

An emerging learning design for student-generated 'iVideos'

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This paper describes an emerging learning design for a popular genre of learner-generated video projects: *Ideas Videos* or *iVideos*. These advocacy-style videos are short, two-minute, digital videos designed “to evoke powerful experiences about educative ideas” (Wong, Mishra, Koehler & Siebenthal, 2007, p1). We draw on a recent study in teacher education to present a structured description of a pedagogical approach to iVideo filmmaking. A visual learning design representation (Agostinho, Harper, Oliver, Hedberg & Wills, 2008) and a LAMS-based generic learning design template (Cameron, 2008) form part of this description.

Keywords: generic learning design video filmmaking templates

Introduction

There has been a paucity of pedagogical frameworks for supporting specific genres of *learner-generated* video projects and more work is needed to develop and document research-based principles of good teaching practices with these project-based tasks. This paper focuses on an emerging genre: *learner-generated ideas videos* (or 'iVideos'). Wong, Mishra, Koehler and Siebenthal (2007) espouse this succinct, advocacy-style genre of filmmaking as a valuable, transformative tool for learners, designed to spark emotion and imagination. Informed by a recent study in teacher education, we describe a learning design representation and associated pedagogical planner to present a structured description of a teaching approach for iVideo filmmaking.

Background

The value of *learner-generated* digital video projects (referred to subsequently as 'DV tasks' or 'DV projects') has been espoused by numerous education researchers (eg., Bull & Bell, 2010; Kearney & Schuck, 2006; Shewbridge & Berge, 2004). These project-based tasks can support a range of learning outcomes in most curriculum and discipline contexts, including the development of traditional and new literacy skills and affective benefits. They can support a rich, authentic learning experience, encouraging student autonomy and ownership, meaningful student roles and interactions, especially when students are given an opportunity to discuss and celebrate their products with a relevant audience (Kearney & Schuck, 2006). However, formalised pedagogical frameworks are needed to help teachers leverage these worthwhile outcomes from these complex, open-ended tasks. Expert teaching and learning practices with DV tasks, tailored to the subtle nuances of specific DV genres, need to be documented in a consistent and reusable form so they can be adapted to different learning environments. These forms of documentation, describing well-researched sequences of activities and interactions supporting students' learning experiences, are referred to as *learning designs or pedagogical frameworks* in this paper.

Pioneering efforts to develop pedagogical frameworks for supporting learning with specific genres of student-generated DV tasks have recently emerged. For example, Cooper, Kosta, Lockyer and Brown (2007) described a learning design to support multi-literacy development for K-12 students working with learner-generated *journalistic DV tasks*. Their design focuses on analysis, construction and deconstruction activities. Analysis activities include students interpreting a variety of media images and comparing news stories across media types. Construction activities include creating a script and editing a digital video

news item using professional footage, and also creating their own news item. Deconstruction activities include presentations to the class and comparison of students' new items. More recently, Hoban (2009) described a four-stage learning design underpinning learner-generated *slow motion animations* (or 'slowmations'). The stages include planning, storyboarding, construction and reconstruction. Also, Kearney (2011) recently described a learning design for *student-generated digital storytelling*. Digital stories combine the tradition of oral storytelling with 21st century multimedia and communications tools. Unlike oral stories, they are permanent and can be disseminated widely, making them accessible for reflection and critique (Davis, 2004). This learning design emphasised peer feedback and sharing of perspectives at all stages of the filmmaking process.

This paper introduces an emerging learning design for supporting another specific genre of learner-generated DV projects: *iVideos*. Wong et al. (2007) provide a rationale and discuss guidelines for supporting this new DV genre, including group learning strategies, formative feedback procedures and a 'coach / mentor' teacher role. The learning design presented in this paper is informed by their guidelines and builds on the before-mentioned learning design for student-generated digital storytelling genre (Kearney, 2011). This latter framework was considered appropriate given the similar characteristics between digital stories and iVideo genres. Like digital stories, iVideos emphasise emotional content through economy of detail, supporting communication of the filmmaker's "personal beliefs, values and aesthetic sensibilities" (Girod, Bell & Mishra, 2007, p 24).

