High aspirations: Transforming dance students from print consumers to digital producers

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Abstract: During 2012, the Dance Department at the University of Surrey developed a set of Open Educational Resources with a Creative Commons license (Attribution, Non-Commercial, Share Alike) for dance studies as part of the JISC-funded project Contexts, Culture and Creativity: Enriching E-learning in Dance (CCC:EED) see http://contextscultureandcreativity.wordpress.com/ for details. These OERs exemplify a pedagogical model of openness by unleashing creative learning ideas that combine revised subject specific activities, freely available audio-visual resources, and newly digitised materials from the National Resource Centre for Dance archive. With its emphasis on technology, this project enabled both lecturers and students to see the interrelationship between the articulation of knowledge through creative processes and digital literacy, and to appreciate how these connections allow for new developments in pedagogy, performance and practice.

Designing and testing OERs revealed, on the one hand, a number of needs with respect to the institutional involvement and technological infrastructure, namely, acquired software, Virtual Learning Environment design, staff technical competence, and support. It also encountered some obstacles related to educational expectations (such as content responsibility and degree of learning autonomy), levels of digital literacy (including lack of awareness of adequate copyright practices, and of online help), accessibility to technology, and perception of the role of technology in formal learning in theory and practice based dance modules. On the other hand, the creation of these resources showed great flexibility and unexpected creativity from the learners. More importantly, it meant a transformation of both classroom-based and independent learning. This work moved teaching practices from the distribution of print materials to the facilitation of online activities for personal reflection, self-testing and collaboration. The introduction of e-learning packages pushed the development of staff and students' digital skills, and initiated a move to a learning model where learners influence objectives and methods (OPAL, 2011, p. 3).

This paper highlights the potential transformative impact of OER production and reuse for Higher Education dance students. It focuses in particular on the challenges and opportunities that arise from aiming at encouraging students to become producers of digital objects by engaging with digital resources. The idea
of the 'student as producer' has been highlighted by Mike Neary (2009) based on Walter Benjamin's concept of the author as producer. Neary argues that we need "to reinvent the relationship between teacher and student, so that the student is not simply consuming knowledge that is transmitted to them but becomes actively engaged in the production of knowledge with academic content and value" (2009, p. 8). Neary's proposal is that we should facilitate research or research-like experiences in our undergraduate programmes in order to transform them into "productive collaborators" (Neary 2009, p. 9). The design of the OERs in the CCC:EED project were inspired by these pedagogical ideas.

**Keywords:** Dance, e-learning, OEP, OER, Student-as-producers

**Introduction**

The *Contexts, Culture and Creativity: Enriching E-learning in Dance* (CCC:EED) project aimed at enabling the Dance Department at the University of Surrey to digitise archive items from the National Resource Centre for Dance collections and use them to create e-learning packages for a diversity of subjects in the Bachelor of Arts Dance and Culture degree programme. The project was funded by the JISC Content programme and ran from November 2011 until January 2013.[1]

One of the project objectives was to embed appropriate e-resources in a range of practice and theory based dance modules. Teaching staff and students worked closely with an e-tutor to develop e-learning materials for the following subjects: Arts and Society (year 1), Choreography (year 1), Laban Movement Analysis and Notation (year 2), Ballet (year 2), Dance and the Hollywood Musical (year 3), plus additional resources on the reconstruction of the dance piece *Negro Spirituals* as well as audio-visual tutorials for the use of the Digital Dance Archives and the use of the Xpert tool for Creative Commons image attribution. Students accessed the core subject materials via the university’s Virtual Learning Environment (VLE). The resources were developed and tested across two semesters before they were released in JORUM as reusable Open Educational Resources (OERs) with a Creative Commons license (Attribution, Non-Commercial, Share Alike).[2]

This paper will focus on the extent to which the project managed to transform the dance programme by involving academics and students in the production of OERs for Dance Studies.

