

Informal learning in formal learning: Web 2 to the rescue

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ABSTRACT

The learning characteristics of students in an Australian Bachelor of Popular Music program and their multi-faceted engagement with music making have led to the development of a complex assessment process that takes account of collaborative work and submissions in which a student may have a number of types of involvement. This process includes self-assessment, peer-assessment and assessment by teachers and although there are learning benefits associated with this practice, it has become increasingly unsustainable, as enrolments in the program have grown. Rather than simplify the process, an on-line database has been developed that minimizes the administrative duties associated with the assessment process as well as providing the students with an interface that operates in the same way as the social networking sites that form such a significant part of most students' lives in the 21st century. This example of Web 2.0 interactivity enables students to engage with the assessment process in a way that is comfortable for digital natives and has provided an assessment innovation with the potential to be not only sustainable but also scalable.

Keywords

Web 2.0, peer assessment, self-assessment, informal learning, popular music.

INTRODUCTION

We must move away from a view of education as a rite of passage involving the acquisition of enough knowledge and qualifications to acquire an adult station in life. The point of an education should not be to inculcate a body of knowledge, but to develop capabilities: the basic ones of literacy and numeracy as well as the capability to act responsibly to others, to take initiative and to work creatively and collaboratively (Leadbeater, 2000, p. 111).

A Conservatorium Bachelor of Popular Music (BPM) program is the location of the work referred to in this paper and it has been operating since 1999. All students undertake courses in the history and analysis of popular music, audio engineering and production, creative music technologies, music industry studies, rhythm studies and live performance projects. Music industry internships are also available as work integrated learning courses. Students report that access to the BPM recording facilities and the opportunity to collaborate with their fellow students are the aspects of the program that have had the greatest impact on their musical abilities, followed closely by the development of the ability to conduct systematic analysis and reflection

developed, at least in part, by the assessment processes used in the program (Lebler, 2007).

The major study course is called Popular Music Production and students complete one major study course every semester of the six semesters of the program. This course requires the submission of recorded material in which a student is likely to have had several involvements such as composition, arrangement, performances of various kinds, audio engineering or audio production. 'Of 1616 tracks submitted over 5 semesters between Semester 2 2006 and Semester 2 2008, students had a single involvement in only 2% of submissions, and in 79% of the submitted tracks, individuals were involved in four or more ways' (Lebler, Burt-Perkins, & Carey, 2009). The submissions usually include collaborative work with only 12% not including the involvement of others and almost half involving four or more participants. The acceptance of this collaborative and multifaceted work within the program relates well to the combinations of diverse activities of students prior to their BPM studies (Lebler, Burt-Perkins, & Carey, 2009).

A major study class is held each week for students in all year levels of the program and it is often presented by an industry professional. At least one class each semester is allocated to reporting current research that is relevant to the BPM program, often presenting data drawn from the BPM assessment processes. Students have access to the extensive BPM recording facilities and it is in the recording environment that much of the learning in this course occurs. Apart from the benefits associated with the opportunity to hear recordings of their own work frequently and reflect on its strengths and weaknesses, students are also able to solicit feedback on these performances from collaborators and others. This learning is enriched by the high incidence of collaboration across year levels in the program as well as with others external to the program.

In addition to the informal feedback that is common in the BPM environment, work-in-progress can be presented at major study classes each week, and at least one class each semester is entirely devoted to this activity. A range of on-line versions of a more formal work-in-progress feedback processes has also been used.

ASSESSMENT METHOD

Proposal (5% marked by teachers)

Because the creative work in the major study is self-directed, students are required to submit a proposal by the end of week three each semester, detailing what they are

planning to record and how they are intending to achieve their goals. Teachers provide feedback and award a mark out of 5% for this assessment item.

Recorded folio (60% marked by assessment panels)

Students submit their recorded work at the end of the semester along with a written report for each track detailing:

- what they were intending the track to be;
- who was involved and to what extent each participant contributed to the final product; and
- their observations on the outcome.

Students also include marks in their report for:

- how well they met their intentions;
- how good the track is overall;
- how good their personal contribution to the track was; and
- the significance of their personal contribution to the track.

There are also two ‘whole of folio’ marks (each out of 10%) for how helpful the track report was and how well the submission as a whole has demonstrated achievement.

