CHAPTER 1

Capturing the Moment and Replaying the Tape: Developing Technology-Enhanced Strategies for Student Learning and Engagement in Music Performance at Third Level

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Introduction
Initially motivated by a need to create clear guidelines for assessment and feedback on group performances in music, this chapter reflects on the impact of an intervention developed during an accredited professional development programme in learning and teaching to utilise audio-visual technology to improve the student learning experience by making recordings of classroom activities accessible to students through a Virtual Learning Environment (VLE). Students on the music programme engage in a series of ensemble performance projects across a range of genres. Building on the concept of assessment for learning, the project involves consideration of effective group work, student interaction and engagement in group learning activities within and beyond the classroom. Formative peer assessment becomes an integral tool in the development of motivation and understanding and can help identify areas or skills that students need to develop from week to week over the course of the module. Participation in an accredited professional development programme allowed the lecturer to share ideas, learn from critique and develop best practice in terms of research and implementation within and beyond the discipline of music.

The impact of the project can be examined through a number of factors. In the short term, any changes to grades achieved are not assessed although this may form part of a longitudinal study. Instead, attitudes and responses of students provide a qualitative means of assessing impact. The three principal factors examined are student engagement, student understanding of assessment practices, and lecturer responses to the use of technology. Through a critical evaluation of the development and implementation of an intervention, the paper presents a model that can be utilised and further developed in a range of contexts within and beyond the area of music performance to enhance and encourage student engagement and understanding. Four impacts of the intervention will be presented, namely enhanced student engagement, a greater understanding amongst students of assessment practices, greater
levels of communication between students and with their lecturer, and moves to introduce similar models across a range of classes on the programme.

**Methodology and Data Collection**

The intervention initially took place over the course of one semester with students on the BA (Hons) Applied Music at Dundalk Institute of Technology. The twenty-six students involved were in the second year of a four-year programme. All but three of the students were aged between eighteen and twenty-one, with three mature students. For this module, the students had a one-hour practical lecture in each of three genres of music – ‘traditional’, ‘classical’ and ‘popular and jazz’ – as well as a larger ensemble and choir. Assessment had conventionally been an end-of-semester performance worth 30% with 70% of marks for continuous assessment, marked in relation to preparation for and participation in class. Lecturers assessed each class as a rehearsal with individual marks given to each student. As part of the intervention, the process of marking did not change but students were encouraged to provide their own feedback both in class and online to the lecturer and their peers, with feedback also provided in class by the lecturer.

In order to assess the impact of my change in practice, I carried out anonymous surveys with students in the final week of the semester. Prior signed permission to conduct a survey and develop research related to my MA had been sought in week three, in compliance with Institute ethical guidelines and students were made aware of my desire to assess changes in practice. The surveys were distributed as paper copies at the end of class, with time dedicated to the completion of the survey. Questions focused on student satisfaction with the module – clarity of information, level of learning, suitability of assessment and most enjoyable aspects. More developed questions related to the use of the VLE, the benefits of material on the VLE and the frequency with which they engaged with material on the VLE.

**From the Music Class to the VLE**

Each week I facilitate classes in group music performance. Early in the semester I choose repertoire (knowledge) that I believe is suitable for the group and the level or standard to which they need to aspire to meet the learning outcomes of the module at the stage in the programme that they are at. Each week, the students are required to practice and successive classes develop upon the knowledge acquired by developing skills. These skills may be related to technique on an instrument or related to other aspects of performance including communication. The communicative skills refer to both communicating with others in the group and learning to communicate with an audience. In every classroom the ability of students to communicate clearly with each other and with a lecturer varies greatly, as does the preferred mode of communication.

Students’ participation in group performance classes is monitored weekly with marks being assigned for participation, preparation and progress. Through the semester I facilitate formative assessment, asking the students to perform for me in the classroom. I take notes. After the ‘performance’ I ask them for their thoughts. The response is often limited. I communicate my thoughts from my notes. They are often confusing or limited in meaning as my perspective of the performance is so different to that of the student. So, challenged by my desire to do better and informed by the theories presented during my postgraduate research in education, I press record on a little video recorder and can later point to examples of what happened during the performance. The video becomes a tool for communication.

