

# **Chapter 6: Creativity, criticality and engaging the senses in higher education: Creating online opportunities for multisensory learning and assessment**

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## **Abstract**

This chapter considers why there is a need for a greater focus on creativity in higher education and critically explores how digital technology can be used to facilitate creative, multisensory learning and assessment in higher education, particularly, though not exclusively, at a distance. It introduces and critically appraises three forms of assessment used in Religious Studies and Philosophy modules at the Open University, including the assessment of digital audio recordings of oral presentations,

presentation slides and a ‘Take a picture of religion’ activity involving digital photography.

## **Keywords**

Multisensory learning; creativity; higher education; online learning; assessment; digital technology

## **Introduction**

This chapter considers why there is a need for a greater focus on creativity in higher education and critically explores how digital technology can be used to facilitate creative, multisensory learning and assessment in higher education, particularly, though not exclusively, at a distance. It introduces and critically appraises three forms of assessment used in Religious Studies and Philosophy modules at the Open University, including the assessment of digital audio recordings of oral presentations, presentation slides and a ‘Take a picture of religion’ activity involving digital photography.

## **The benefits of creativity**

Creativity is in demand. At all levels of education, creativity has been linked to increased levels of wellbeing, student engagement and depth of learning (Robinson, 2011; Gauntlett, 2011). Furthermore, creativity features highly amongst desirable

graduate attributes as identified by employers around the world (Osmani et al., 2015; Rampersad and Patel, 2014; Robinson, 2011). As Gaspar and Mabic note, “in the last decade creativity has become a mantra which is used by politicians, businessmen, employees, teachers, professors, students and others. Creativity is seen as a cure for a wide range of [social, economic and educational] problems” (Gaspar and Mabic, 2015, p. 598). It is widely acknowledged that creativity builds students’ resilience (Gauntlett, 2011, p. 20) by enabling them to find resourceful ways of dealing with challenges they may face in their studies and their personal and professional lives. Creativity can build students’ capacity to work out “unprecedented highly complex problems, often termed ‘wicked’ problems” (Stefani, 2017, p. 198) that contemporary and future societies face, linked to increasing rates of change, rapid globalisation of economic and social systems, environmental concerns and rising social and economic inequality. As Robinson points out, “the more complex the world becomes, the more creative we need to be to meet its challenges” (Robinson, 2011, p. xiii).

From this point of view, it could be argued that creativity has an important *political* dimension. Gauntlett argues that even ‘everyday creativity’ – making things, including DIY or knitting – can lead “to a whole new way of looking at things, and potentially to a real political shift in how we deal with the world” (Gauntlett, 2011, p. 19), due to “the fact that people have made a choice to make something rather than consume what’s given by the big suppliers” (Gauntlett, 2011, p. 19). Stefani argues that by fostering creativity and creative learning to unlock creative, critical capacity, higher education in particular can “play a profound role in contributing to socially responsible (in the sense of critically aware rather than socially compliant) citizenry” (Stefani, 2017, p. 198).

## What is creativity?

Creativity is a complex, multi-faceted concept. The literature on creativity and creative learning fails to agree on how exactly these terms can be defined (Watts and Blessinger, 2017, p. 229). The term ‘creativity’ is derived from the Latin word *creare*, which means ‘to make’. However, notions of creativity range from its understanding as an elite enterprise that is reserved for the talented and gifted few to the increasingly influential understanding of creativity as a powerful *collaborative* process that can and should be harnessed in everyone (Rampersad and Patel, 2014, p.1; Robinson, 2011). Literature also distinguishes between the ‘everyday creativity’ of ‘making things’ (Gauntlett, 2011) and “major creative achievements that *change a domain* and are recognised as such by the domain’s experts” (Blessinger and Watts, 2017, p. 3). Literature exploring the complex relationship between creativity and critical thinking skills (Watts and Blessinger, 2017, p. 226), imagination (Blessinger and Watts, 2017, p. 4) and intelligence (Kim, 2011, p. 285) broadly agrees that these strengths are complementary and overlapping, but opinions vary on the extent to which they overlap.

