

PALATINE Development Award: Executive summary

An exploration of learner and tutor experience in using online synchronous learning environments (OSLEs) across disciplines within the School of Drama and Creative Industries.

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The full report is available at: <http://www.palatine.ac.uk/development-awards/1732/> and <http://www.qmu.ac.uk/palatine/deliverables.htm>

1. Introduction

This report presents key findings from a 9-month, mini-project, which investigated tutor and learner experiences of online synchronous learning environments (OSLEs) in drama and cultural studies at Queen Margaret University (QMU), Edinburgh. The study was funded by Palatine, the Higher Education Academy Subject Centre for Dance, Drama and Music and was conducted at QMU between October 2009 and June 2010.

2. Background

Drivers for introducing and encouraging use of an OSLE within higher education include social, political, economic, and environmental factors. The student population is made up of a diverse demographic. For example, within higher education institutions, the student body may at any time consist of school leavers, distance learners, part-time learners and mature learners, as well as international students from countries around the world. All learners have competing demands on their time, whether from family, work, or other commitments, which they need to manage along with their studies. In addition, many learners are required to undertake a work-practice placement as part of their higher education experience, which frequently involves being based at a distance from their institution. Tutors within higher education are also facing lifestyle changes, with many now job-sharing or balancing professional and academic responsibilities, as well as supporting students based outwith their institution, within the UK and overseas. These factors make the task of maintaining learning support when either the student or the tutor is away from the institution challenging and it is suggested that use of an OSLE might offer an appropriate and flexible means of providing such support for learners.

For the purpose of this study we define an OSLE to be: a web-based, computer mediated communication (CMC) program, which enables any combination of learners, tutors, and subject experts to meet 'virtually', in 'real time', for the purpose of natural interaction and shared communication, in respect of a learning activity.

Conducting this mini-project has enabled us to trial an implementation of an OSLE (Wimba) within the learning, teaching and mentoring processes of the School of Drama and Creative Industries at QMU and to explore the role of the OSLE in supporting and enhancing learning and teaching within three programme areas for three very different purposes:

- **MA Arts and Cultural Management**
Facilitating one-to-one tutorials between tutor and students to support dissertation completion for students based in Greece, Bahrain and South Korea;
- **BA (Honours) Drama & Theatre Arts**
Presenting student performance rehearsals to tutors who were away from the institution and facilitating synchronous feedback from the tutors to the students;

- **BA (Honours) Performing Arts Management**

Supporting one-to-one academic mentoring – facilitating one-to-one meetings between academic mentor whilst students were off-campus on work placement experience.

3. Aim and objectives

The aim of this study was to investigate whether, and in what ways, tutors and learners engage with online synchronous learning environments (OSLEs). An in-depth, comparative study of tutor and learner experiences of using an OSLE was carried out in order to achieve the following objectives:

- Build a rich picture of *actual* learner and tutor engagement with OSLE technology across three diverse drama and cultural management programmes, two at undergraduate level and one at postgraduate level;
- Develop an understanding of the impact of using an OSLE in the learning experience;
- Develop guidelines and case studies for educators to aid and improve learner and tutor use of an OSLE.

4. Method

This was a qualitative study and followed a mixed method approach to data collection. A collective case study design enabled us to study in-depth examples where use of an OSLE had been introduced within three different drama programmes at QMU. Qualitative research is recognised as having the strength of generating rich data (Glazier 1992) and it was anticipated that studying these cases in-depth would enable generalisations from our findings to be applied to a wider population (Stake 2000), for example, across other drama and creative industries subject areas. Ethical approval was gained from the institution. Preliminary data were gathered from students and tutors via web-based self-completion questionnaires, while video diaries and individual interviews conducted through use of the OSLE facilitated access to learners’ and tutors’ perceptions and preferences regarding their experiences of using the OSLE. An iterative and interpretive process of analysis was employed, enabling the value and shortcomings of using an OSLE to be identified. Despite the small scale of this study, as demonstrated in table 1, a rich picture of experiences has emerged, which has enabled us to develop guidelines for tutors and students with the aim of improving future use of an OSLE.