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1 A ‘mature’ student is one who is at least 23 years of age on January 1st of the year they enter a course.
Previous related studies in music education include developing self-regulatory skills amongst individual music students preparing for performance (Nielson, 2001), the advantages of videotaping in various music education contexts (Daniel, 2001) and the challenges relating to the use of video analysis in piano teaching (Daniel, 2006). Acknowledging the challenges associated with assessment of music performance, Baker-Jordon (1999) highlights not only the potential for examiner bias but also the importance of strong interpersonal communication in order for examiners to communicate a critique or evaluation of a student’s performance. The benefits of videotaping for music education is further outlined by Daniel (2001) drawing on a variety of authors. My intervention is similar in many ways to strategies developed by Lynch (1998), developed further in the context of genre and the use of ICT.

During the class time, I become part of the group. I have a particular role as a teacher/lecturer, introducing material to the rest of the group, providing instruction and expertise and, at times, performing with the students. I am also a facilitator encouraging other members of the group to make suggestions, demonstrating their creativity, particularly in relation to the arrangement of music and approaches to presentation. However, the group dynamic is also affected by what happens when I am not there. The group practices without me and has developed an existence in virtual space where they share ideas that are not monitored by me. Usually using Facebook, the group share ideas, links to youtube or other resources, and discuss their own progress without my involvement. They make me aware of these interactions through in-class discussion but I am happy that this is a space for them to refine their learning without my involvement. These are examples of students demonstrating intrinsic motivation (Newstead and Hoskins, 2003) and institutional encouragement to explore the use of Virtual Learning Environments (VLE) and related technology through my accredited professional development programme allows me to mirror their use of online spaces and monitor and enhance the value of these developments. The online platform becomes a space in which to communicate and learn.

The emergence of peer learning in a virtual environment echoes the study of Petocz et al., (2012) who state:

> with a greater focus on e-learning and electronic communication, such aspects of peer learning become more important. Students are less and less likely to attend classes in person and benefit from the lecturer’s live approach and the actual class interactions. Rather, they obtain learning materials electronically, experience the classes via recordings, and build their educational experiences in the virtual world (2012, p. 91).

Influenced in part by activities of the students and also by my own desires to enhance the learning experience, the intervention carried out during my Masters explored the potential usefulness of providing audio-visual reference in a virtual environment to encourage critical reflection and enhance feedback. However, the process provides an opportunity to also develop reflective practice and self-assessment, peer-assessment and motivation. Using a VLE, the intervention brings the learning experience beyond the classroom and develops blended learning opportunities. Aspects of learning include knowledge related to learning repertoire and context/background to music, skills including techniques and approaches on instruments and the ability to critique a musical performance. The intervention also highlighted the potential for enhanced engagement in learning and the understanding of assessment processes.
Student Engagement and Motivation

Student engagement in classroom activities is critical to the successful development of learning (Kuh, 2003; Quaye and Harper, 2014), particularly in programmes with an emphasis on skills development and experiential learning (Carini et al., 2006). A barrier for both engagement and learning can be underdeveloped skills-based learning processes whereby students are not able to engage in the evaluation of their own work. This may be further accentuated in the context of group activities such as performing in a band or ensemble. To facilitate the development of such skills, educators may use reflective activities that help identify weaknesses in a constructive manner and allow for the development of collaborative approaches to learning. In the music classroom, performers must learn to understand the development of musical sound and interpersonal musical relationships, as well as develop individual skills on an instrument or voice. It is necessary to facilitate opportunities for reflection through the recordings of performances that may be occasions for assessment. Acknowledging the potential of the internet and social media for facilitating learning (Dabbagh and Kitsantas, 2012), this project sought to use the internet as a channel for communication, collaboration, and creative expression that enhanced student engagement.