Outline of study

Participants in this case study were 33 volunteer pre-service elementary education students and their lecturer from two classes in consecutive years (17 from 2010 class and 16 from 2011 class) choosing a subject titled *Current Issues in ICT in Education*. This subject is completed in the third year of a Bachelor of Education program at an Australian university and its main goal is to deepen students' understanding of contemporary curriculum, professional, social and ethical issues relating to ICT in school education. Both cohorts completed an identical assessment task comprising an iVideo and accompanying written rationale focusing on a relevant, negotiated topic of interest. The two page rationale was required to explain students' iVideo design and provide a research-based background to their topic.

The pre-service teachers received support with their iVideo filmmaking following the before-mentioned pedagogical framework for teachers making digital stories (Kearney, 2011). A crucial early session used roundtable discussions, promoting exchange of students' ideas about their iVideos with peers and their lecturer. Another important stage was the final showcase session where students celebrated and shared the penultimate version of their iVideos with staff and peers. These presentations provided crucial opportunities for class discussions on chosen topics and for formative feedback. Most students embedded their web-based final iVideo and written rationale in the project's online gallery (<http://sites.google.com/site/teacherivideos/>) and further peer feedback was encouraged via the comments feature at their selected video host (e.g. Youtube). A class of student teachers doing a similar subject at a UK university were invited to react to the iVideos to exchange international perspectives on their chosen topics and also to facilitate critical feedback from viewers unknown to the student filmmakers.

A qualitative case methodology was used to uncover participants' experiences with their iVideo task, enabling a comprehensive description to emerge (Merriam, 1998). An interpretive approach to data analysis was employed, providing insight into how participants made sense of their teaching and learning experiences (Mason, 1996). Data sources included student and staff surveys, student focus groups and artefact analysis (e.g. students' iVideos and accompanying written rationales). An identical 35-item survey was administered to both 2010 and 2011 students after completion of their task. It probed students' views about their experiences completing the iVideo task using 25 Likert scale questions and 10 open-ended questions. A staff survey was also completed by the lecturer. Under this framework, the main focus of the study was to investigate the efficacy of pre-service teachers creating their own iVideos to inform their professional learning in their role as teacher filmmakers.

Data from the study and critical collaborative reflection (Bullough & Gitlin, 1991) amongst the researcher (the first author) and critical friends of the project (the second and third authors), assisted in forming principles of good practice tailored specifically for iVideos, building on the before-mentioned pedagogical framework for student-generated digital storytelling (Kearney, 2011). Informed further by

relevant literature, a beta formal representation of the resulting learning design for learner-generated iVideos is presented in this paper. An associated LAMS-based template for enacting this design is also proposed. LAMS was chosen primarily because its intuitive drag and drop authoring environment and was considered user-friendly for both students and staff. It is freely available as open source software, provides local support and has shown positive signs for engaging the teaching community (Masterman & Lee, 2005; Russell, Varga-Atkins & Roberts, 2005).

An emerging learning design for student-generated iVideos

A pedagogical framework for iVideos was adapted from the student-generated digital storytelling learning design (Kearney, 2011) and trialled over two successive classes as described in the previous section. Subsequently a beta learning design for learner-generated iVideos has emerged from the study and is represented by a graphic formalism in Table 1. Although it is text-based and tabular in style, the structure of the notation system used in this formal representation is based on the visual learning design representation system espoused by Agostinho, Harper, Oliver, Hedberg and Wills (2008). The table is divided into three categories: *resources*—digital facilities that learners interact with; *tasks*—activities the learners participate in; and *supports*—usually teacher-mediated procedures assisting learners' engagement with resources and tasks (Agostinho, Oliver, Harper, Hedberg & Wills, 2002). Arrows in the representation depict the sequence of activities and interactions between these three categories.