**Reformulating dance education through OER production**

The dance academics involved in the project had the task of creating a set of OERs for the dance community with students' active involvement. The concept of OER production is intimately connected to new technologies for obvious reasons. Without the technology, resources are not easy to share, reuse or modify. Before developing resources with such purpose, a basic rethink of our key educational aims was necessary. For this reason, the e-tutor provided lecturers with a list of all the different things they needed to consider when planning these resources for their subjects, including activity types, tools, software, digital skills and equipment.[3] They were also asked a set of key questions:

- What do you want students to learn from engagement with digital resources and activities?
- Why do you want that learning?
- Where is it best learnt?
- How is it best learnt?
- What type of feedback is most appropriate?
It was essential to ensure that a student-centred pedagogical approach underpinned all the educational resources created, as well as that these resources reflected the student perspective. The idea was that technologies would support students’ dance learning, as well as the development of digital and professional skills. The introduction of technology in the dance programme was also seen as an opportunity to increase student motivation which academics had identified as low in recent years. Technology use was seen as potentially very powerful in this respect. A previous project by academics at De Montfort University had reported on positive experiences for dance undergraduates using technology in creative practice (Doughty et al. 2008).

More specifically, the design of the OERs for digital dance in our project was inspired by several student-centred pedagogical ideas which technologies support particularly well (Figure 1).

Figure 1. A student-centred approach to dance studies (with roles and activities supported by technology)

A critical idea in our pedagogical approach to dance studies was Mike Neary’s concept of the student as producer. He suggests that we need "to reinvent the relationship between teacher and student, so that the student is not simply consuming knowledge that is transmitted to them but becomes actively engaged in the production of knowledge with academic content and value" (Neary 2009, p. 8). His proposal is that we should facilitate research or research-like experiences in our undergraduate programs in order to transform them in "productive collaborators" (Neary 2009, p. 9). In fact, it can be argued that this idea matches beautifully with how dancers develop in their professional practice.

A first stage in the project focused on understanding technology based educational practices and expectations in the Dance Department and in similar
programmes elsewhere. Desk research was carried out on already available online materials for dance, e-learning projects in dance and the literature around the production and reuse of OERs. A review of the teaching and research experiences and resources as well as initial questionnaire[4] distributed to all academics and students in the department helped produce a preliminary picture of knowledge, attitudes, obstacles and possibilities. In addition, briefing sessions on the objectives of the project were offered to ensure awareness and involvement at all levels.

The actual process of creating and piloting dance OERs was monitored throughout the project by the e-tutor with different methods. Firstly, online discussion forums dedicated to any aspect of the online activities were set up in each of the module websites. Secondly, frequent classroom observations were carried out in order to assess student and teacher engagement in the design and completion of the e-learning tasks. Thirdly, individual e-learning sessions to test out a number of digital tools were offered to volunteer students and teaching staff in order to ascertain issues of knowledge, trust, interest, and skill development using the technology.

Finally, an evaluation of the outcomes and impact of this study was conducted by analysing the data from various sources. We set up several student focus groups at the end of each term to gather further information about students' experiences of and views on the project activities. Also feedback was provided by a team of student critical readers of the e-learning materials. In addition, lecturers were asked at the end of project to record their reflections on the process of using technology in their individual subjects. Another important indicator has been OER reception by the dance community, by levels of interaction with the project website, statistical data from the repository, and feedback from dissemination visits to several dance institutions in the UK. As part of the evaluation, we also planned at the end of the project to invite all students and lecturers at Surrey to complete again the initial short questionnaire, but this did not happen in the end due to the departure of key members of the project team.

**Point of departure**

At the beginning of the project, an online questionnaire was designed to gather information about the use of the VLE, the use of digital resources in the Dance Department, the level of private use of technology as well as perceptions around technology for dance learning. This information would help us understand where we were and take the necessary steps to achieve the objective of creating a set of relevant digital resources for sharing with the dance community.

The initial questionnaire had a teacher and student version. It was distributed to 16 lecturers (seven permanent members of staff and nine associates) and to all 128 students registered in the dance programme at the time. It should be noted that the great majority of lecturers and students were female. Responses were entered by eight (50%) female lecturers and 30 (20.3%) students, all also female except for one male student. Of those 30 students, 55% were first year students, 7% second year students and 38% third year students.

Responses to the questionnaire not only indicated a lack of clarity about concepts but also about which of the current educational practices in the department were examples of e-learning. Both lecturers and students declared making more use of the technology in private (social and personal use) than in their dance modules. They indicated only a few forms of e-learning as present in the dance modules, with a quarter of the participants expressing uncertainty about what would count as such. Open comments claimed that e-learning was happening almost exclusively in theory modules, and in limited ways: via email, the VLE, notational software (LabanWriter) and the university's webfolio tool (PebblePad). Email
messages and mobile phone texting were reported as the dominant communication tools for teaching and private use.

