Research Article

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Student-generated video creation for assessment: can it transform assessment within Higher **Education?**

https://doi.org/10.2478/ijtr-2018-0001 received 1 August, 2018; accepted 14 October, 2018

Abstract: Student-generated video creation assessments are an innovative and emerging form of assessment in higher education. Academic staff may be understandably reluctant to transform assessment practices without robust evidence of the benefits and rationale for doing so and some guidance regarding how to do so successfully. A systematic approach to searching the literature was conducted to identify relevant resources, which generated key documents, authors and internet sources which were thematically analysed. This comprehensive critical synthesis of literature is presented here under the headings of findings from literature, relevance of digital capabilities, understanding the influence of local context and resources, and pedagogical considerations.

Student-generated video creation for assessment is shown to have several benefits, notably in supporting development of digital and communication skills relevant to today's world and in enhancing learning. As an emerging innovation within assessment, intentionally planning and supporting a change management process with both students and staff is required. The importance of alignment to learning outcomes, context and resources, choice of video format to desired skills development, and to relevance beyond graduation is emphasised for video creation in assessment to be used successfully. Video creation for assessment is likely to grow in popularity and it is hoped the evidence of benefits, rationale and guidance as to how to do this effectively presented here will support this transformation. Further research to consider video creation for assessment with individuals rather than collaborative group assessments, and to establish academic rigour and equivalence would be beneficial.

Keywords: Video creation; Assessment; Higher education

1 Introduction

Student-generated video creation assessments are an innovative and emerging form of assessment in higher education contexts across many institutions, programmes and countries (Schofield et al, 2017; Walters et al, 2015) with positive benefits being reported. Despite the benefits of student-generated video creation the overall adoption of this within programmes and higher education institutions remains relatively limited (Lipps, R, 2018), suggesting that its full potential has yet to be fulfilled (Walters et al, 2015).

The Quality Assurance Agency report on Digital Capability and Teaching Excellence (Austen et al, 2016) recommends institutions should horizon-scan emerging technologies and new pedagogical ideas to consider them and their potential application before implementation. Whilst Reeves et al (2017) went some way to reviewing the literature regarding the pedagogical benefits and challenges of learner-generated videos, the limited scope of their research and subsequent focus on only video blogging means that there has not yet been a comprehensive review of the literature on the topic of video creation for assessment or a synthesis of recommendations for its use. Academic staff may be understandably reluctant to transform their assessment practices without robust evidence of the benefit of doing so and some guidance in place as to how to do so successfully. As a comprehensive critical synthesis of literature related to video creation for assessment, it is hoped that the evidence provided in this article will support greater uptake and adoption of this emerging and innovative assessment.

The literature review presented here was focused on answering the question "why would the occupational therapy and hand therapy programmes at University of

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Derby use video creation for assessment?" Whilst this specifically focused on the rationale for video creation for assessment within specific programmes at one institution in the UK, it will be demonstrated how the findings and recommendations are applicable across other programmes, institutions and countries. In deciding on the research question, the focus on establishing the rationale was prioritised as without a robust rationale for doing student generated video creation for assessment, practical details and guidance regarding how to do it effectively are redundant. However, inevitably the literature reviewed also gave examples as to what makes effective practice in video creation for assessment and this will also be presented here.

2 Method

A literature search using a systematic approach was undertaken using EBSCO host, as it covers an extensive range of databases including journals related to education, technology and health and social care. Search terms such as "video/ video creation" "assessment" "student generated/ learner-generated" "digital/ technology/ assessment" and "occupational therapy/ hand therapy/ healthcare/ education" were used to generate responses which were then screened to ensure relevance to the research topic. Additionally, as this is an emerging area, further hand searches of relevant text books (based on identification of key authors), policy documents (grey literature) and a Google search to identify internet sources was also conducted to ensure capture of as much relevant material as possible (Aromataris & Riitano, 2014).

The use of student generated video creation from around the world was reviewed with studies covering a range of countries, institutions and educational levels, and subjects with most but not all using the videos created for assessment. Table 1 offers an overview of the scope of the literature and the video projects described.

Thematic analysis (Braun & Clarke, 2006) was conducted to identify the findings in relation to the research question.