While music is an enjoyable activity for many involved, whether performing or listening, the enjoyable experience of music can often mask the level of work required to reach that point (Levitin, 2006). When the level of work becomes intensive in an effort to meet assessment criteria, the enjoyment can waiver and engagement lessen. In contrast to a live performance in front of an audience, a classroom does not necessarily allow for immediate reflection or provide the affirmation of audience applause. The enjoyment aspect may also be undermined by the necessity to perform in different genres. With many students on this programme engaging in the study of traditional music for the first time, it is not surprising that some respondents to the survey noted that they lacked the necessary skills, experience and/or confidence to critically assess others in this genre. Noting aspects of the module that they enjoyed, one respondent highlighted “coming out of my comfort zone” in relation to both the genre being learned and performed and the mode of learning – in this instance primarily aural learning approaches. It is evident from attitudes to recordings and attendance records that the act of video recording the group impacted positively on attendance and student engagement during the project.

Understanding and Engaging in Assessment

Noting the long tradition of assessment in music, Michael Fautley (2010) notes “it could be argued that it is only a specific aspect of music which has traditionally been assessed, namely performance, and that within this only a limited range of instrumental skills have been looked at. For this reason it is safe to say that practices which may have been historically appropriate are now being questioned, and at the same time newer ideas and techniques are finding their way into the daily activities of classroom music and instrumental teachers.” (2010, p. 1). Like Fautley, the methods employed here are based on an understanding of assessment that is not solely based on marks and grading. Assessment is a central facet of teaching not only instrumental skills but a range of transferable skills that are invaluable to the students’ learning experience. In the videos, students could critically observe their stage presence, communication and interaction during a performance, and synchronicity as a group, in addition to their own performance skills.
Assessment is an integral part of the student learning experience and can shape and enhance effective teaching. Assessment of musical performance is a challenging area in education due to the ephemeral nature of a performance, the subjective emotions connected to a performance related to aesthetics and taste and an awareness of the various factors that make up a musical performance and how to develop and improve upon these (Fautley, 2010). One of the underlying challenges to the development of this project – and for the students to be able to communicate clearly – was the need to clearly understand assessment methods and rubrics (Brown and Knight, 1994). Noting a lack of prior experience or confidence amongst students, the work of Dabback and Waldron (2012) emphasises the need to match self- or peer-assessment with informed feedback from the lecturer. Although in many instances the comments online provided by the students indicated a basic level of critical engagement, there was some inconsistency in technical awareness and in the level of marks being suggested by the students. However, by including space for lecturer feedback and in-class discussion, inaccuracies in remarks or confusion could be addressed without unintended offence to peers and student engagement in the process was enhanced. In the context of this classroom, students become more engaged in the assessment process through developing their understanding of the rubrics that have been pre-defined by an examining board and highlighting their relevance. Furthermore, by identifying different stages in the assessment process, this project facilitates different types of assessment that are conducive to enhancing learning and has informed staff discussion on changes in practice, particularly with regard to the weighting of marking criteria.

Both formative and summative assessment are utilised in this programme. The process of developing a performance, in which students demonstrate creativity, communication skills, and improvement in performance skills, is crucial to facilitating learning in the module. Whereas the summative assessment may be a live performance in front of a public audience, the formative assessments are shaped by different factors, albeit with an awareness of what is required at the end of the process, with no marks assigned to the video and response assessment. In this intervention the lecturer video records student performances during classes in agreement with students and makes these recordings available to the students using their virtual learning environment. The students are asked to critically reflect on the recordings, then develop self-assessment and later peer-assessment practices to facilitate and enhance learning through engagement and deeper understanding. Thoughts are shared online and in face-to-face discussions with the aim of developing strategies for practice and enhancing learning. Students are encouraged to include both positive and critical responses to the recordings. It is not only assessment for learning in terms of course content but facilitates the learning of transferable skills and higher-order cognitive thinking. While the lecturer has a particular role in terms of assessment, successful group work depends on the abilities of students to engage in self- and peer- assessment. This can also reinforce student engagement. Brown and Knight (1994) note: ‘Self- and peer assessment give learners a greater ownership of the learning they are undertaking. Assessment is not then a process done to them, but is a participative process in which they are themselves involved. This, in turn, tends to motivate students, who feel they have a greater investment in what they are doing’ (1994, p. 52).