A closer study of the programme documentation and the structure and content of the VLE revealed that, while the use of technology was indeed very limited, basic common technology had been successfully implemented. This was confirmed later in classroom observations. For instance, the presentation software PowerPoint and CD/DVD players were at the time widely used by lecturers and students in most subjects. However, it was also noticeable that there was no educational use of forums, blogs, wikis, quizzes, social networks, referencing software and so on. What became clear was that neither the technology freely available on the internet nor the various tools and devices offered by the institution (e.g. film and audio equipment and software, referencing tools, learning object creators) were being adopted for educational purposes in the dance programme. Only a small proportion of academics were utilising the VLE but mainly as an archive for depositing general information and readings. Moreover, the VLE was organised in a set of folders and subfolders which required too many clicks before students could access the relevant files. As it has been reported in other studies, these results can be directly connected to the fact that "experienced teachers in the system lack the foundation for teaching an integrated arts and technology curriculum" (Gouzouasis 2006, p. 7). Indeed, teachers' lack of familiarity with digital knowledge and skills, particularly in the applications to educational contexts has been identified as a main concern (Trinder et al. 2008). However, as we will see, other factors could be also linked to this situation.

Students' attitudes and expectations about technology in their formal studies did not show more confidence before the project activities. When asked to express an opinion on having an e-learning component in the dance modules, almost half of the students (46%) were not sure with a similar percentage (43%) who declared that they were interested, and a minority (11%) who appeared reluctant to enter the e-learning road (Figure 2). Interestingly, although more than half (62.5%) of the lecturers responded to be in favour of e-learning activities, and only a small minority (12.5%) who did not know whether it would be a good idea, a quarter (25%) expressed to be against it.

Figure 2. Students' response to question 4 of the initial questionnaire

The picture that was emerging from the initial evidence was that dance was being constructed as a performative discipline based on bodily experience, practical knowledge, understanding and skills, but detached from technologies.
As one student put it:

'Dance for myself [sic] is about thinking practically. Sending a message practically not written or through technical way [sic]. Personally I believe dance to be a physical contact that evokes something in someone else. Not something that needs to be pushed into the technical world.' (Student open comment in initial questionnaire)

The initial data collected in this project concurs with results from the report about ICT expectations in Higher Education Institutions in the UK, focusing on first year undergraduates' attitudes towards technology. The study highlighted a higher proportion of arts students (as opposed to those in sciences) expecting good ICT support, not wanting to use technology, and avoiding online submissions (Ipsos 2008, 11). It also reported that art and design students have the impression that the technology offered in their courses is "less advanced" compared to the technology used in other non-arts courses (Ipsos 2008, 23). Previously, the 2007 research on the scope of entrepreneurship and professional practices in dance across the Higher Education sector (Burns 2007) acknowledged IT skills as necessary for the professional dancer, however dance programmes did not report incorporating these in an explicit manner.

It is important to highlight here that the dance profession has embraced technology in many ways for the conception, design, performance and recording of dance pieces.[5] In fact, it has been acknowledged that "dance has taken the lead, among the theatrical arts, in absorbing technology as a creative tool, affording dancers and technologists the opportunity to explore interactive environments, virtual places, and integrated methods that have shifted artistic process." (>Birringer 2002, p. 85). Dance education, however, has been slow in incorporating relevant technological developments and therefore is preparing students inadequately for the professional world.

In the first decade of the 21st century a few efforts to teach dance using new technologies (Anderson 2012, Andrews and Thoms 2008, Caldwell and Milling-Robbins 2007, Cherry et al. 2003, Penrod 2005, Popat 2002, Stock 2004), and working towards a digital dance curriculum (Risner and Anderson 2008) have been made, mostly from universities in the United States. It is evident that there has been an increasing awareness of the need for a wider range of skills in dance studies, although information literacy, ICT or digital literacy skills are not yet systematically developed.