Unique features of this emerging learning design (distinct from the digital storytelling framework in Kearney, 2011) include:

- students' written rationale as a research-based document informing the design and production of their advocacy-style iVideos (phase 1.2 in Table 1)
- more expansive use of Web 2 communities to support dissemination of students' advocacy-style iVideo messages (4.2)
- the option of targeting peers in a partner institution (in our case, from a university in the UK) (1.1) to provide formative assessment (3) and especially to elicit an exchange of perspectives on selected iVideo topics (4.2)
- students' examination of institution guidelines (1.1) for professional practice with social media for guidance in their iVideo preparation and subsequent use of Web2 spaces

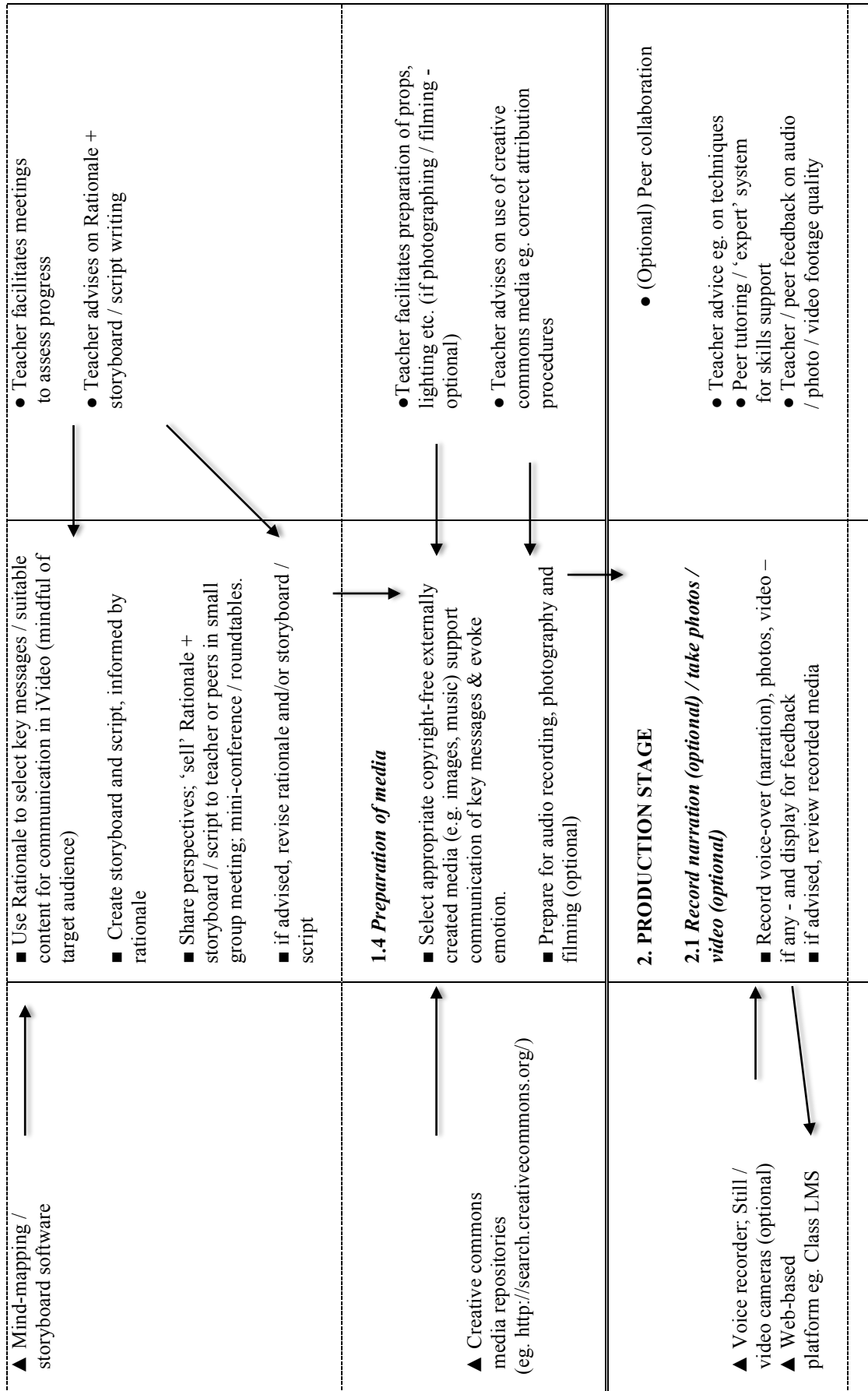
Unlike digital stories that are often autobiographical, iVideos are research-based and advocate a cause. The requirement for an accompanying written rationale helped students to keep their iVideo succinct and gave them an opportunity to include more in-depth reporting of their chosen topics. Staff and students perceived the rationale as enhancing the academic rigour to the iVideo task. For example, Marcel posited in his staff survey: "The need for students to develop a rationale for their iVideo ensured that the eventual iVideo was research based and the content and messages of the iVideo able to be defended academically"; while Sue mentioned in her survey: "The rationale provided an avenue to express a deeper, more academically sound exploration of the topic." Bo concurred when reflecting on her topic of assistive technologies: "The process of researching and putting into words what assistive technology does for students allowed me to gain a greater understanding of the topic and therefore produce an iVideo full of knowledge, compassion and understanding for the topic." Overall, the students thought the rationale was an effective supplement to the iVideo, 32 students either strongly agreed (7) or agreed (25) with the following statement in their survey: 'I felt my iVideo effectively supplemented my written rationale' (1 disagreed).