There are also different views on what kind of environments or conditions can stimulate creativity and on the extent to which creativity requires novelty and originality or builds on existing knowledge or practices. Csikszentmihalyi argues that “an idea or product that deserves the label ‘creative’ arises from the synergy of many sources and not only from the mind of a single person” (Csikszentmihalyi, 2013, p. 1). In other words, creativity does not come out of nowhere and can best be understood as

part of a multi-faceted *process* embedded in a wider socio-cultural context, rather than confined to lightbulb moments of isolated individuals. As Blessinger and Watts note,

Western cultures tend to associate creativity with novelty and originality. [...] But [...] in today's world there is no such thing as a completely novel and original work, since all works are to varying degrees built upon the works created before them, and all creativity is also a balance between tradition and invention. Each domain has its own established rituals, rules, cultural norms, symbols and the like (Blessinger and Watts, 2017, p. 9).

From this point of view, creativity is fundamentally understood as a socio-cultural concept (Jackson, 2006, p. 201), and creative learning relies on effective communication and collaboration (Watts and Blessinger, 2017, p. 222). If creativity is understood in this way, the formal education system, and higher education in particular, can play an important role in the transfer of existing knowledge and norms and in the development of students' communication skills (Blessinger and Watts, 2017, p. 6).

## **Room to grow: fostering creativity and creative learning in higher education**

A growing number of educational experts argue that “creative learning – learning to be creative – is an orientation and capability that all students *could* and most

importantly *should*, develop while they are studying in higher education” (Jackson, 2017, p. ix). However, are higher education institutions living up to this premise?

Employers around the world report a ‘broad mismatch’ between the competencies graduates acquire in higher education and current and future workplace requirements, particularly when it comes to creativity (Osmani et al., 2015; Rampersad and Patel, 2014; Robinson, 2011). As Csikszentmihalyi notes, “one hears the same story in industry and the business world, in civil service and scientific research. Technical knowledge and expertise might abound, but originality and innovation are scarce” (Csikszentmihalyi, 2006, p. xviii). While the benefits of creativity and creative learning are widely acknowledged, there is growing recognition that education could do more to nurture it (McLellan and Nicholl, 2013, p. 165). In fact, it has been argued that “the dominant forms of education actively stifle the conditions that are essential to creative development” (Robinson, 2011, p. 49; see also: Kim, 2011), with their predominant focus “on teaching ‘facts’ and conducting lots of tests” (Gauntlett, 2011, p. 227). Gauntlett blames the impact of neoliberal policies on education for this. He argues that

“in education, the influence of neoliberalism means that students become ‘customers’ who assume that their purpose is to purchase and extract qualifications as simply as possible rather than engage in the process of discovery, learning and growth. For their teachers, the work becomes a matter of handing over relevant ‘packages’ of ‘knowledge’ in a uniform manner – the practice which can be most simply unified, at the cost of individuality and creativity” (Gauntlett, 2011, p. 229).

Stakeholders in higher education increasingly acknowledge that this situation is no longer sustainable and needs to change (Watts and Blessinger, 2017, p. 215). Stefani concurs that “it is no longer enough to teach students all that we know. Rather it is time to explore, innovate and enable the co-creation of new knowledge” (Stefani, 2017, p. 199).

However, teachers in higher education, who are keen to explore and develop ways in which creativity can be fostered in teaching and learning, face a wide range of significant logistical, financial and cultural challenges. Large workloads, funding cuts and demands for greater efficiency, personal accountability, quality assurance and student satisfaction put teachers in higher education under increasing amounts of pressure (Jackson, 2006, pp. 4ff.). The current environment, determined by league tables and ‘burdensome bureaucracies’, encourages a risk-averse culture that is not conducive to innovative, creative learning and teaching strategies (Stefani, 2017, pp. 198f.).

### **How can creativity and creative learning be facilitated in higher education?**

In spite of the challenges, Blessinger and Watts confidently predict that “it is safe to presume that creativity will continue to grow in importance and that creative learning will start to emerge as a major focus area in all disciplines and at all levels of education” (Blessinger and Watts, 2017, pp. 3f.). However, how can educational environments be created within which creativity can develop and thrive? While there

is a sizable body of research and literature on creativity in primary and secondary education, much less attention has been paid to the role of creative thinking and creative learning in higher education, though there is growing interest in this area (Blessinger and Watts, 2017, p. 6; see also Jackson et al., 2006). There are also different views on how creativity can be nurtured and what conditions allow and inspire creativity to flourish.