Feelings, attitudes, and expectations

The results of the study reported here showed that there was an evident tension between the implementation of an ambitious student-centred approach and the lack of desire from dance students to act as producers, collaborators and constructors of an innovative curriculum supported by technology. Passivity and resistance was demonstrated in different forms. For instance, when given the choice, only eight choreography students out of 42 attempted to work on a digital artist sketchbook. The great majority of students did not accept learning designer roles, or make use of the suggested technology. Nor were they willing to suggest ways of and tools for learning. In other subjects, some students refused to do any of the online activities, others gave up at the first (technological or content related) hurdle, some would not engage in any of the proposed collaborative activities. Most made a strong connection between being assessed and completing the tasks, failing to recognise (despite explicit references in the programme) the importance of the means themselves and the skills they would develop by being active contributors. A repeated message from student participants in this project was that if there is an explicit requirement to use technology, they will use it, particularly if it is an assessment requirement. However if in their dance subjects they are not expected to engage with
technology, they won't do it on their own initiative, whatever the extent to which they use technology outside their formal learning.

When given the opportunity to express their views on the use of the technology in their dance programme, the main requests from students were:

- Consistency of digital expectations along the programme.
- At the beginning of the term more guidance on expectations about the use of technology.
- Tutorials on how to use the new tools.
- Opportunities to try out new tools.
- More texts available online.
- More podcasts of the lessons.
- Make all online activity a requirement.

As it can be appreciated, these points still reflect students' perception with the teacher at the centre of the production of the curriculum and resources. Although a complex theoretical focus seemed pertinent at the beginning of this project, the mind-set reported by students from the start proved difficult to change. As it has been pointed out, "while educators might engage in critical pedagogical practices that contain liberatory messages, sometimes the students greet this information with hesitance" (Caldwell and Milling-Robbins 2007, p. 29). Despite the fact that professional dancers are indeed productive collaborators and creative investigators along with choreographers, dance students in our department seemed to adopt a very different role; they resisted a new learning dynamic supported by technology in the context of their formal studies. We realised that the implementation of these educational ideals was going to take time.

A number of factors can be connected to students' lack of involvement. In general, the novelty of the approach seemed to be overwhelming for most students. The reasons reported were mostly related to the use of technology rather than educational reasons, although clearly, as it has been already mentioned, both types of barriers had an impact on their attitudes and behaviour. Students highlighted a number of issues related to their resistance to engage with the project activities. These include lack of knowledge and familiarity with some software and tools, getting used to the new VLE, feeling "safer" to continue working with print and paper-based resources and assignments, irrelevance of technology use to their dance learning, fear (in collaborative tasks) of modifying contributions from others, difficulties accessing equipment, getting connected and accessing some external sites which needed a new account creating or signing in. One of the lessons we learnt in this project was precisely about decisions regarding the use of external tools and sites as opposed to those provided by the university. In our experience students were more reluctant to work and interact outside the confines of the VLE.

To the above list of issues students also reported lack of time, extra effort and work, as well as low involvement of the other peers as reasons for not engaging with the learning opportunities offered by this project. Some specific comments students made in the focus groups about how they felt are as follows:

'I felt it was extra work, as there is a lot to do on it. It took a lot of time to get everything work correctly.'

'I feel it is safer and easier [to submit paper copies] because I wouldn't have to worry if they did not get my email or if there was a problem with sending it.'

'The main difficulties were in understanding how to contribute to the mind map...'
without editing someone else's work by accident. Also basic things like copy, paste, etc. were difficult to find at first and then also difficult to work because they were using a similar format to, for example, a word document.' (Student focus groups)

In fact, there were difficulties not only for students but also for lecturers. There was insecurity and uncertainty from academics who, on the one hand, as 'digital immigrants' (Prensky, 2001) were themselves in the process of learning to develop online resources for their subjects; on the other hand, they also had the task to adapt to new roles. Understandably, without much time or training, staff did not want to plunge fully into the new blended approach, neither did they feel confident managing it. The experimentation with digital tools in a selection of subjects was mostly limited to volunteering students because it was perceived by teaching staff as too risky to implement, especially when activities were connected to assessment. Classroom observations revealed some attempts of facilitating greater control to the learners, but decisions on activity design continued mostly under the control of lecturers, making it difficult to transform roles and behaviours. Student feedback was welcomed and encouraged by lecturers but all in line with common educational roles.

Most of the designed tasks were to be completed outside lessons with some aspects that could be expanded and further discussed during class time. For instance, students were invited to participate in collaborative digital walls in the Arts and Society module and mind maps in the Ballet module.[6] In these activities they had to search for information, summarise it, make links with it, and share it (Figure 3).

Figure 3. An example of a digital wall on street art for the Arts and Society module http://padlet.com/wall/BanksyWorks

Just by participating in these online tasks, students were producing together a visual whole of knowledge in one area on an open digital space which offered a wider dialogue with others.