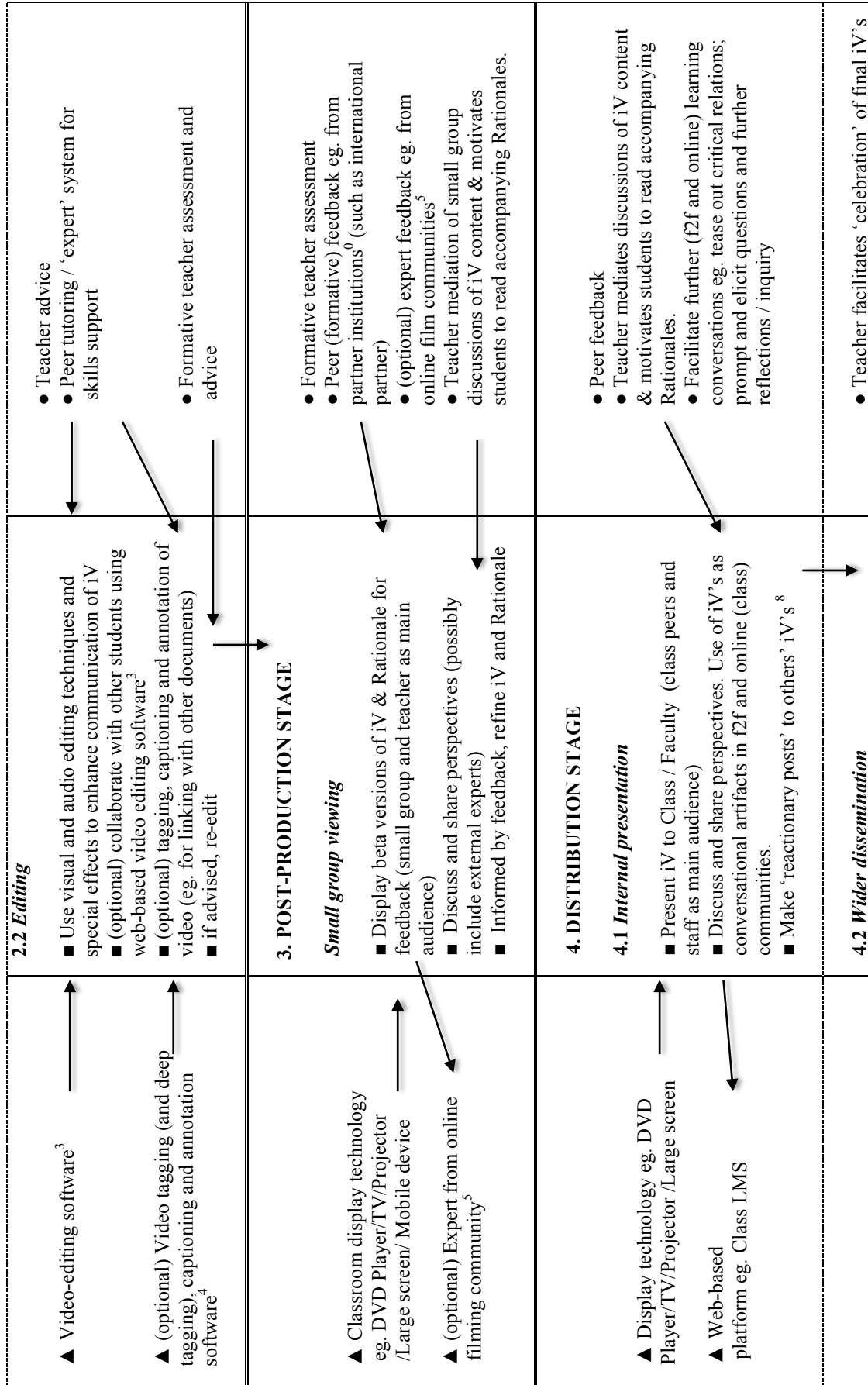
Students were excited by posting their films on Youtube and the class wiki and pleasing levels of exposure and commentary occurred in these spaces. For example, Lisa (2010) received 1100 views (see <http://sites.google.com/site/teacherivideos/teacher-ict-proficiency>) while Abbey (2011) received more than 800 views, including 14 comments (see <http://www.youtube.com/watch?v=IXnqToAwqiE>). Abbey mentioned in her interview:

The best experience was seeing the final product and knowing that I had researched this topic and created a piece of work all by myself. Being able to share that with a wider audience and hear such positive feedback really made the whole experience wonderful and well worth it.

Table 1: Learner-generated iVideos: Visual learning design representation (adapted from Kearney, 2011)
 (The following abbreviations are used: *iV*: iVideo or 'Ideas Video'; *DV*: Digital Video; *f2f*: face-to-face; *LMS*: Learning Management System; *CC*: Creative Commons)

▲ RESOURCES	■ TASKS	● SUPPORTS / SCAFFOLDS
<p>▲ Exemplary iV's (from external sources / previous students) →</p> <p>▲ Key readings introducing iVideo genre¹ →</p> <p>▲ Institution Web 2 protocols →</p>	<p>1. PRE-PRODUCTION STAGE</p> <p>1.1 Development of ideas</p> <ul style="list-style-type: none"> ■ Define purpose and target audience⁰. ■ Review elements of iV genre¹ (advocacy, succinct, evoke emotion etc.); ■ (If publishing films to Web2 space such as class wiki, Youtube etc.) Review Guidelines for Professional Practice with Social Media². Clarify potential public nature of audience and publishing platform & implications for Pre-production and Production phases. 	<ul style="list-style-type: none"> ● Teacher displays selected models of iVs ● Teacher prompts: suggestions for purpose, focus questions to guide ideas for content ● Teacher advises on professional practice with Web 2 publishing (including Institution protocols)
<p>▲ Exemplary Rationales (from external sources / previous students) →</p>	<p>1.2 Research and write rationale</p> <ul style="list-style-type: none"> ■ Negotiate & define topic. ■ Research topic; Synthesise and refine information for succinct text-based Rationale. ■ Write coherent rationale for iVideo. 	<ul style="list-style-type: none"> ● Teacher introduces topics & negotiates final selection of topics to ensure range of topics and perspectives suitable for audience⁰ (e.g. global perspectives for international audience) ● Teacher displays selected models of Rationales ● Teacher prompts: focus questions to guide ideas for content (considering audience)
	<p>1.3 Creation of iV storyboard / script & Roundtables</p>	<ul style="list-style-type: none"> ● Peer collaboration (optional). I.e. iV's could be completed individually)