Csikszentmihalyi (2006, pp. ixf.) highlights the importance of rewarding and facilitating the love of learning among students and staff, and of a curriculum focused on joyful learning and student engagement as a bedrock for creative thinking and creative learning. Student engagement is a central theme here, and there are many different ways of engaging students more effectively in their learning: through the exploration of ‘real-world questions and problems’ (Gauntlett, 2011, p. 238), through collaborative approaches to learning, through critical reflection (e.g. reflecting on ‘mistakes’ as opportunities for learning) and through active, multisensory and experiential learning.

Chatterjee et al. (2015) particularly emphasise the value of object-based learning in higher education. They argue that the engagement of multiple senses (i.e. touch, vision, smell, hearing and/or taste) in close interaction with objects can lead to more holistic learning experiences that engage a greater range of different learning styles (Chatterjee et al., 2015, pp. 2-5). Chatterjee et al. focus on students’ hands-on engagement with artefacts from museum collections, but their findings highlight the benefits of object-based, multisensory learning in higher education in a much broader sense. Their research shows that a more engaging, active learning experience is likely

to lead to a greater level of immersion, concentration and ‘personal meaning-making’, which – in turn – is more likely to facilitate students’ innovative, creative thinking. From this point of view, creativity “captures the impulse to think innovatively, and to welcome, access and utilise the unpremeditated congruencies of multisensory exploration” (Morrison, 2015, p. 215).

Digital technologies potentially offer exciting new opportunities for the development of creativity, creative learning and different modes of communication. They also offer new opportunities for the facilitation of multisensory learning experiences, particularly in distance learning settings, where multisensory learning experiences have traditionally been much harder to facilitate than in face-to-face classroom settings. However, the use and influence of digital tools in higher education (and other contexts) and changing pedagogies as a consequence of the digital age (Stefani, 2017) require further critical appraisal. This includes the question of the extent to which digital technologies can support or stifle the development of creativity and creative learning – or learning per se – and how these technologies can be most effectively used in higher education (Losh, 2014).

In the remaining sections of this chapter I will explore examples of how digital technologies have been used in the context of two Open University Religious Studies modules and one Philosophy module to facilitate multisensory, creative approaches to learning. Though the relevance of the findings of these case studies is not limited to these particular subject areas, it could be argued that as an inherently interdisciplinary subject, crossing the boundaries and thresholds of many different academic discipline domains, Religious Studies is in a particularly strong position to facilitate the

development of creativity and of creative learning in higher education. As Stefani argues, multidisciplinary and interdisciplinary approaches play a particularly important role in the development of creativity and creative learning in higher education. She points out that creative solutions that are required to solve complex, ‘wicked’ problems often “lie in the ‘liminal’ spaces, the boundaries or thresholds of different academic discipline domains” (Stefani, 2017, p. 206). Indeed, the *Employability* guide published by the Higher Education Academy’s (HEA) Subject Centre for Philosophical and Religious Studies in the UK argues that “in an increasingly global economy, the skills of vision, *creativity* and religious sensitivity, which are developed through the study of TRS [Theology and Religious Studies], will be at a premium” (HEA Subject Centre for Philosophical and Religious Studies, 2009, p. 4; emphasis added).

The Open University’s mission, with its commitment to widening participation and accessibility, fits very well with inclusive ideals of creativity and creative learning as something that needs to be made available to *all* students (Jackson, 2017, p. ix) and the understanding that “a culture of creativity has to involve everybody, not just a select few” (Robinson, 2011, p. 3). Although the Open University offers some optional face-to-face tuition, the fact that many students study at a distance and are not in a position to attend face-to-face tutorials (for a range of good reasons) poses particular challenges to the facilitation of multisensory, experiential learning and the development of students’ oral communication skills. However, digital technology has created new opportunities to address these challenges creatively in distance learning settings, and beyond.