Those students who got involved in the project were clearly motivated learners who expressed a high level of satisfaction completing the digital tasks. An important aspect reported among those students, was the links they were able to
make between theory and practice with the support of the technology:

'It has made me think more about the engagement with my practical work.'

'I found linking readings to practice and finding creative ideas.' (Student focus groups)

Some of these students pointed out that the digital tools had facilitated the connection of ideas as well as the integration of multimedia, although one student commented on the fact that she did not feel technology helped more with reflection than when working with pen and paper.

It has been acknowledged that, "in dance technology education, there is a unique set of opportunities to present innovation in the context of tradition that might increasingly reaffirm creativity, discipline, and the centrality of the body in motion" (Risner and Anderson 2008, p. 119). Artistic creativity was particularly evident in those who had engaged with the presentation of a digital choreographic sketchbook. This was an invariant assessment task, i.e. an assignment that could be used year on year without modifying the instructions. The activity itself encouraged students to work autonomously and in collaboration, to carry out research for the exploration of creative choreographic ideas, and to use an online presentation tool.[7] Departing from the same set of instructions, students produced a range of very different highly sophisticated versions of their solos and duets in their artist sketchbooks. One student felt that the templates provided by the software were not suitable for what she wanted to achieve so she created, on her own initiative, a template replicating the look of a complementary paper handbook she had produced during the first part of the module. Some students made useful links in their choreographic handbook between other practical classes (ballet and contemporary; Kathak and contemporary.) Those students who engaged with this task commented that they like freedom of choices and do not want to be directed too much or limited by restrictive task instructions. They felt a deeper learning process of making choreography is achieved when the can reflect on thoughts processes and engage in conscious decision-making. For example, they agreed that they prefer to look for their own duets rather than having a choice of duets proposed by the teacher. This result coincides with experiences of students elsewhere. For instance, students producing a digital dance portfolio at Wayne State University in the USA:

'were often more self-motivated and engaged because the content of their digital portfolio is a clear and direct reflection of themselves and their aesthetic values. Within this pedagogical approach, technology enhances dance learning in more meaningful and resonant ways for students' (Risner and Anderson 2008, p. 121)

Indeed, lecturers in higher choreography modules reported evidence of deeper intellectual engagement from those students who had been involved in digital choreographic sketchbooks in the first part of the project.

It is important to point out that, halfway through the project, the university changed the VLE from a Blackboard learning environment to another commercially available, Desire2learn. Within this new platform, the Faculty of Arts and Human Sciences developed a more attractive interactive interface for their modules. The new environment offered a more user-friendly web space for each module that became a point of reference for students. The new module websites facilitated a more blended approach to dance education where news items, discussion forums, various learning materials and library links helped transform learning independently and in collaboration with others. The VLE design also started to change how communication was conducted between staff and students, and supported the introduction of an e-submission process for assessment tasks. The new platform clearly gave a solid ground from which to
start articulating e-learning materials for the dance programme during the second part of the project.

The project has made evident some of the challenges, needs and opportunities that arise from aiming at encouraging the adoption of innovative technologies and new roles in education. Findings from this e-learning initiative have revealed, on the one hand, obstacles related to educational expectations (such as content responsibility and degree of learning autonomy and control), attitudes and motivation, levels of digital literacy (including lack of awareness of adequate copyright practices, and of online help), accessibility to technology, and perception of the role of technology in formal learning in theory and practice based dance modules. Designing and testing these dance OERs has also highlighted a number of needs regarding institutional involvement and technological infrastructure. Adequate support involves commitment to technology training and support, acquisition of relevant software, effective design of the VLE interface and interactivity. On the other hand, findings have also exposed greater flexibility gained with the use of technologies (for sharing and communication), unexpected creativity from students while manipulating digital tools, and a transformation of both classroom-based and independent learning.

A trajectory towards openness

The CCC:EED project allowed for testing and experimenting with the extent to which both practice and theory based dance subjects could benefit from making academics and students engage with innovative technologies and design a diversity of activities around them.