<ul style="list-style-type: none"> ▲ Web 2.0 communities⁷ ▲ External class (e.g. from another institution) 	<ul style="list-style-type: none"> ■ Further exposure of iV & Rationale with wider (face-to-face⁶ and online⁷) audience⁹. Possible video-conference with external class. ■ Use of iV's as stimulus for ongoing conversation in online (external) communities⁹: Sustained discussion and sharing (possibly global) perspectives on topic. ■ Reflect on learning about own and others' topics. Raise questions for future inquiry. 	<p>& Rationales via f2f⁶ and web-based/ (external) presentations</p> <ul style="list-style-type: none"> ● Teachers (including teacher of external class) mediate ongoing online (synch. &/or asynch.) discussions & sharing of perspectives of iV content. ● Teachers use of online posts as 'conversational artefacts' to elicit common themes & suggest questions for future inquiry
<p><i>Notes:</i></p> <p>⁰ such as peers, pre-service teachers in own institution or partner institution (e.g. international partner), practising teachers. NB. Teacher needs to liaise with partner institution well in advance to determine nature and timing of exchanges.</p> <p>¹ eg. Girod et al., (2007); Wong, et al., (2007).</p> <p>² e.g. see NSWDET Social Media Guidelines https://www.det.nsw.edu.au/policies/technology/communication/implementation_1_PD20110418.shtml</p> <p>³ eg. Desktop-based software such as <i>iMovie</i>, <i>Moviemaker</i>, <i>Photostory</i>; web-based applications such as <i>Jaycut</i>, <i>Wevideo</i> or <i>Siroomie</i>.</p> <p>⁴ eg. see Johnson, Levine & Smith, 2008; Rich & Hannafin, 2009</p> <p>⁵ local / international film communities</p> <p>⁶ eg. (internal) gala night, film festival involving staff from other Faculties and Institutions, families & friends;</p> <p>⁷ via class wiki or blog, class Youtube channel, Teachertube, Wikis, Blog; community-based film festivals, national and international DV competitions. Involves local and international peers & staff, community members, outside experts;</p> <p>⁸ e.g. in YouTube or TeacherTube communities .</p> <p>⁹ partner institution can use iVideos and Rationales to inform their (separate) activities</p>		

The important role of audience was a strong consideration reported in the students' interviews and this role was strengthened (or at least diversified) in the iVideo learning design. The international collaboration with the UK student teachers was perceived as a positive aspect of the project and added to our students' sense of accomplishment and advocacy: "I found it exciting to receive feedback from overseas as it made me feel good about my ivideo. It makes the time spent on it worth it as we know it is reaching out to people other than people in our class." (Rachel, survey). Bo expressed similar sentiments in her survey: "I loved interacting with peers in the UK. The whole concept of interaction across the world is something I would love to take into my own classroom as the experience was so rewarding." Staff member Marcel noticed this attention to audience: "The messages are tight, research driven, relevant and engaging to the audience. A lot is going on here, not least of which is awareness of audience."

International perspectives on the iVideo topics extended student views on the commonality and difference faced by educators on different sides of the world. Whilst not asked specifically to provide an international context to their iVideos, there were common themes especially in the area of children with special needs and the integration of such children into the mainstream and the consequent challenges this presented educators. As well, perceptions of UK students changed as they redefined the concept of 'rural' within Australian as a result of viewing an iVideo on rural education (<https://sites.google.com/site/teacherivideos/rural-education>) compared with what they understood 'rural' to mean within the UK. However, the partnership was not only one-way, with the UK students receiving feedback from their Australian counterparts prior to their formal assessed presentations. This probably occurred too late in some ways for the UK students, but dialogue was entered into, references provided and, if not, detailed critiques provided, then certainly words of support and appreciation for sharing their academic work. Students in the UK valued our Australian students' feedback at a formative stage of their own work and incorporated those ideas into their final presentations in the UK. Subsequently, it was suggested that the international collaboration be brought forward into the 'post production stage' in future iterations of our iVideo task.