Before I go into any further detail of each of the three case studies, I should explain that at the Open University, module materials and assessment strategies are designed by a small group of academics (referred to as the ‘module team’), and modules are delivered and assessed by a larger group of tutors, who each teach small groups of about 20 students across the UK (and beyond). The modules that form part of these case studies each run over 9 months (from October to June) each year.

### **Case study 1: Digitally recorded oral presentations**

*Why is religion controversial?* (A332), a Religious Studies module designed for students in their final year of undergraduate study (HE Level 6), was the first module in the Open University’s Arts and Humanities programme that included the assessment of digitally recorded oral presentations. This innovative form of assessment, praised by the external examiner “both on grounds of transferable oral skills, and in breaking the perceived constraints of distance learning” (A332 External Examiner report, 2015), has since been introduced across a wide range of modules in the Open University’s Arts and Humanities programme. This new form of assessment was created to support students’ development of oral communication skills in recognition of the fact that that “most careers require [oral] communication skills; some require them far more than the kind of written skills fostered through written exams and essay assessments” (Higher Education Academy [HEA], n.d.). As part of this assessment, students are asked to make a three-minute long digital audio recording of an oral presentation. The topic of this presentation is closely related to that of a written assignment (an essay of 1,500 words). It basically requires students to

imagine that they are briefly explaining the content and main arguments of their written essay to a general audience who are not familiar with the topic. Students with relevant disabilities are offered the alternative option of submitting a written script for an oral presentation.

Supported by funding from the Higher Education Academy, I critically assessed the use of this form of assessment in the context of this module over the period of two years (2014-2015), through the analysis of 50 sample assignments and student and teacher questionnaires, completed by 233 students (sent out to 607 students with an overall response rate of 38%) and 17 tutors (sent out to 21 tutors with a response rate of 81%), and designed a toolkit for best practice in the design of this form of assessment in consultation with tutors and students. I drafted this toolkit on the basis of the survey findings and then invited students and tutors to comment on this draft on online forums (Sinclair, 2014; Sinclair, 2016). This toolkit has since been shared with other module teams across the Open University's Arts and Humanities programme and at a range of national and international conferences.

The findings of the critical evaluation of this form of assessment highlight the technical and logistical challenges of the introduction of a new form of assessment that heavily relies on the use of digital technology, but also stress the benefits of multisensory approaches to communication and the use of different media. The questionnaires sent out to students did not include any specific prompts or questions about creativity or the benefits of multisensory learning and assessment experiences. However, I was struck by spontaneous feedback that students included in their open comments, which highlighted how much approaching a similar task through both a

spoken presentation and written essay can deepen their learning experience. Some students noted that their spoken presentation helped them with writing the related essay:

A benefit was that when I first did the sound recording [...] I discovered I'd missed an important point to be made in the essay conclusion. (A332 Student, 2014)

and vice versa:

writing the essay gave me confidence with the subject matter so when I came to write my script [for the audio recording] I felt knowledgeable & comfortable with my talk. (A332 Student, 2015)

Some students also said that they were inspired to consider changing their practice of writing essays in future, saying for example:

I may now say my essay into a recorder, which will be more fluent when I write it down. (A332 Student, 2015)

These findings very much reflect Thompson's (2014) and Elbow's (2012) views on the opportunities that multisensory approaches can bring to the development of sophisticated communication skills, and the mutually beneficial relationship between oral and written communication skills in particular. Survey responses also showed that this form of assessment can be of particular benefit to students who struggle to

express themselves in writing, such as students with dyslexia, as they appreciated the opportunity to express themselves through a different medium. This is reflected in the following open comment from a student:

As a dyslexic I really enjoyed this part [of the assignment], as I was able to express my ideas much better. (A332 Student, 2015)

In fact, all student survey respondents, who identified themselves as dyslexic, specified that they would welcome the wider adoption of this form of assessment in the Arts and Humanities programme at the Open University.