The significance of the process of producing those OERs for dance could be summarised in the following four observations:

Firstly, they constitute a departmental wide effort to distribute a large amount of dance educational resources. If one looks carefully on the internet, one will certainly be able to find a variety of open resources that could be used for dance studies. From a multitude of dance videos of professional and amateur dancers to a range of images and texts, there is some choice of reusable (although mostly non-derivative) materials. However, it is far more difficult to find complete activities, assessment tasks, or full courses specifically designed for dance studies. The hope is that the OERs would be inspirational to many dance educators.

To date the dance community has hardly shared any educational content as such. So far there is no evidence of wide interest in or reuse of these resources. Statistics on the CCC:EED resources in JORUM show a few months after the release of the OERs produced by this project that these have been seen in 28 different countries from all continents, but numbers of individuals accessing them remain very low. These have been so far a total of 322 views with 245 downloads of 10 different items.[8] The most active periods being the end and beginning of the academic year, i.e. June and September, when lecturers have time to think of materials for the new student cohorts (Figure 4).
Not surprisingly, these views and downloads were concentrated in the USA (with a total of 233 times) and the UK (169), followed by India (22) Canada (15) and France and Germany (13 times each). As we pointed out earlier, the USA is clearly a leader in introducing technology into the dance curriculum, an action that could lead to OER production and awareness. The figures of activity in Jorum from the USA indicate that some teachers and learners are looking for resources to use. However, it is not possible to know whether the views are incidental or if they are reflecting an interest from actual dance educators and learners. Downloads, however, could be more directly connected to purposeful and focused searches. It is important to note that there has been no rating or evidence of access to these resources from any of the other repositories where we made connections (Merlot and OERcommons.) Interest in the UK could be related to the project dissemination visits arranged in five dance institutions in the UK. The visits made clear that, in general, dance academic staff was neither aware of the concept of OERs or of educational repositories, and therefore that the dance community in the UK is still quite inactive in this area.

Lack of dance OERs production should be linked to lack of OERs available, and this in turn should be linked to lack of searches. Similarly, there was an evident lack of engagement by the dance community with the project website which included a blog and a resource area. Perhaps this could also be explained, at least to some extent, by the current perceptions of what the study of dance entails, as well as current educational practices in dance programmes, as revealed by this project.

The hope is that this project's educational intervention, using a range of technologies for the production of OERs, would be inspirational to many dance educators around the world. It seems that dissemination activities have a certain impact, but these are clearly not sufficient to break the vicious circle, other interventions such as the initial support of a specialist e-tutor on site, institutional support and training activities would be needed for a real transformation of a dance programme.

Secondly, the production of the dance OERs for this project has been an extraordinary team effort which has consisted of speedy up skilling of digital literacy by academic staff and students. In this process, participants became aware of issues such as content responsibility, authorship, copyright law and Creative Commons licences, as well as accessibility. These aspects were made explicit in the resources to support other users' awareness. The OERs produced for the CCC:EED project contain a range of materials and activities for and by
dance lecturers and undergraduates. They combine both newly created and freely available resources. They make use of new podcasts and tutorials, as well as online texts and archives, such as the Dance Digital Archives website. The audio-visual and visual resources include more than 3,000 digitised materials from the National Resource Centre for Dance collections, photographic images from the dance staff’s personal collections and videos, presentations, mind maps, and digital walls produced by dance students (Figure 5).

Figure 5. Digitised image from the Eilean Pearcey Archive, National Resource Centre for Dance

The learning packages released by this project include:

- teacher notes with a description of the background, materials, aims, learning outcomes and tools;
- instructions for students on how to complete the tasks;
- ideas for additional or complementary tasks;
- links to relevant student samples or other relevant online resources;
- a list of recommended readings and audio-visual materials.

The release of these dance OERs in several repositories will provide a unique opportunity to monitor in the long term whether the dance education community has taken notice.

Thirdly, the methodology behind these dance OERs is based on principles of connectivity (Siemens 2005). The resources establish a close link between active reading, reflections, articulation of knowledge through creative processes and learning in the studio or classroom, bridging theory and practice which leads to an appreciation of how these connections allow for new developments in pedagogy, performance and practice. By the end of the project, these connections were becoming clearer:

'Bringing in the e-learning task made me think of the skills you require as a real choreographer. I started thinking about my subject as a professional project.' (Teacher interview)

'When we heard first, oh yeah, we are doing online activities in ballet, how is that actually gonna to be helpful at all? But it has actually been really helpful...I
do look at them afterwards.' (Student focus group)

Also, in relation to this point, the OERs invite producers and users to engage with technology supporting the development of interrelating digital literacy skills and professional skills. In addition, the resources connect formal and informal learning by drawing from students’ experiences beyond the educational setting.