There was also some refinement needed as to the ideal nature of feedback from our UK partners at the iVideo 'distribution' stage. The UK students were able to see that the iVideos had involved dealing with technical and conceptual material; clear decisions had been made about conveying a message using a multimodal method and a topic had been selected that had required research and consideration. As a result, at the feedback stage, some UK students weren't sure whether they were simply celebrating someone else's work, making links with their own experiences and developing that shared understanding of issues or whether they should be commenting on the successes and potential improvements on the use of video as a medium. For example, Natalie appreciated this feedback: "The feedback from UK peers were great. It was nice to have someone else comment on a work I've done, crediting it for its pros, and helping me become more aware of my areas of improvement." Indeed, the extract in Fig 1 below (from http://www.youtube.com/watch?feature=player_embedded&v=IXnqToAwqiE) shows UK students did negotiate a way of providing feedback that acknowledged the multifaceted nature of an iVideo:

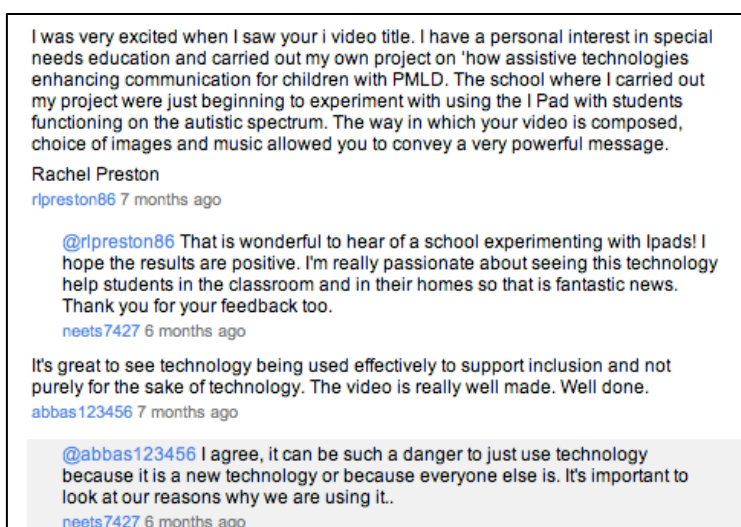


Figure 1: Screenshot of extract from 'comments' section of Abbey's Youtube-based iVideo

Fig. 1. Screenshot of extract from ‘comments’ section of Abbey’s Youtube-based iVideo

An associated (beta version) LAMS-based generic learning design template or pedagogical planner (Cameron, 2008) was subsequently developed as a way for teachers to contextualise and enact this iVideo design. This planner is depicted in Fig. 2 and was tailored from a separate planner focusing on digital storytelling (Kearney & Campbell, 2010) and will be further trialed in 2012.