However, the novelty of this form of assessment posed a number of challenges. Especially in the first year it was introduced, survey responses clearly reflected that some students felt very anxious about this new form of assessment. These anxieties were, for example, related to the fact that some students had little or no prior experience of delivering oral presentations or of using digital audio recording technology in this way. These difficulties were exacerbated by technical teething problems of the Open University's in-house audio recording tool. Furthermore, the analysis of tutor feedback revealed discrepancies in the quality and type of feedback that tutors provided in the first year this form of assessment was introduced. This indicated that tutors needed more support in the implementation of this new form of assessment, particularly since it was – at that point – not only new to students, but also to many tutors. This finding led to the further revision and clarification of the marking criteria the module team provides to both tutors and students for this

assignment and highlights the challenges associated with supporting both students and tutors in the introduction of innovative assessments.

The findings of this study also highlight the limitations of a relatively isolated assessment of a particular skill or mode of communication in terms of its effect on the *development* of these skills. This is why a further range of preparatory activities and resources have since been included in this module to support students in the development of oral presentation skills as well as the technical skills required for making a digital audio recording. While this Religious Studies module pioneered this form of assessment in the Open University's Arts and Humanities programme, this form of assessment has since been included – in a variety of adapted guises – in a wide range of different modules at different levels of study across this programme. Collaboration between module teams in the development of this form of assessment and related assessment criteria has aided the formation of a consistent approach to this new form of assessment across the Open University's Arts and Humanities programme. This has enabled students to build on their tutors' feedback (and 'feed forward') in the development of their oral presentation skills across different modules (see also: Sinclair, 2016). This highlights the need to carefully manage the implementation of new forms of assessment, particularly when a shared understanding of the aims and purpose of this form of assessment need to be reached across different modules and tutors.

## **Case study 2: Offering students a choice between the assessment of oral presentations and presentation slides**

*Key questions in philosophy* (A333), a Philosophy module for Open University students in their final year of undergraduate study (HE Level 6), further develops the oral assessment discussed in Case Study 1. It offers students a choice between submitting a digitally recorded four minute long oral presentation (using the same Open University in-house audio recording tool as the Religious Studies module discussed above) and presentation slides. Students who choose the option of a slide-style presentation are asked to create this using slide-presentation software or an ordinary word-processing package and to not exceed 500 words (including headings and notes). As with Case Study 1, this assignment is closely linked to an essay-writing task. Whichever style of presentation students choose for this assignment, they are asked to present the key points of their essay clearly and succinctly in the form of a brief summary aimed at a general audience who are not familiar with the topic.

To critically assess this form of assessment, I worked together with the A333 module team in the design of questionnaires which were sent out to 281 students in March 2016, of whom 81 students responded. 49% of the respondents had submitted an oral recording and 51% had submitted a slide-style presentation. Surveys were also sent out to all 14 tutors, of whom 10 (71%) responded.

The questions asked in this questionnaire focused more explicitly on creativity than the survey for Case Study 1 had done. “I thought that recording a spoken presentation would be more creative than putting together presentation slides” was, for example, part of a list of options students could select as reasons why they chose either form of

assessment. Indeed, this was the second most frequently selected reason, chosen by 34% of the respondents who opted for the digitally recorded presentation, just after “My prior experience prepared me better for the oral recording than for the slide presentation” (which was chosen by 39%). Prior experience featured even more strongly as a motivation among those students who opted for the presentation slides (selected by 46%). However, creativity was also mentioned as an influential motivation among this group of students. “I thought that making presentation slides would be more creative than an oral recording” was the joint second most frequently mentioned reason for choosing the presentation slides, mentioned by 27% of the respondents who opted for this form of assessment, jointly with “I didn’t feel confident in my oral presentation skills”.

While the findings suggest that many students value opportunities to express and develop their creativity, a large majority of survey respondents (80% of respondents who opted for presentation slides and 71% of respondents who opted for the oral presentation) did not think that either the creation of an audio recording or the preparation of presentation slides was *more* creative than writing an essay. Some students even stressed in their open comments that “academic writing requires much more creativity” (A333 student, 2016) and argued, for example, that a four minute oral presentation was too short to allow creativity to unfold. Others felt that “I wouldn’t particularly say that the oral recording was more or less difficult or more or less creative than the essay, it just posed a different challenge” (A333 student, 2016).