	<i>Questionnaires</i>	<i>Video diaries</i>	<i>Interviews</i>
<i>Tutors</i>	n=4	n=3	n=4
<i>Students*</i>	n=5	n=4	n=5

Table 1: Demonstrating participant numbers for each data collection method

**Note:* participating tutors were consistent across the study, while participating students varied for each data collection method and due to the anonymity of the data collection process it is not possible to identify where a student has participated in more than one form of data collection.

5. Key findings

Studying three different cases where use of an OSLE had been introduced into the curriculum enabled the project team to build a rich picture of use for three very different purposes within the subject area of drama and cultural management at QMU. Within our main report, our findings are presented holistically for each case study. A summary of the key findings across the three case studies for each of these areas is now provided.

Overall experience of using the OSLE

Similarities were found regarding initial experiences of using the OSLE across the three cases and generally tutors and learners were excited regarding the prospect of using the

OSLE as a means of distance communication. Some frustration was reported regarding the functionality of the technology – in particular the quality of the video and audio elements was variable. However, tutors and students demonstrated patience and commitment to using the technology; furthermore, since the trial the program has been improved.

Context of use

The OSLE was used differently in each of the three case studies, as table 2 illustrates.

<i>Case study</i>	<i>Programme of study</i>	<i>Context of use</i>	<i>Student location</i>
1	MA Arts and Cultural Management	<ul style="list-style-type: none"> • For conducting one-to-one tutorials between tutor and students in order to support dissertation completion. 	<ul style="list-style-type: none"> • One student in Greece; • One student in Bahrain; • One student in South Korea.
2	BA (Honours) Drama and Theatre Arts	<ul style="list-style-type: none"> • As a vehicle for students to demonstrate performance rehearsals to tutors who were away from the institution; • As an environment for tutors to provide feedback to students on their performance rehearsals – both individually and in groups. 	<ul style="list-style-type: none"> • Seven students, all based in Edinburgh.
3	BA (Honours) Performing Arts Management	<ul style="list-style-type: none"> • A means of providing one-to-one developmental support for students who were away from the institution on work placement experience. 	<ul style="list-style-type: none"> • One student in London; • Two students based in Edinburgh.

Table 2: Context of OSLE use across the three case studies

Advantages experienced

As would be expected where a tool is being used for different purposes, differences were identified regarding the perceived benefits of the OSLE, but similarities were also noted. In particular, use of the OSLE was found to facilitate:

- Convenience – e.g. being able to meet despite geographical distance;
- Immediacy of communication;
- Study support;
- Contact between tutor and student;
- Maintenance of tutor presence;
- Development of communities of learners;
- Personalisation;
- Sharing of materials;
- Student empowerment;
- Revisiting of work through archive facility;
- Objectivity and individualisation when viewing archives of student work;
- Privacy and confidentiality;

- Access to experts;
- A new approach to the working environment for tutors.

Challenges encountered

For all three cases, challenges in using the OSLE were found to relate to:

- Time – e.g. time to log-in to the system; time to become familiar with using the system;
- Lack of spontaneity of communication – instant talking was not available for the OSLE used in this study;
- Functionality and complexity of the system – it was reported that there was a lack of intuitiveness with some of the system's functions and at times the interface could be overwhelming;
- Technical issues – e.g. difficulty with connection speeds;
- Poor quality of video and audio.

In addition, in case study 2, where the OSLE had been used for performance practice and group sessions, specific challenges were found to relate to:

- Physicality constraints – e.g. it was not possible for tutors to make physical corrections of students' poses, such as moving an arm into an alternative position;
- Constrained performance space, due to the camera;
- Time issues – e.g. preparation time when setting up a performance space;
- Difficulty accommodating group use – large groups at one location could be disadvantaged regarding equality of communication.

Student response

The tutors described a mixed student response across the three case studies. Several students were very positive; these students enjoyed the experience and indicated they had quickly become comfortable with using the OSLE. Where students reported negatively on their experiences it is possible that poor quality of the video recordings and specific technical issues had an effect on their overall response to the experience. Concerns raised by students related to:

- Anxiety regarding being seen on video (this was only reported by female students);
- Personal space – e.g. some students were unhappy at communicating with their tutor from their home environment.

Tutor response

Generally the tutors were enthusiastic regarding the future potential of the tool. The tutors recognised that there was a need to learn to work with students in a slightly different way within the OSLE. It was also suggested that the technology needed to be improved to meet the needs of the students and tutors.