Assessment panel (20% marked by course convenor)

Following initial trials at the end of 2000, a peer assessment process was devised to assess recorded submissions and associated written work, replacing the previous system in which only teachers conducted this assessment. Although teachers still participate in the assessment of this work, they do so as members of panels that include seven or eight students as well as the teacher. Students from all year levels are assigned to each panel and the recorded submissions of seven or eight students from all year levels are allocated to each panel to assess. Submissions are made available before the panels meet to refine their assessments by listening to the submissions in reference standard listening environments in the BPM recording studio facilities. Each panel member provides written feedback and marks for every track assigned to their panel. Marks out of 40% for each track in a submission are averaged added to the whole of folio marks to provide 60% of the marks for the course. A criteria and standards marking guide is provided along with guidelines for the written feedback based on the work of David Boud (1995).

Students are expected to engage in this process by listening to the recorded material before their panel meeting and reading the associated track reports. Finalized reports from each member of the panel are lodged electronically after the panel meetings, feedback is collated and marks from individual panel members are averaged. The collated reports are provided electronically to each submitting student. Because this activity is demanding and requires students to conduct professional systematic assessments and commit substantial time to this activity, their

performance as a member of the assessment panel is marked by the course convenor out of 20%. These marks are awarded to improve student engagement and to explicitly acknowledge their input into the process (Prins, Sluijsmans, Kirschner, & Strijbos, 2005). Feedback on each student’s performance in the panel is included in their folio feedback document. To illustrate the quantity of feedback produced by this method, 268,514 words of feedback were generated by this process, averaging 2183 words per reviewer, for an average of 88 words per reviewer per track reviewed in semester 1 2009.

Reflective journal (15% marked by teachers)

Students also submit a structured journal that includes reflections on their activities and the learning they have experienced through the semester, along with reviews of the major study classes they have attended. Teachers provide feedback on the journal and award a mark out of 15% including 5% for the major study class reviews.

LEARNING STRATEGY

The emphasis placed on this complex assessment process represents a shift from the instructional and transmissive model (as found in most conservatorium settings) towards an experiential model that has benefits for students in addition to the development of musical skills. It is no longer sensible to focus only on knowledge transfer from teachers to students, assuming that it will serve them well or that they will be able to adapt this knowledge to suit new contexts. At least some of our focus in education must be on the development of the abilities in our students to meet the challenges of their changing environments independently. Learning to learn should be the central objective of the education experience and the music learning provides a good opportunity to develop an individual’s ability to monitor progress and develop self-evaluation skills (McCarthy, Ondaatje, Zakaras, & Brooks, 2004).

Assessment can be broadly grouped into three types. Assessment *of* learning occurs when a student’s understanding of curriculum content is measured and this is the traditional role of assessment. Assessment *for* learning occurs when the goal is to identify areas in which more work may be needed. Assessment *as* learning involves students in the act of assessment as active participants and this involvement is intended to produce learning in itself (Lebler, 2008).

In this method, students are the first to make judgements about their own work through their completion of the self-assessment included in the track reports. The development of both the inclination and ability to self-assess is important so that students can monitor progress, identify strengths and weaknesses, recognize good work and develop professional judgement (Boud, Cohen, & Sampson, 1999; Claxton, 1999; Sadler, 2005).

Through participation in the assessment panels, students

enhance their abilities to conduct systematic assessment of music and also their ability to provide feedback in positive ways even when they might be drawing attention to flaws. In the case of popular musicians in the broader community, assessing peers and providing feedback are normal behavior. The adoption of these practices where this subject area is dealt with in structured educational environments is largely a formalization of existing informal practices (Green, 2001; Hunter, 1999; Jaffurs, 2004). The awarding of marks as a measure of quality is an aspect of this assessment method that is not a usual part of popular music practice in the broader community, so this requires attention as students are prepared for the formal assessing activity. The assessing of peers can enhance not only content-related learning and the ability of students to conduct assessments of other people, but can also produce improved self-reflection skills resulting in increased confidence and better awareness of the quality of the students' own work (Prins, Sluijsmans, Kirschner, & Strijbos, 2005).

One of the measures of the validity of peer assessment processes is the correlation between peer marks and those of expert academics. A comparison of marks awarded by panels as a whole and the participating staff member over the past ten semesters up to Semester 1 2009 indicates a close correlation. All marks were within 3 (out of 60) in one semester, within 4 marks in three semesters, within 5 marks in three semesters and within 6 marks in the remaining three semesters. On average in this ten-semester sample, 57% of panel marks were within 1 mark of the staff mark and 97% were within 4 marks. These correlations indicate that students have not been disadvantaged by this assessment method, especially considering that the course convenor has oversight of all marks and could moderate marks if necessary.