82% of respondents found it helpful that the topic of the oral presentation or presentation slides were based on the same topic covered in their essay (though aimed

at a different audience). 49% of those respondents who had opted for the presentation slides and 39% of those who had opted for the oral presentation agreed that they had gained a deeper understanding of the topic by approaching the same topic through different media. While some students noted a sense of unnecessary repetition and duplication, others emphasised how engagement with the same topic through different modes of communication had enhanced their understanding of the subject matter, improved their communication skills and/or built their confidence.

70% of all students who responded to this survey welcomed the fact that they had been given a choice between an oral and a slide-style presentation. However, tutors were divided on whether or not giving students this choice was indeed a good idea. Some tutors felt that it was important to offer students this choice, especially since some students struggled with the technical aspects of making an audio recording. Others regarded the presentation slides as a much easier option and felt that the learning benefits of an oral presentation by far outweighed those of the creation of presentation slides. Some tutors also felt that some students struggled with preparing the presentation slides “because no one quite knows what is wanted” (A333 tutor, 2016), which, in their view, also made it difficult to mark this task. As in Case Study 1, this highlights the importance of clear marking criteria.

Only 13% of all student respondents stated that they would have found it helpful if this assignment had required them to submit a combination of both an oral recording and presentation slides for this assignment. When asked whether they would have preferred making a video rather than an audio recording, not a single student expressed enthusiasm for this option. Furthermore, only 27% of respondents

expressed interest in receiving recorded oral instead of written feedback on their assignment from their tutor, whilst 35% stated that they would not welcome this (the rest expressed no opinion on this matter).

What stood out for me was that the guidance this module provided in relation to the production of presentation slides exclusively focused on the production of written text for the slides, not images or graphs. Even though Open University teaching materials make sustained use of images, this was not transferred into this assessment task. However, this was not picked up as an issue by either students or tutors in their comments, which might be specific to the particular subject area of philosophy, where images are perhaps not considered to be as relevant or helpful as in other subject areas. Prompted by the project findings, the module team is now providing students with a sample slide show that clarifies expectations and illustrates how images, tables and speech bubbles can be used effectively.

### **Case study 3: ‘Take a picture of religion’ activity**

Engagement with images and objects plays a much more prominent role in the subject discipline of Religious Studies. The new Religious Studies module *Exploring religion: Places, practices, texts and experiences* (A227), for Open University students in their second year of study (HE Level 5), therefore includes a range of assessed and non-assessed activities which aim to harness the benefits of multisensory learning experiences in order to foster student engagement and provide students with opportunities to apply and develop their creative and critical thinking skills.

Multisensory learning experiences are of particularly great value here due to this module's focus on the study of 'vernacular' or 'lived' religion and material aspects of everyday religious places, practices, texts and experiences. This module will be presented for the first time in autumn 2017. This means that at the time of writing, there has not yet been the opportunity to critically appraise this approach in action. However, the module team has secured funding to conduct a scholarship project critically evaluating this module's multisensory approach to learning and assessment in the first year this module is offered.

This scholarship project will particularly focus on an assignment task, which asks students to engage critically and creatively with different understandings of the concept 'religion' and explore this concept in the context of their own locality. This assignment is divided into two assessed parts, linked to a preparatory 'Take a picture of religion' activity. This preparatory activity asks students to take a photograph of an object or place (human-made or natural) representing an aspect of 'religion' in their locality and post this image together with an image description on an online platform (called 'OpenStudio'), which is shared by small group of other students and moderated by a tutor. This activity also involves an interactive element as students are asked to comment on each other's photographs on the OpenStudio platform. Part A (50%, 500 words) of the associated assignment task asks students to explain why they chose a particular photograph, how it represents something 'religious' and why what is represented in this photograph might be worthy of further study. Part B of this assignment task (50%, 500 words) asks students to critically reflect on their experience of the 'Take a picture of religion' activity and comment on how their understanding of the concept of 'religion' (and of different theoretical approaches to

this concept explored in this module) was enhanced, shaped or challenged by engaging with images shared by other students on the platform and with other students' comments. They are also asked to reflect on what they found challenging or interesting about the activity.