Suggestions for improvement and future use

Several suggestions were made regarding future use of the OSLE and these include:

- For maintaining peer contact – e.g. with fellow students based at different geographic locations;
- Introducing the system to students at an early stage, embedding its use within a module, aiding empowerment of students and making them more relaxed regarding its use;
- Exploring the use with mobile technologies;
- Connecting between an OSLE and other learning technologies.

6. Discussions

The findings demonstrate how we have met the aims of the study by creating a rich picture of actual learner and tutor engagement with OSLEs across three diverse drama programmes, and by offering us an insight into the impact of an OSLE in the learning experience.

OSLEs for learning and teaching

The tutors believed that the OSLE had provided them with a convenient and easy-to-use tool which allowed them to reach out to their students and develop a stronger social presence which would facilitate learning wherever the student may be physically located. In many cases, the technology failed to deliver and the learning experience was compromised; however, an over-whelming enthusiasm and commitment to OSLEs prevailed throughout the study. Learners and tutors worked around the technology and few discontinued using the OSLE, although some voiced considerable frustration at the lack of robustness and limited functionality of the technology.

Despite the very different uses of the OSLEs in the case studies, two clear themes resonated throughout all of them:

- The OSLE as a one-stop learning shop;
- The OSLE as a connected learning environment.

The OSLE as a one-stop learning shop

The OSLE was considered to be a one-stop learning shop by tutors, providing video, audio, text, file sharing, breakout groups, recording, and archiving in a private, password-protected area. This range of functionality differentiated the OSLE from social network sites and Skype for the learners and tutors and supported the development of both cognitive and social presence. Participants particularly liked:

- The instant visual and audio communication between tutors and students supported through the OSLE;
- The archiving tool;
- The potential of the breakout groups.

Frustration was caused by technical issues including:

- The poor design of the system with all the participants finding the system, complex, fiddly, and with a busy interface;
- Poor connectivity. Audio and video were often compromised because of poor and intermittent Internet connection;
- Audio feedback (“squeal”) which meant that learners either had to resort to turn-taking or wear headsets when possible.

Although many of these technical frustrations could be explained by the early version of the OSLE that was used by the participants in the study, problems persist in later versions. As a result learners and tutors will use Skype from time to time because of its superior audio and video quality.

The OSLE as a connected learning environment

All the tutors and students felt the OSLE had the potential to change significantly the learning landscape for them: it might offer a new way, and a more exciting way, of doing the business of education in the 21st century – it was possibly a step-change. The OSLE was considered to be a more dynamic, personal, student-centric, fun learning environment, which could “free participants” from the constraints of the current physical learning environment of the campus in Edinburgh. There was a strong belief that the OSLE encouraged participation and learner interaction, as well as improving motivation.

The benefits of the OSLE for learning and teaching included:

- Development of cognitive presence;
- Empowerment of learners;
- The tutor-learner connection;
- Development of technical skills.

Nevertheless, it was acknowledged that for some the OSLE may be an impediment rather than an aid to learning, for example, through the need for turn-taking to reduce audio feedback and the potential intrusion of video on the social space of a learner.

In most cases, the tutors were consistent in their views but there was a notable exception – the informality or the formality of the OSLE. Here there was a lack of consensus amongst the tutors whether the OSLE was a formal or informal learning environment. This would reflect:

- The tutor's preferred approach to learning and teaching;
- The learning context and subject area;
- Different semantic understandings of the terms, formal and informal learning.

For future studies this would be an area for consideration especially if there is difference between learner and tutor perceptions of an OSLE.

Throughout the interviews and the diaries, the four tutors continuously reflected on how the OSLE impacted on the way they worked and the way they worked with their learners. They were addressing if, and in what ways, the OSLE affected 'teaching presence' and more precisely how it changed their role from lecturer to facilitator. Their discussions, mirroring the work of Garrison and Anderson (2003) focussed on:

- Designing and organising the learning environment in an OSLE;
- Facilitating discourse in an OSLE;
- Direct instruction in an OSLE.