The concept of assessment as a critical skill is embedded in the act of reviewing the videos. The intervention has encouraged students to be more discerning in their appreciation and critique of performances and to identify ways in which they can improve both as individuals and as part of a group. The intervention aided the development of critical listening and
evaluation skills in order to enhance the learning experience. Although marking guidelines and a rubric were provided to all students beginning each semester, some respondents noted that they were not clear on every aspect that they were being marked on. As Brown and Knight note: ‘The biggest problem is likely to be that tutors typically have multiple criteria that are often poorly articulated’ (1994, p. 113). Some aspects of the criteria and rubrics were discussed with students but discussions highlighted a need for further consideration of the instructions provided and the clarity of the criteria being used.

In seeking to further develop and integrate the intervention as a regular form of assessment on the programme, the issue of assessment overload arose. Wakefield (2003) notes that this can affect the quality of the work from the student and feedback from the lecturer. There is a tendency to advocate for less assessments but this does not necessarily benefit the student. Rather, it perhaps the type of assessment and the rationale for assessment that must be considered. Brown and Knight outline a different perspective in the debate concerning the quantity and types of assessment, with an awareness of practicalities for the lecturer or tutor and the engagement of all students:

Some tutors might suspect that fewer assessed items would lead to less work being done by basically idle students. A solution which also has the advantages of allowing students to experiment, and of making it easy to introduce some form of peer- and self-assessment, is to require work to be done but to insist that findings be presented in a concise form and to make the work qualificatory, not graded (Brown and Knight, 1994, p. 31).

Snowball and Mostert (2013) also highlight the potential of peer assessment for providing ‘more and faster feedback’ than provided by tutors but note arguments concerning potential challenges of implementation often raised by those in opposition to the practice. However, noting the value of self- and peer-assessment, Brown and Knight note that such practices make ‘the process much more one of learning because learners are able to share with one another the experiences that they have undertaken’ (1994, p. 52). Furthermore, Snowball and Mostert highlight the importance of peer assessment in developing active and independent learners, stating: ‘the evaluative, critical stance required by students in order to assess their peers’ work encourages the development of higher-order cognitive skills’ (2013, p. 646). The development of higher-order cognitive skills can contribute to lifelong learning, deep learning and greater motivation for learning.

The development of independence, both in terms of thinking and doing, is critically important to the development of the successful student. The success of formative self-assessment is reliant on a number of assumptions outlined by Brown and Knight, including the assumption that students ‘take seriously the business of weighing their work against available criteria’ (1994, p. 32). Integral to this is a shared understanding by staff and students of the criteria and expected learning outcomes or standards. Over time, videos become a reference log for standards that are expected and achieved by class groups. These may be compared to other sources available to students on platforms such as youtube, which can further inform discussion, reflection and peer assessment.
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Communicating online

Both the real and virtual classroom can and should be spaces for sharing of ideas, critiques and solutions. The intervention has allowed the integration of more discussion and instruction related to tasks and the purpose of self- and peer- assessment from an earlier stage in the classroom, allowing students more time to practice in face-to-face contexts prior to their online efforts. Despite some limitations, the intervention was successful in motivating students to consider their own learning and develop higher-order cognitive skills.

Using the VLE was viewed positively with respondents noting that the videos of other groups provided a benchmarking tool in relation to standards. Other responses noted that videos ‘allowed me to analyse what I need to work on and improve’, ‘Moodle has aided my learning process by using video to view my performances and rectify my problems’, and ‘getting to listen to how we sound as a group to other people was very helpful’. Although the intervention sought to provide students with the opportunity to engage with their learning as individuals (see also Dabbagh and Kitsantis, 2012), some responses indicated that students watched videos together and discussed them face-to-face while others noted the benefit of Moodle for communication between group members. Thus, the development of blended learning did not negatively impact upon face-to-face interaction, the development of team spirit or communication amongst group members (see also Petocz et al., 2012).