The literature was of varying academic robustness, quality and relevance to the research question. Not all studies reported a robust research methodology or provided the details needed for confidence in the validity and rigour of their findings. Additionally, some were of limited focus or set in a very different context to the programmes and institution being considered in this research question. However, due to the limitations of the literature

available on this as an emerging topic, rather than adopt strict inclusion/exclusion criteria, this study adopted an inclusive, but critical synthesis approach. A full summary of the literature reviewed with integral critique was completed and a table of this is available online at https:// docs.google.com/document/d/1EGum2LCyus2n4HDQEm-BaTr_CQzSzp7SUYexQP8ZlPhI/edit?usp=sharing. As an example, this reveals that Alpay & Gulati (2010) found that students gained skills in technology and communication, that there were benefits for the students in working collaboratively as a group and that the process of active construction of knowledge required in creating the podcasts enhanced the depth of the students learning. However, lack of detail and definition regarding the definition of whether the students created audio or video podcasts, and potential sampling bias due to student self-selection as a voluntary sample were elements of critique. Furthermore, the lack of association with any specific programme and that the podcasts were not being used as a demonstration of learning for assessment limited the generalisability of their findings for this research question. Likewise, for each study included in the literature review, the table details their methodology, main findings and critique.

3 Findings and discussion

The findings are presented and discussed here under the four headings of what literature examples revealed, the relevance of digital capabilities, understanding the influence of local context and resources, and pedagogical considerations. Subsequently, the limitations of the study and implications for practice are presented.

3.1 Findings from literature examples

Perhaps unsurprisingly, nearly all studies explicitly described that using student generated video creation enabled students to gain increased competency and efficacy in using technology (Alpay & Gulati, 2010; Armstrong et al, 2009; Elsom, 2009; Letschka & Seddon, 2010; Pereira et al, 2014; Russell & Moote, 2015; Wong et al, 2003; Yang & Wu, 2012) with this being learnt in an authentic manner not divorced from subject content or pedagogy (Wong et al, 2003). As well as the development of digital skills, development of communication skills was also commented on across several studies (Alpay & Gulati, 2010; Chetty & Pallit, 2013; Letschka & Seddon, 2010; Orus et al, 2016; Yang & Wu, 2012). Information sharing in today's

 Table 1: An overview of the scope of the literature.

Title	Country	Programme/ Institution	Video creation Project
Alpay & Gulati, 2010	UK	Engineering/On campus/ university	Voluntary groups of students within the faculty but across pro- grammes, not associated with a specific class. Students were tasked to create podcasts on topics of interest to raise profile/ awareness of engineering.
Armstrong et al, 2009	USA	Business/On campus/ university	Students worked in groups to produce research presentation on a topic that incorporated a student produced podcast. Students could choose either audio or video as the medium for their
			podcast, creation process often involved interviewing a relevant expert in the topic area.
Blackinton, 2014	USA	Physical therapy education/ online learning/ university	Students video themselves performing palpation and upload the video to their YouTube channels to receive feedback from tutors and peers.
Borowczak &	USA	Teacher education; undergradu-	Students had to create and share their own videos and used
Burrows, 2016		ate; on campus; university	YouDemo as a tool to support their assessment of their own and others work.
Burns & Lester, 2007		Tourism/ On campus/ University of Brighton	Students had to create visual essays about a city using either video or collection of stills.
Chetty & Pallitt, 2013	South Africa	Programme details not known/ University of Cape Town	No description of specific projects, however does provide useful guide to practicalities of using student created video as an assessment.
Cox et al, 2010	UK	Information & Knowledge Management; undergraduate; on campus; University of Sheffield	Students had to create video (or photostory or animated model in powerpoint) for 3 minutes on a given theme for submission for assessment.
Elsom, 2009	UK	Biochemistry/ on campus/ University of Brighton	Students worked in groups and had to create short videos (4 mins) to explain particular topic in biochemistry.
Greene & Crespi, 2012	USA	Business/ accounting; on campus; university	Students worked in groups as a compulsory task to produce one minute television advertisements/ students worked in groups as an optional task to create 2-3 minute educational video on accounting topic of choice to share with peers in class
Kearney & Schuck, 2006	Australia	Across different subjects and topics; 5 schools (two primary and three secondary).	Students worked in groups to create various video creation projects such as animations of astronomy concepts, news stories, advertisements etc as determined by subject areas.
Letschka & Seddon, 2010	UK	2 programmes within Arts/ Design; on campus; University of Brighton	Two groups of students (3D design/wood, metals, ceramics and plastics; history of design & decorative arts & visual culture) had to create short video (30 secs – 1 minute) together either on aspects of objects stored in museum or on contemporary making of objects destined for museum collections.
Orús,et al, 2016.	Spain	Business/ on campus; university	Students worked in groups to create videos that explained a theoretical concept of marketing. Videos could partially replace content of primary compulsory project of the course but no direct link to the final mark was assigned to the video.
Pereira et al, 2014.	Spain	Nursing; on campus; university	Students had to make online videos about "structure and function of the human body"
Reeves et al, 2017	UK	Performing arts programme; on campus; university.	Students had to create their own video blogs reflecting on their own learning with the potential for learners to comment on others blogs too.
Russell& Moote, 2015	UK	English (as a foreign language); distance learning; pre-university foundation level	Students were asked to produce a short individual video on the topic of studying at a British university which was submitted via a YouTube account.
Ryan, 2013	Ireland	Biochemistry module across 3 programmes; undergraduate; on campus; university in Ireland.	The video project replaced a traditional essay and was one part of the summative assessment alongside practical laboratory work and a lab report. Students worked in groups to create an educational digital video for their peers on a biochemical area of interest to them.