OSLEs for supporting research

An unexpected use of the OSLE was as a means of supporting data collection during this study. This approach to data collection had not been anticipated at the methodological planning stage of the study, but it soon became clear that using the OSLE to conduct interviews with tutors and students, who were geographically dispersed from the institution, was a practical solution and one which we hoped would widen participation in the study. Furthermore, the OSLE offered a convenient means of enabling participants to create video diaries – an important data source for this study – where they could reflect on their actual experiences of using the environment for both learning and teaching.

Our literature search revealed limited guidance regarding use of videoconferencing tools for supporting data collection through interviews, or video diaries; instead, the focus of guidance was found to relate more to non-visual, synchronous and asynchronous online methods of research. This is a gap which we are attempting to address.

Generally, the visual benefits when using the OSLE to conduct interviews and to capture video diaries of participants' experiences were consistent with those identified in the literature. For example, the visual element enabled the researcher to confirm the identity of participants and to gain an awareness of their personal status and circumstances during interview, which would not necessarily have been possible via a telephone interview; this concurs with work by Nastasi (1999), Mann and Stewart (2000), and Sedgwick and Spiers (2009). The visual element also aided the development of a rapport between interviewer and participant (Sedgwick and Spiers 2009), an important factor, especially where participants

were located outside Scotland. Additionally, the visual and gestural cues were helpful in assisting understanding of both the video diary recordings and the interviews at the analysis stage – in particular the visual cues assisted in relaying depth of feeling which participants had about certain aspects of using the OSLE. Again, our findings here concur with the literature in this field, particularly Nastasi (1999) and Sedgwick and Spiers (2009).

Limitations were noted, especially during interview, where due to the limitations of the OSLE used in this study, only the person who was actually speaking was visible on screen. This hindered the ability for interviewer and participant to pick up gestural and visual cues during interview. For example, it made it more difficult for the interviewer to know if the participant had understood the question and for the participant to see visual cues of re-enforcement and encouragement given by the interviewer.

Specific benefits which were observed when using the OSLE for supporting data collection included:

- Convenience;
- Offering a familiar and secure environment;
- Allowing the researcher to experience the environment in a similar way to the participants – similarities with ‘being in the field’;
- Aiding recall of events;
- Facilitating a more equal status between interviewer and participant;
- Ability to revisit data many times;
- Allowing other researchers to view recordings;
- Assisting practice of research techniques.

Challenges were also encountered and these mainly focussed on the actual system, such as the intuitiveness and usability of the system, as well as technical issues such as failure of video or audio elements, and poor connectivity. One concern which related to the environment itself was whether the participants and the interviewer were actually comfortable in using the OSLE for the purpose of interview and/or diary creation.

To a large extent, these findings are very similar to our findings in relation to using the OSLE for learning and teaching.

7. Conclusions

Online synchronous learning environments are an emerging technology which may offer great potential. Our experiences and knowledge of using such environments for learning and teaching, and also for supporting research, provide a glimpse of the possible role of this tool for the future. Much will be dependent on how technologies develop but there is a real enthusiasm amongst our tutors and learners for such a tool to facilitate an online connection.

Through this mini-project we have been able to trial an implementation of an OSLE within the subject area of drama and cultural studies at QMU, and to explore in-depth, the role of the OSLE in supporting and enhancing learning and teaching processes for three very different purposes. Our small, collective case study, has sought to answer our research questions and build a rich picture of learner and tutor engagement with, and experiences of, an OSLE. Our research indicates that the OSLE provided a convenient and easy to use tool, which enabled our tutors to reach out to their learners and develop a strong social presence, facilitating learning wherever the students were physically located.

As a consequence of our small study we have begun to develop guidelines which can direct tutors and learners in using the OSLE more effectively, encouraging a deeper level of

engagement with this emergent technology. However, we suggest that further studies are needed to explore additional ways in which OSLEs can be used to support learning and teaching, especially in other subject areas, and potentially with a wider range of media, such as mobile technologies. It is also suggested that longitudinal studies are undertaken which can chart the development of a more complex understanding of OSLEs and their role in the learning and teaching process. An unexpected outcome of our study was the use of the OSLE as a research tool: this seemed highly appropriate for this project but has provided us with considerable experience which will be used in future educational studies. As the technology continues to improve, especially mobile OSLEs, there is much potential for this tool in learning, teaching and research.