THE PROBLEM

When this process was developed in 2000, there were fewer than 40 students enrolled in the program. Each year enrolments have increased, culminating in the 2009 level of about 120 students. The assessment process has also become more complex for all participants. As enrolments increased, more efficient methods have been required.

An on line secure streaming application is now used to make music available anywhere with access limited to enrolled students and staff. While this represents a major advance in terms of easy access to materials to prepare for panel sessions, the design of the secure server requires registered staff members to add tracks and create playlists. This system requires staff members to encode tracks from the CDs into a file type suitable for the streaming player, upload them to a server and construct playlists for each panel. Considering that more than 300 tracks are submitted each semester, the staffing resources consumed by this task were substantial. In addition, staff have to conduct numerous processes with completed assessment panel workbooks to calculate marks, collate feedback and create

the feedback forms for students. While the use of Excel for these aspects of the process enables some efficiencies through the use of elaborate macros, this remains an substantial task.

In an effort to make the process more manageable, students are now required to submit their tracks as full quality CDs for playing in panel meetings as well as mp3 files for streaming. These are submitted electronically via the Blackboard (a learning management system) along with their track reports and reflective journals, both in digital forms. Currently the submission process at the end of the semester for this course requires students to submit the following:

- a CD, ready to play in a normal domestic CD player, complete with appropriate design and cover art work;
- the track report contained in a provided Excel proforma;
- mp3 versions of each of their track, identified according to specific protocols; and
- the reflective journal in a provided Word proforma.

In addition, students also have to download and complete their assessment panel Excel workbook consisting of seven or eight worksheets, each containing the track report of another student's submission. Finally, they must upload their completed assessment panel workbook to Blackboard. Not only is this a demanding set of activities in itself, but it requires students to move from one web interface to another and from Excel to audio programs. For students accustomed to the ease and 'one stop shop' design of Facebook and Myspace, this is not a very engaging set of activities. As recently as three or four years ago, applicants for the BPM program were asked about their engagement with social networking sites as a gauge of their connection to internet-based technologies. This question no longer seems necessary because engagement with Myspace and Facebook is virtually universal among applicants for whom Web 2.0 is a part of their everyday lives. According to Wikipedia (itself a Web 2.0 concept), 'Web 2.0' applications facilitate "interactive information sharing, interoperability, user-centered design and collaboration on the World Wide Web" (2009).

The choice had to be made between simplifying the process and perhaps losing at least some of the learning benefits that flow from such a rich set of activities, or developing a technological solution that moves towards the kinds of technologies that our students will relate to, as recommended by such recent reports as *The Horizon Report: 2009 Australia–New Zealand Edition* (Johnson, Levine, Smith, Smythe, & Stone, 2009).

THE SOLUTION

Funding was provided in 2009 to modify the music streamer so that students could upload tracks themselves rather than involve staff in this process. The educational designer leading this project identified the potential to

include other aspects of the assessment process in the new database and the project has subsequently been reframed to accommodate all assessment activities associated with the recorded folio, including the work in progress feedback process. At the time of writing, the Bachelor of Popular Music Assessment Tool (BoPMAT) is close to completion and will be available in semester 1 2010. Although this represents a substantial allocation of resources, the resulting application will enable students to interact in a secure environment designed to resemble the social networking applications they use in other aspects of their lives. They can upload tracks and written work, provide feedback and respond to feedback provided by others, submit work for assessment, access and lodge assessment panel materials and respond to the assessments they receive, all in a single application. Figure 1 illustrates the welcome page of the application.



Figure 1. BoPMAT welcome page.

Another major benefit in the BoPMAT approach is the degree to which processes are automated. Many of the staff activities required by the current system will no longer be necessary, and staff involvement will be needed only for those activities requiring academic judgements. This innovation will enable the rich assessment processes currently in use to be sustained and cope with possible increased enrolments in the future. The application also has potential to be used in other contexts.

CONCLUSION

While this set of assessment activities has demonstrable benefits for students, there were major challenges in respect of the amount of resources required and the complexity of the process for all participants. Faced with the choice between simplifying the assessment activities or finding a technical solution, the adoption of a Web 2.0 approach has enabled the richness of the assessment method to be maintained in a form that is effective, sustainable and scalable.

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