Title	Country	Programme/ Institution	Video creation Project
Schofield et al (2017)	New Zealand	Education; post-graduate; on campus, Unitech institute of technology.	Details of video creation project not provided other than that students had one compulsory video creation and traditional essay for assessment; and could subsequently choose between video/ essay format.
Visosevic & Myers, 2017	Australia	Creative industries, Edith Cowan University	Students had to create video essay for submission for assessment.
Walters et al, 2015	New Zealand	Sports; undergraduate; on campus; University	New assessment method – video creation as opposed to previous exam. Students had to create short (3 minute) video to examine a sport and recreation related issue from a sociological theoretical perspective.
Wong et al, 2003	USA	Educational technology; post- graduate; on campus; Michigan University	Students worked in small groups to create "iVideos" – short, two-minute, digital videos designed to evoke powerful experi- ences about educative ideas.
Yang & Wu, 2012.	Taiwan	English as a Foreign Language, High School	Students were required to complete digital storytelling projects within groups as part of the teaching.

 Table 1 continued:
 An overview of the scope of the literature.

world increasingly relies on digital media. Therefore, the combination of these two skills is of real benefit and relevance as the ability to communicate effectively using digital media is increasingly critical for the current generation of students (NMC, 2016; Schrum et al, 2017). In some studies, students recognised these skill developments as being of benefit to them beyond graduation and in their future employment (Kearney & Schuck, 2006; Walters et al, 2015). Whereas, in contrast, the mixed feedback from students in Greene & Crispi (2012) & Reeves et al, (2017) reported that some students failed to see the relevance of the video creation project to either their education or their future careers. This is perhaps a timely reminder and demonstration of the importance of aligning skills and tasks and introducing in them in such a way as to make their relevance clear for beyond graduation above and beyond how it supports meeting immediate learning outcomes (Walters et al, 2015).

A second major theme focused on how video creation enhanced learning (Alpay & Gulati, 2010; Armstrong et al, 2009; Burns & Lester, 2007; Elsom, 2009; Greene & Crespi, 2012; Letschka & Seddon, 2010; Orus et al, 2016; Reeves et al, 2017; Russell & Moote, 2015; Visovesic & Myers, 2017; Wong et al, 2003; Yang & Wu, 2012). A number of contributing factors for this were suggested. These include that video creation is active learning which supports and transforms students from passive knowledge consumers into knowledge constructors (Greene & Crespi, 2012; Ryan, 2013). Second, the processes of video creation, for example in preparing a script, considering how to portray a concept in a new way and review/editing of material, involves several stages of repetition of the content thus facilitating deeper learning (Bonk & Khoo, 2014; Greene