Multisensory learning experiences can open up opportunities to many students (such as those with dyslexia, as demonstrated by Case Study 1), as they engage a range of different senses and respond to a wider range of learning styles and modes of communication. However, they can also pose challenges to some students in terms of their accessibility. In order to address this, accessible alternatives are available for this assignment. For example, in the case of the 'Take a picture of religion' activity, students unable to take their own photographs are given the option to upload images from an image bank provided by the module team. All students are asked to include image descriptions as part of this activity, which will support the accessibility of their chosen image to students with certain disabilities. Students in secure environments (such as those studying in prison) are sent a print version of the bank of images.

While this is the only activity using the OpenStudio platform as part of its formal assessment, this module uses a number of other unassessed activities involving this platform. This includes, for example, a sound bank activity, which asks students to listen to, comment on and upload sounds associated with lived religion and religious traditions. Hopefully, the scholarship project will shed some further light on the value of the use of the OpenStudio online platform and of multisensory learning experiences in fostering student engagement and creative learning.

## **Conclusion**

The benefits of fostering creativity in higher education are widely acknowledged, and so is the role that multisensory learning experiences can play in this. While it can be particularly challenging to facilitate multisensory learning experiences in distance learning environments, my three case studies provide examples of how digital technologies can be used to address some of these challenges. They also highlight that innovations in online technology and the use of digital technology in learning, teaching and assessment in higher education involve many challenges and potential risks in themselves, which require critical appraisal.

I have experienced the involvement of students and tutors in the critical evaluation of new forms of assessment (see Case studies 1 and 2) as extremely valuable. Students' and tutors' engagement in surveys and in the development of a relevant toolkit has led to the improvement of these particular forms of assessment and contributed to the establishment of principles of good practice. I would also argue that their involvement in the improvement of these new forms of assessment has helped to bring students and tutors 'on board' and encouraged them to feel more open to innovative and creative learning and teaching strategies and to being challenged in new ways. When it was first introduced, the digitally recorded oral presentation was initially met with a considerable amount of resistance by students and tutors (Case study 1). In turn, the surveys provided students and tutors with an important opportunity to voice their concerns around this new form of assessment, which – in this case – were particularly

focused on anxieties around the use of new technology, and helped the module team to address these concerns and support students and tutors more effectively.

Collaboration with colleagues working on different modules (for example, through sharing good practice and co-led scholarship projects) has also been extremely valuable in the development of these new forms of assessment, not least as it has supported the development of a consistent programme approach. It also very much resonates with Csikszentmihalyi's (2013) understanding of creativity as a collaborative process - which is not only relevant to fostering creativity in students, but also to the creation and development of innovative forms of teaching, learning and assessment.

However, it is important to bear in mind that these three case studies are only examples of very small steps towards the injection of creativity in teaching and learning in higher education. Multisensory approaches to teaching, learning and assessment and the use of different media can play a role in facilitating creative learning, but there are many different routes and approaches to this. In order to create an environment that is more conducive to fostering creativity, change is required on a much more structural, fundamental level. This means moving away from a culture in higher education determined by league tables, 'burdensome bureaucracies' and students as customers purchasing qualifications, and a greater focus on teaching and learning as collaborative processes of discovery and growth.

## Tips and Points for Discussion

- A good way of creating learning environments, where creativity can develop and thrive, is to provide students with opportunities to engage different senses (i.e. touch, vision, smell, hearing and/or taste) and use different media in their learning and assessment.
- Digital technologies (such as audio and/or visual recording devices, including digital cameras and mobile phones) can offer new opportunities to engage students in multisensory learning and to develop and assess different communication skills. This applies particularly - though not exclusively- to distance or online learning settings.
- The use of digital technologies in higher education should primarily be driven by the intended learning outcomes, not by the technology as such. It is therefore particularly important to provide clear learning outcomes and, if an activity is assessed, clear and transparent assessment criteria.
- The use of digital technologies in higher education requires ongoing and thorough critical appraisal, especially since these technologies develop so

quickly and in light of the fact that some students struggle with accessing or working with them.

- Be bold and try out new forms of learning and assessment. Consult colleagues and involve students in the critical evaluation of new forms of learning and assessment, and share and exchange learning and teaching resources with other colleagues as much as possible.

## **Further reading**

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