**Fourthly**, the process of creation of these OERs initiated a transformation of the dance curriculum at Surrey. The conception, creation, testing and reflection on the resources brought about an unexpected rethinking of the dance programme content, objectives, assessment and delivery.

The introduction and testing of various e-learning tasks supported a move from a learning model of low pedagogical level of openness with a focus on knowledge transfer towards a medium level where learners influence objectives and methods (Figure 6).

Figure 6. Matrix 1: Constitutive elements of Open Educational Practice (OPAL 2011, p. 3)

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<thead>
<tr>
<th>Learning Architecture</th>
<th>OER Usage</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>No OER (re-) usage</td>
<td>OER (re-) usage or creation</td>
</tr>
<tr>
<td>High</td>
<td>Social practices, Collaboration, Sharing (Reflection in action), „open“ objectives, „open“ methods</td>
<td>A</td>
</tr>
<tr>
<td>Medium</td>
<td>Dialog, Procedures, Rules (Know-how), „closed“ objectives, „open“ methods</td>
<td>D</td>
</tr>
<tr>
<td>Low</td>
<td>Knowledge transmission (Know that), „closed“ objectives, „closed“ methods</td>
<td>G</td>
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During the course of the project, the Dance Department went from a culture of paper-based resources to a wide production of digital resources, that is, from the distribution of print materials (photocopies and pdf files) to the co-creation of online activities for personal reflection, self-testing and collaboration. Dance academic staff members are now committed to incorporate e-learning and digital literacy into the dance curriculum which will be the foundation to new educational practices. In addition to practical workplace experiences in their programme, by engaging with digital resources and tools, students can complete authentic activities in dance, and become real artists and creative producers of reusable items.

**Next steps**

This project has constituted a first step towards the opening of educational practices in the Dance Department at the University of Surrey. It offered a rare opportunity for dance lecturers and undergraduates to engage in the production of OERs.

In order to consolidate the initial impact of the project and ensure successful
implementation of e-learning, the department will be working towards the following:

- a department-wide reformulation of the dance programme for embedding digital literacy at all levels in the curriculum;[9]
- establishment of coherent policies and practices around e-learning, including feedback processes and criteria for both formative and summative assessment tasks;
- extensive use of the VLE for effective communication, teaching and learning;
- collaborative development of further OERs for dance studies;
- articulation of a full student-centred pedagogical approach where students become more confident and more in control of their learning by using innovative technologies to carry out meaningful tasks

The real aim of this engagement with technology is, in the long term, dance staff and students' transformation into creative digital authors, not only for educational purposes but also for professional ones.

Finally, future research would need to look at issues such as the extent to which e-learning contributes to and differs in theory and practice based dance subjects, and how dance OERs are being shared and reused by the educational community.

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**References**


[1] For more information about the CCC:EED project go to the project website: http://contextscultureandcreativity.wordpress.com/resources/e-learning/

[2] Links to these OERs have been also established from other major repositories of OERs such as Merlot (http://www.merlot.org/merlot/index.htm), and OERCommons (http://www.oercommons.org/).

[3] The list is available in the Resources area of the project website: http://contextscultureandcreativity.wordpress.com/resources/e-learning/

[4] For this we used the online questionnaire tool SurveyMonkey. Available at: https://www.surveymonkey.com /

[5] Research journals such as the *International Journal of Performance Arts* and *Digital Media and Performing Arts Journal* have been recording these various ways in which artists utilise technologies.

[7] Prezi presentation software was recommended as it is visually flexible and facilitates the inclusion of multimedia. A Prezi app is also available for tablets. Available at: http://prezi.com/

[8] The resources were released in January 2013 but statistical data is only available from 20th March 2013. For an update of this data: http://find.jorum.ac.uk/report?source=%7B%22query%22:%7B%22query_string%22:%7B%22query%3A%22ccceed%22,%22default_operator%3A%22OR%22%7D%7D,%22size%3A0,%22partial_fields%3A%7B%22exclude%3A%5B%22statistics%22%5D%7D%7D%7D#

[9] JISC has an online hub with numerous resources to support institutions development of digital literacies: http://jiscdesignstudio.pbworks.com/w/page/54539610/DL%20resources%20index