& Crespi, 2012). A further possible factor relevant to video creation and learning relates to the levels of engagement as studies reported that students reported video creation to be enjoyable (Armstrong et al, 2009; Chetty & Pallitt, 2013; Elsom, 2009; Greene & Crespi, 2012; Walters et al, 2015), to increase motivation (Alpay & Gulati, 2010; Pereira et al, 2014; Russell & Moote, 2015; Wong et al, 2003) and engagement (Cox et al, 2010; Elsom, 2009) in the learning process. The ease of sharing/viewing content increased the likelihood of peers and others viewing the content, not just academic tutors. This factor also contributed to increased motivation and engagement (Chetty & Pallitt, 2013; Greene & Crispi, 2012; Rvan, 2013) and likewise to enhance learning. The opportunity to use and develop creativity during video creation projects, for example in considering how to portray subject content in the video, was cited by Cox et al, 2010; Elsom, 2009; Pereira et al, 2014; and Russell & Moote, 2015, as valuable as both a skill development and as a means to enhance learning. Whilst video creation was almost universally recognised across the studies as supporting student learning, there were conflicting views as to if this impacted on assessment outcomes. Whereas Walters et al (2015) reported a significant change in the pass/fail ratios when moving to video assessment, Schofield et al (2017) reported that the choice of medium for assessment between video and/ or traditional essay had no impact on student assessment outcomes.

Furthermore, student satisfaction was cited as a positive benefit in Elsom, 2009 and Orus et al, 2016. The use of video creation for assessment, moreover, was felt to be a potential selling point to attract future students (Russell & Moote, 2015) and be a potential resource for staff and students (Chetty & Pallitt, 2013; Russell & Moote, 2015). In a competitive, metric driven education industry, these are potentially significant benefits. Whilst student feedback reported by Ryan, 2013 also pointed to students' positive perceptions on the completion of their video creation project, they captured further details as to how video creation projects were experienced emotionally, describing it as an emotional rollercoaster comprised of both positive and negative phases. In turn, this conclusion highlights the need for adequate support throughout the video production process.

Although not an integral element of using student generated video creation, many of the literature examples of video creation projects were done collaboratively with groups of students involved in the video creation; thus, the benefits of collaboration and team working were often reported within the studies too (Alpay & Gulati, 2010; Armstrong et al, 2009; Cox et al, 2010; Kearney & Schuck, 2006; Letschka & Seddon, 2010; Pereira et al, 2014; Ryan, 2013). While the benefit of collaboration and using groups in relation to video creation for assessment have been documented, collaborative group assessments are not used on many programmes and can pose their own challenges related to staff and student perceptions, student engagement and complications arising from the group dynamic (Greenbank, 2003; Lavy, 2017). As such, this may be another factor contributing to the reluctance of academics to adopt video creation for assessment. Consideration of the potential, practicalities and experience of using video creation for assessment with individuals rather than groups is an area for further exploration that may support increased adoption.

3.2 Relevance of digital capability within education and beyond graduation

Policy agendas nationally and globally seek to encourage and support the use of digital technologies within the education industry (Gov, UK, 2017; Selwyn, 2013) highlighting the relevance and importance of the development of these skills within higher education (Austen et al, 2016; Davies et al, 2017; JISC, 2015; NMC, 2016). Higher education supports students in developing these skills for both economic and social reasons: to support industries and to address the digital divide.

21st century students, termed Generation Y, Millennials and digital natives can often have pre-existing technological skills and experiences that support video creation (Beetham & Sharpe, 2013; Cox et al, 2010; Greene & Crispi, 2012; Prensky, 2001). However, students may come from a wide variety of backgrounds and some will have limited technology skills: for example, confident using email and the internet but not with skills in digital media creation. Furthermore, even "digital natives" or those who are "techno-savvy" can have difficulty transferring these skills into an academic or professional context (Beetham & Sharpe, 2013; Currant et al, 2011; Hills et al, 2016; Orus et al, 2016). It is therefore not surprising that using technology within high-stakes assessment tasks has been recognised as a cause of stress for students (Lawless & Allen, 2004) and there is a need for specialist assistance to be provided to build confidence initially (Ridley, 2011). Aside from the technological challenges, Cox et al, 2010 made clear that students also benefit from inclusion and support in the change management process of moving to new assessment structures. Student involvement with developing a clear guidance determining the assessment criteria for video creation assignments is recommended (Cox et al, 2010).