The module in which this research was conducted was taught through group work and experiential learning, demanding a physical presence in a classroom or rehearsal space. As noted in the introduction, the group work elements, communication and interaction extend beyond the classroom and this is usually to the benefit of the students. Petocz et al. note: ‘Interacting with others – peer learning – has always been an important dimension for any learner and supports the learning opportunities provided in formal arenas such as lectures, tutorials, rehearsals and laboratory classes’ (2012, p. 91). The potential to extend this interaction to online spaces is further explored by Purvis et al. (2011). In this intervention, students were able to develop their own skills in the context of a band or ensemble by playing back rehearsal videos and/or playing along with these recordings.

The project has helped to facilitate students to develop as autonomous learners and acquire ‘transferable personal skills in such areas as group work, leadership, teamwork, creative thinking and problem-solving’ (Brown and Knight, 1994, p. 52). As Petocz et al. (2012) state: ‘Peer learning can lead to high quality learning outcomes for students even with a lower level of involvement from academics’ (2012, p. 93). The online spaces that allow students to interact in their own time and on terms with which they are comfortable with also assist students to feel part of a group. Hancock (2004) highlights the importance in group work contexts for all group members to feel involved and indeed essential for the success of the group. He notes the importance of ‘assigning each group clear and measurable tasks and structuring and routinely reinforcing goal interdependence within the groups’ (2004, p. 162). Positive interdependence is developed and necessitates the sharing of resources, mutual support and encouragement, and public acknowledgment of joint successes (ibid). While a public performance may be part of the summative assessment, the sharing of videos of classroom performances can lead to peer acknowledgement of achievement.
Conclusion
Engaging in accredited professional development programmes in learning and teaching has helped me evolve my pedagogical approaches in music performance classes to explore ways of extending the classroom into a virtual world in which students could engage further with their learning, participate in their assessment, and help each other to develop. The video camera can become a useful tool in a classroom and, guided by the scholarship of teaching and learning, can be used to address issues relating to assessment beyond merely documenting an act for purposes of grading. The importance of peer learning is widely recognised in the context of music education (Hunter, 1999; Green, 2002) and I now integrate more discussion and instruction related to tasks and the purpose of self- and peer-assessment from an earlier stage, allowing students more time to practice in face to face contexts prior to their online efforts. Despite some limitations, the intervention was successful in motivating students to consider their own learning and develop higher-order cognitive skills. The exercise also highlighted limitations in the knowledge and understanding of assessment rubrics. By challenging students to use rubrics to assess their own work and the work of their peers, aspects that were not understood or misunderstood were brought to my attention.

One of the principal challenges for teaching staff implementing new methods or incorporating new technologies into their teaching is the burden of time, particularly in relation to preparation. The intervention was not overly time-consuming to implement (for staff) or participate in (for student) and had a noticeable impact on classes - it helped initiate discussion relevant to material being developed and highlighted gaps in learning amongst the student group such as unlearned material, lack of strategies for improvement and limited understanding of the breadth of assessment rubrics. Some discussions did indicate a desire to improve the layout of the VLE and also for greater consistency in its use. It is proposed that other staff will develop similar methodologies and platforms during the next stage of this project and there is potential for exploring the use of Mahara in future developments. From my engagement with the literature as part of the programme of study, I have become more interested in the group dynamics and its impact on learning. There is also potential to explore the role of personality further (Hancock, 2004), particularly in relation to student roles and motivation and to consider ways of developing the online space to be more user-friendly. A significant impact of the intervention and one that relates to changes in society rather than pedagogical pursuits was to realign learning with the increased use of social media and the familiarity of students with online modes of communication. The project has made me more aware of the power and potential role of social media in an educational context (see also Blankenship, 2011; Moran et al., 2011), bound by the parameters of the Institute’s policies on social media and digital citizenship. Despite finishing my accredited professional development programme, this project is really only beginning. The project subsequently received funding for further development and will be broadened to involve other colleagues in the department. In the next phase of the project, the impact will be further assessed through the incorporation of lecturers’ experiences and perspectives across a wider range of classes. By embedding such practices in a range of classrooms, knowledge may be developed at a programme rather than a module level, aiding programme development, policy decisions and consistent grading practices.
References


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