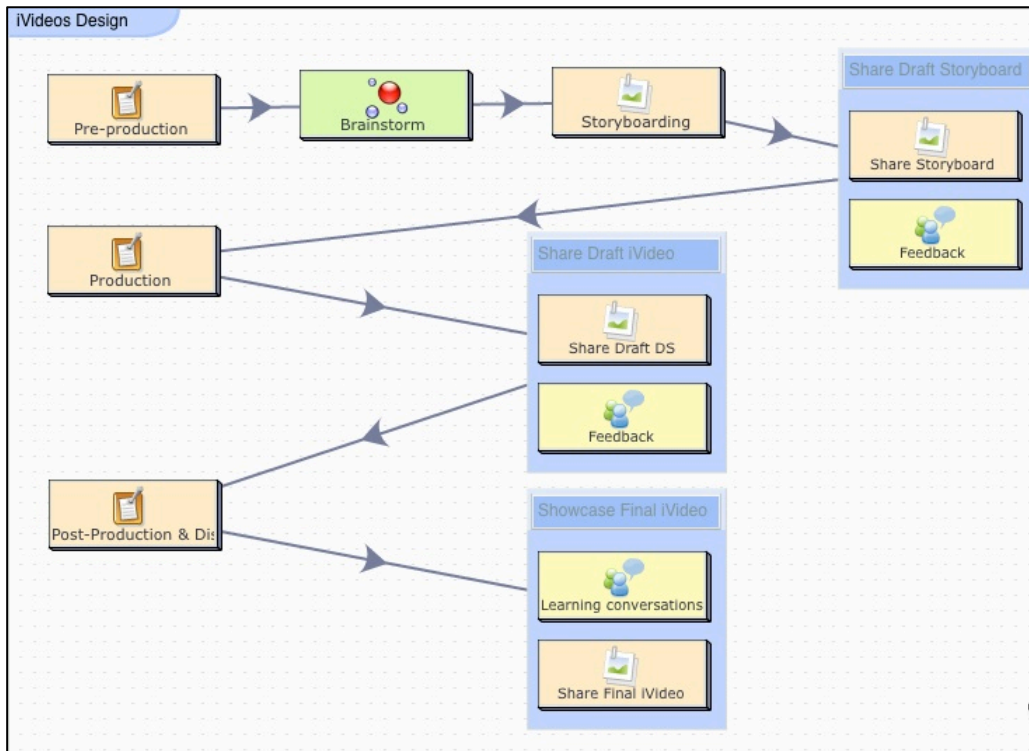


Figure 2: Screenshot of LAMS-based generic learning design template (adapted from Kearney & Campbell, 2010)

Discussion and conclusion

A beta generic learning design, including a LAMS-based template, is presented in this paper to inform student-generated iVideo filmmaking. It has emerged by drawing on data from a recently completed study in teacher education investigating the efficacy of iVideos in teacher education. The design included a research-based rationale to enhance academic rigour and guide filmmaking and emphasised wide audience participation and peer feedback, especially from partner institutions. Partnerships, whilst valuable, do present some challenges when there are differences in cohorts of students, time zones and academic years. None of these challenges are insurmountable, of course, but should be anticipated. The next cycle of evaluation of this design and associated LAMS-based template will involve both practising and pre-service teachers, including feedback from the LAMS community. In particular, we will examine the option of collaboratively created iVideos (using LAMS and web-based applications such as *Jaycut*, *Wevideo* or *Stroome*) with students from partner institutions to enhance the exchange of global perspectives on pertinent issues.

In contrast to learning designs for more tightly focused, smaller scoped sequences such as predict-observe-explain (Kearney & Wright, 2002; Kearney & Dalziel, 2010) and analogical reasoning (Kearney & Young, 2007), learning designs for larger scoped, more complex tasks such as DV tasks remain challenging to document and enact. iVideo tasks are typically open-ended and somewhat ill-defined and involve high levels of creativity and consideration of aesthetics. Indeed, there is a certain tension between the art of teaching for creativity and prescriptive pedagogical scaffolding that may not sit comfortably with teachers with a filmmaking background. Nevertheless, these tasks are accompanied by unique

pedagogical challenges, so guidance is needed on aspects such as teacher roles, peer learning structures and assessment procedures. At the very least the representations presented in this paper provide a talking point for the discussion of design-based pedagogies (Girod et al., 2007), illuminating important features of different genres of DV tasks.

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Please cite as: Kearney, M., Jones, G. & Roberts, L. (2011). An emerging learning design for student-generated 'iVideos'. In Cameron, L. & Dalziel, J. (Eds). *Proceedings of the 6th International LAMS & Learning Design Conference 2011: Learning design for a changing world* (pp 117-127). 8-9 December 2011, Sydney: LAMS Foundation.
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