As stated, this literature review specifically focused on the use of video creation for assessment within Occupational Therapy and Hand Therapy. Within Occupational Therapy, Hills et al (2016) argued that a requisite level of technological skills is essential to be a competent 21st century occupational therapist. Likewise, the relevance of video creation and integration of technology skills within Hand Therapy is evidenced by recent patient information videos made by Occupational Therapy students in the local hand therapy unit (https://www.youtube. com/watch?v=rNDK5QRBSD8; https://www.youtube. com/watch?v=zPqeX_xfyZM ; https://www.youtube.com/ watch?v=CcEMTwx5Q6A) and the development of apps such as CORE HandTM (Pulvertaft, 2014). As recognised previously, Hills et al (2016) argued that despite new generations of OT students being perceived as "techno-savvy" they lacked the confidence and expertise to use technology skills in clinical practice that they had not had chance to experience or develop confidence in during their prior education. The development of these skills as an essential element of pre-registration education and preparation for future employment indicates that more focus on technology related topics would be beneficial within the OT curricula. Hills et al (2016) recommended that students experience the use of technologies in their studies, so they would be better prepared to confidently use a range of technologies integral in clinical practice and for the advancement of profession. Furthermore, they specifically recommended the creative use of assessment items that include media, e.g. development of short videos, as this would be useful within networking and professional practice. Whilst Hills et al (2016) focused on these issues

specifically within Occupational Therapy, arguably, as other industries also rely on networking and use of technology within the job role, their observations and recommendations are transferable to other job roles both within and outside of a health and social care industry context. Thus, demonstrating the relevance and value of digital capability skills to future graduate employment for students across many programmes.

The alignment of video creation for assessment to graduate capabilities required for industry is of crucial importance. Indeed, Walters et al (2015) argued that it was this alignment to graduate capabilities required for industry that students perceived as of greater value and had higher transformative potential than the innovation of video creation for assessment itself.

3.3 Understanding the influence of context and resources

Selwyn (2013) states that in the application of technology within educational settings it is important to consider fully how issues of local context and circumstances have an impact. The impact of the context can be both the big picture, such as how reliable the electricity and internet access are, and also in terms of understanding how a contexts previous choices and available resources influence future decisions. In considering the local context within this research project, the institution and the programme, it was evident that the use of student generated video creation for assessment would be in alignment with both. As with many institutions, the University of Derby has a clear vision and commitment to develop staff and student digital capabilities with extensive practical application in the curriculum (UoD TEL strategy, 2017). Furthermore, contributions to contemporary developments within the emerging area of video creation for assessment is an existing strength for the University (Collins & Brown, 2016; Howcroft, 2016; Warmsley, 2017). Student generated videos as an assessment method have been used by other programmes within University of Derby with positive outcomes for a number of years. Thus, the resources and infrastructure are already in place to support this (Howcroft, 2017). As a result, at a programme level staff were open to learn more about the potential for introducing video creation for assessment. They also had some awareness of the benefits and relevance of this within occupational therapy and hand therapy. This alignment of how video creation can support the overall aims and goals of the both the institution and programme is not unique to University of Derby and occupational therapy/ hand

therapy, but would be applicable in many higher education institutions and programme contexts due to the high importance of digital skills to higher education and relevance to graduates future employment.

The additional area to be considered is to ensure that the necessary resources and infrastructure to support video creation for assessment is available; as without this, the effectiveness and potential usage of video creation for assessment is limited. In the same way that development of skill in using technology was the most often cited benefit for video creation for assessment, technical issues were the most often cited challenge in using video creation for assessment (Alpay & Gulati, 2010; Beetham & Sharpe, 2013; Currant et al, 2011; Greene & Crespi, 2012; Kay, 2012; Pereira et al, 2014; Russell & Moote, 2015; Wong et al, 2003). These issues included access to right equipment, software, compatibility between different devices/ software and technological skills of both staff and students. Challenges in managing issues of copyright during video creation were also acknowledged (Chetty & Pallitt, 2013; Cox et al, 2010; Visosevic & Myers, 2010) along with suggestions of how this had been addressed. Whilst these challenges inevitably led to frustrations and student stress, they did not diminish the end result of student satisfaction and enjoyment (Ryan, 2013). Furthermore, it is noteworthy that ways of addressing these challenges were reported in every study, in addition to technological advances making this more accessible (Chetty & Pallitt, 2013; Cox et al, 2010; Schofield et al, 2017) and an area of likely growth for the future (Kay, 2012; Reeves et al, 2017; Schofield et al, 2017)

