawing on theories and practices related multimodality, mobility, and place, this study offers insight into the design and assessment of students' digitally mediated work.

Introduction

Digital assignments are increasingly part of the landscape of higher education, with educators in many disciplines seeking to scaffold students' competence and engagement with social, visual, interactive, and multimodal representations. However, assessment rubrics for such assignments have not always kept pace: teachers may be consciously or unconsciously working with "a paradigm of assessment rooted in a print-based theoretic culture" (Curwood, 2012, p. 232). Consequently, technical and compositional assessment criteria do not always address the richness and complexity of multimodal work. Without criteria that can account for this complexity, instruction, feedforward, and feedback cannot fully support students to develop their communicative capacities for future work in digital spaces.

This poster describes work in progress from a collaborative project between members of the Centre for Research into Learning and Innovation (The University of Sydney, Australia) and the Centre for Research in Digital Education (University of Edinburgh, UK). The aim of the research is to develop new insights into the nature of digital assignments and methodologies for their design and assessment, drawing on theories of place-based learning, mobility, and multimodality. The project addresses the following research questions:

- 1. How can theories of mobilities and place-based learning inform research into and assessment of multimodal student work?
- 2. How do university students use assessment criteria for self and peer assessment of multimodal work?
- 3. How do teachers in higher education effectively design and assess students' multimodal work?

Theoretical framework and literature review

Multimodality and multimodal composition: From theory to practice

Learning in a digital age involves the creation and assessment of multiple, multimodal, and multifaceted textual representations. Informed by theories of multimodality and place-based learning, the construction of multimodal texts includes decisions related to the presence, absence, and co-occurrence of alphabetic print with visual, audio, tactile, gestural, and spatial representations (Cope & Kalantzis, 2009). Whilst learning and literacy are still grounded in decoding, comprehension, and production, the modalities within which they occur extend far beyond written language. As Curwood (2012) notes, a focus on the meanings of multimodal student texts has been a central emphasis of work in this area, but there is still a need for more nuanced understanding of the "complex ways in which technical skills, composition elements, modes, and meaning interact" (p. 242). Greater attention to materiality, including artefacts (Pahl & Rowsell, 2011), movement (Leander & Vasudevan, 2009), and place (Ruitenberg, 2005) enriches this understanding, and we argue that the inclusion of multimodal compositions in formal learning environments needs to consider how the conceptualisation, design, and assessment of such texts shape teaching and learning.

Innovative digital assessment within higher education

Higher education institutions around the world are increasingly incorporating digital tools, spaces, and resources to support teaching and learning, and prepare graduates to work with technology, engage with multimodal artefacts, and be leaders within their respective fields (Adams Becker, Cummins, Davis, Freeman, Hall, Giesinger, &Ananthanarayanan, 2017), including in assessment tasks. Many teachers in higher education are seeking new approaches to incorporating technology into disciplinary learning, assessing collaborative, digitally

mediated work, and facilitating student learning across modes, tools, and semiotic resources. With assessment, grade descriptors, rubrics, and exemplars are commonly used to increase the transparency of assessment standards and assist students to develop assessment literacy, yet we argue that teachers and students alike must engage in meaning making with assessment expectations and standards. We suggest that teachers within higher education need to consider how to create a dialogue with students around assessments.

Methodology

Over two semesters in 2017 and 2018, this project analysed, in depth, the creation and assessment of work in undergraduate classes at the University of Sydney with 130 total students. The instructions given to students were to work in pairs to create a three-minute film about their "Australian cultural experience", including structured narrative, interviews, cinematic elements, and a reflective account of the process. The initial stage of the research involved analysing existing processes and assignments, conducting interview and focus groups with students, interviews with tutors, and developing an assessment framework that uses multimodal and place-based analysis to understand student learning. Through the development of an innovative multimodal assessment framework, we are redesigning, implementing, and analysing a new rubric in relation to the task, and comparatively studying students' developing understanding of multimodality and course content.

Emergent findings

In this section of our poster, we focus on the nature of the assignment rubric and how tutors and students engage with this, drawing on our preliminary analysis of interviews, artefacts, and assessment guidance. The rubric for this multimodal assignment – a three-minute film – carefully breaks down the different elements the students are expected to include in their assignment, under the headings of 'cultural narrative experience', 'cinematic elements', and 'collaboration', with three categories for each criterion ('does not meet', 'meets' and 'exceeds'). The criteria can usefully be characterised as an act of 'decomposition' (Bateman 2012, p.18) – where a holistic view of the multimodal artefact is broken down to focus on specific features or compositional elements (for example use of lighting, diegetic and non-diegetic sound, and transitions).

The tutor described an iterative process for assessing student work that aligns with the rubric but also attempts to achieve this holistic view. First, he watched all videos without making notes, so as to focus on overall impressions and affective aspects. On the second viewing, the tutor took notes according the rubric and allocated a mark to each film. On the final viewing, he made some adjustments to the marks and comments as needed. The question of what can be contained within the rubric and what, by necessity, goes beyond it in these types of assessments, is central. The rubric guided students in the use of discipline-specific vocabulary and highlighted the importance of collaboration in reflecting on the meaning of Australian culture and representing it within a multimodal composition, yet students also felt that it 'left a lot of room for interpretation'.

The next phase of the project will explore how this assignment rubric and support for students around the assignment can capture more nuanced elements, including how compositional choices build or create tensions with the narrative, how to use multimodal elements to critique oversimplification of cultural meanings, and how to construct multimodal arguments. This revised rubric will then be implemented in the subsequent semester to gain insight into how multimodal composition can be effectively assessed within higher education.

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