3.4 Pedagogical considerations

Assessment choices communicate a strong message to students as to the skills and qualities that are valued (Biggs & Tang, 2011) and professionally relevant and contemporary (Davies et al, 2017). They have been put forth as a critical factor in determining the depth and direction of student learning for many years (Biggs, 1996, Davies, Mullan & Feldman, 2017). Additionally, in healthcare education (and other industries) summative assessments ultimately provide evidence of competence required for practice, thus demonstrating the importance of this process being held to rigorous standards (Walsh, 2010).

The argument and potential for alternative assignment formats such as multimedia-enhanced presentation, audio and video podcasts is not new, having been made some years ago (Davies, 2010). The Higher Education Academy (HEA) has likewise advocated for a vision of transforming assessment in higher education (HEA, 2012) and provided a framework to support this (HEA, 2015). Based on these recommendations, assessment within higher education has been encouraged to consider greater diversity of assessment methods, to make increased use of inclusive assessment practices, to promote student choice, and to consider how technology can support effective assessment and the outcomes required in 21st century education. (HEA, 2015; Davies et al, 2017).

Good assessment choices support student learning. As already expressed, video creation has been found to be a powerful tool to support learning and thus this makes it a good assessment choice also. As recognised by Davies et al, 2017 (p. 39) "students working on digital assignments relevant to employment and discipline practice show high levels of effort and engagement, as well as building their work readiness". Furthermore, as an additional element to an existing assessment portfolio, it adds the capacity to offer learner-centred assessment, enhance inclusivity and support learner diversity (Warmsley, 2017).

Choice of assessment method should be determined by the learning that one wants to assess (Toohey, 1999) whilst all assessments chosen must have four cardinal criteria: validity, reliability, discrimination and practicality (Quinn & Hughes, 2007). Whilst it is clearly possible to assess student learning using video creation, changing the assessment method requires both staff and students to be equipped with and confident in assessing student competences in a new format (Beetham & Sharpe, 2013; Cox et al, 2010; Ridley, 2011). Ideas regarding methods for assessing videos have been proposed (Borowczak & Burrows, 2016; Bouwer, 2017; Chetty & Pallitt, 2013; Cox et al, 2010). Furthermore, Cox et al, 2010 advocate for a change management process to support this recommending involvement of students in development of the assessment criteria, use of rubrics and examples, plus clear guidance using traditional academic rhetoric to show clearly the focus on intellectual content rather than technical difficulty. The consideration of weighting and ratios with regard to technological skills alongside demonstration of learning content remains an area of debate. Whilst there is a consensus across the literature regarding the relative importance of subject content over technical wizardry, within each use of video creation for assessment, the ratios of how much of the mark was assigned to subject content and how much to technical competencies was determined by each according to their own programmes needs and context which appears an appropriate way forward. Additionally, Cox et al (2010) described (and challenged) what he described as an entrenched cultural suspicion of the visual as superficial. Whilst this may be considered outdated academic snobbery, the demonstration of criticality within video creation is essential to overcome as a stumbling block to widespread academic adoption. As a new and emerging area, video creation for assessment would benefit from further research to determine its academic rigour, robustness, and academic equivalence across different levels of study.

Constructive alignment (Biggs, 1996; Biggs & Tang, 2011) - the principle of aligning learning outcome, learning activity and assessment method, remains central. Regardless of the benefits of video creation as a potential assessment method, or indeed any technology use within education, intended outcomes should drive the selection of teaching strategies. If they do not support the student to meet the learning outcomes, they are not appropriate choices (Blackinton, 2013). A critical challenge within the use of video creation for assessment lies within achieving alignment with learning outcomes, context and resources available, of video format with choice of skills you wish to support in students development, with relevance to graduate capabilities needed for industry and beyond graduation, with institution and programme, and finally with subject content, technology and pedagogy. It is in relation to this final alignment, content, technology and pedagogy that the TPACK framework (Mishra & Koehler, 2006) merits further consideration regarding how it might support alignment to be maximized.

3.5 Limitations of the study and implications for practice

The lack of homogeneity in the literature in terms of study context and variety of video creation project was considered both positive and negative. It was positive as it adds greater weighting to the themes produced as they have emerged across different projects rather than from within only one context or one type of video creation project. As Palinkas et al, 2015 recognised, themes which emerge out of heterogeneity are considered to have the benefit of increased credibility and generalizability and are therefore of particular value in capturing core experiences and shared dimensions of a topic (Patton, 2015). However, whilst the variety of video creation projects described demonstrates the range of possible options, the lack of precision in definitions and multiple uses of language does not help to achieve research clarity. For example, some refer to digital storytelling and video creation interchangeably implying they are the same (Reeves et al, 2017) whereas this could be disputed; and it is inevitable that each video format inherently requires and develops a

subtly different set of skills. An extensive (but not exhaustive) list of the potential variety of video formats can be found on the website published by Maastricht University (http://videum.library.maastrichtuniversity.nl/video-in-education/video-formats/). It is recommended that the format deemed to be most suited to each context be carefully considered when planning for video creation for assessment.

Implications for practice and recommendations for successful use of video creation for assessment in Higher Education, and for further research, have been embedded throughout the discussion. Table 2 presents a summary of these recommendations.

4 Conclusion and recommendations

This synthesis of the literature suggests that video creation has many benefits, most notably in supporting the development of digital and communication skills relevant to today's world and in enhancing the learning process. Video creation has been shown to be a motivating, effective and enjoyable method of student learning. Incorporating this technology into new programmes not yet using it could be attractive to students and contribute positively to student satisfaction. Using student generated video creation as an assessment method offers the opportunity for these benefits in addition to offering students an emerging, innovative assessment method aligned with the HEA vision for transforming assessment.

To use video creation for assessment successfully, careful consideration should be given to the choice of video format so they match the skills desired and are aligned with relevant learning outcomes, content, technology and pedagogical knowledge and institutional and programme aims, support and relevance. Failing to, or being unable to, align these factors not only limits the potential utility and effectiveness of video creation for assessment but also contributes to poor student experiences and academic reluctance to adopt this potential method.

Pedagogical considerations must always be the primary concern in determining assessment choice and the use of technology within education. Video creation as an assessment method is an emerging area that is likely to grow in popularity which has the potential to positively transform student experience and assessment methods. As a non-traditional, innovative assessment method, intentionally planning for and supporting a change management process for this with both students and staff is required. In addition, further research should consider video creation for assessment with individuals rather than collaborative group assessments and focus on determining the academic rigour, robustness and academic equivalence of video creation tasks across different levels of study.

Completing this research project, has resulted in transformation of thinking and practice for the authors in relation to understanding the rationale and benefits of video creation for assessment and a determination to pursue the implementation of this within the programmes we are involved in. Transformation in any context depends not just on information but upon the application of that information into behaviours and actions that bring about change. Likewise, the transformative power of this research starts with the sharing of information, but subsequently rests in the application and actions taken by those who read it. It is hoped that providing a critical synthesis of the robust evidence and rationale for video creation for assessment, alongside some clear recommendations on how to do this successfully, will support this transformation of assessment method to occur.

For successful use of video creation for assessment	 Align video creation task set to both learning outcomes and skills development required for graduate capabilities for relevant industry Ensure technological support, resources and infrastructure are all in place Have an intentional change management process to support both staff and students in the transition to a new assessment format. Involve students in the generation of clear guidance for the assessment and development of an assessment rubric.
For future research	 Consideration of how video creation for assessment works with individuals as well as groups. Research focused on determining the academic rigour, robustness and academic equivalence of video creation for assessment tasks across different levels of study.

Table 2: Summary of recommendations

4.1 Key points

Student-generated video creation offers students the chance to develop digital and communication skills and to enhance their learning in an enjoyable, motivating and satisfying way. When used for assessment it has the potential to offer all the above benefits and is aligned with the HEA vision to transform assessment.

Understanding the context and need for alignment in using video creation for assessment is of critical importance for it to be used effectively.

As an innovative and emerging form of assessment, the implementation of a change management process for both staff and students and clear articulation and guidance as to the assessment framework is valuable.

4.2 What this article has added

A critical synthesis of the literature related to video creation for assessment to provide an overview of its benefits and challenges, a rationale for its use and guidance as to how to use this emerging assessment method effectively.

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