Assessment and engagement in music classes: Are they mutually exclusive?



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Abstract

Education in Australia is driven by measurement of progress. Music education, however, requires students to engage in creative and experiential tasks. This article will address the inevitable conflicts between these two by suggesting that measurements of student work in fine detail can be made within a practical and engaging classroom without resorting to traditional summative testing as the only means of data collection. The pedagogical approach addressed in this article will benefit from further systematic research; however, the initial anecdotal evidence shows that a wide range of data can be collected from a mixture of assessment types that are also engaging, therefore addressing both sides of the conflict. The added benefit is that these data collection tools are simple and quick to operate, even for those who are not formally trained in education. This means that all involved can focus on the important task of music-making, without spending class time recording and analysing data. The data collection tools may have positive impacts at an individual level to track student and teacher progress; at a curriculum level to develop best instruction; at a teaching cohort level to measure consistency; and at a policy level to fulfil the requirements of transparency and accountability.

Key words: Music education, assessment, curriculum, student progress, education policy, tracking, data collection, classroom music.

Introduction

Measurement of student progress

A dominant feature of contemporary education is that it is driven by measures of progress (Kuh, Jankowski, Ikenberry, & Kinzie, 2014, Government of Australia, 2013). The measurement cycle is ever present: the governmental benchmarks inform school administrations, who direct teachers about delivering the teaching and learning, and the teachers test the students to measure progress. The data collected from this testing then provides a form of self-evaluation for the students themselves, informs the teachers about their practice and acts as a consistency check for the teaching cohorts. It serves as feedback for school administrations and leadership who shape the curriculum, and ultimately for government policy. This cycle is an ongoing quest to improve practice (McQuarrie & Sherwin, 2013). Meiers et al. (2007) maintains that consistency between

teacher judgements and the standards set by their educational policies, such as Victorian Educational Learning Standards (VELS) and the Victorian Curriculum (Victorian Curriculum and Assessment Authority, 2017), is vital to ensure student and teacher development, as well as development of the learning standards. The ideal for education is that assessment propels the student, teacher, curriculum and standards forward towards improvement (Kokotsaki, 2017). The Australian Education Act (Government of Australia, 2013) outlines as two of its main objectives is to increase transparency and accountability by using data to measure student educational outcomes, and to make schools accountable to the community. The Act states that the data must be of high quality: as robust, detailed, available and consistent as possible. In other words, the Act places great importance on regular and systematic measurement. Similarly, in the USA, Acts such as 'No Child Left Behind' require the minimum

standards to be rigorously tested so that education can become accountable (Fisher, 2008).

Student engagement

In arts education, engagement has been widely documented as essential for all students, especially those who are at risk (ACARA, 2018; McFerran, Crooke, & Bolger, 2017; Dailey & Hauschild-Mork, 2017; DeVries, 2010; Carruthers, 2007). In the following discussion, engagement is defined as engagement with the music itself, with the goal of acquiring musical skills. There is considerable evidence that music can also achieve significant ancillary goals, such as teamwork, school engagement and turn taking (Carruthers, 2007; McFerran, Crooke, & Bolger, 2017); here, however, the focus is on engagement in order to improve musical skills. This is the emphasis in the rationale from the Australian Curriculum: The Arts-Music (ACARA), which states that music is in its core an engaging subject through active participation. "Through performing, composing and listening with intent to music, students have access to knowledge, skills and understanding which can be gained in no other way" (ACARA, 2018, para 2).

'Engagement' is a broad term within education, and it is important to identify the different forms it can take. McFerran, Crooke, and Bolger (2017) studied four different types of engagement that can be present within a music classroom: engagement with regards to learning, peers, members of a community and the community as a whole. Robinson (2013) acknowledges that music is usually the subject that has students with the most diverse abilities in any school setting. To be successful, it requires particular engagement with creativity and music-making, which can result in a range of skills, including social, behavioural, academic and learning that can be transferred from the music classroom to wider experiences (Carruthers, 2007). It stands to reason that, within engagement that is used in a music classroom, students can lead their own learning. This leading of learning can be

demonstrated through informal learning practices (Robinson, 2013; Green, 2008) and through agency in what the students choose to learn (DeVries, 2010). Therein lies a conflict: can we track progress in a broader and more meaningful way and still adhere to the ethos of a practical, student-driven and engaging classroom?

Context

In my own practice, I have found that a mixture of assessment types is a valuable source of measurement data, and that the data collection is possible while delivering engaging content to a mixed-ability class. I have also found that, when collecting data, following trends in younger years at a whole class level, and tracking individuals at a grain size (Leighton, 2016) for senior students over several years, has informed and sharpened the curriculum. Streamlining the curriculum and constructing it vertically through year levels has aided effectiveness in delivery from early years to senior high school, in terms of how time is spent in class, as well as minimising differences between classes and year levels. This is helpful when students spend relatively small amounts of time in class compared with other subjects over the primary and secondary years. The relative ease of the data collection allows time for the preparation and delivery of practical and engaging classes, which is essential for music education. Visiting instrumental music teachers do not require education degrees to work in the Australian education system, and they are a vital part of music classes, therefore the simplicity of the tool is necessary for consistency and validity of the data collected by all parties. Note that the advisory distributed at the end of 2018 by the Victorian Institute of Teaching (VIT) is that instrumental music instructors should be directly supervised by a VIT registered teacher (Victorian Institute of Teaching, 2018).

What follows in this article are details of an approach which aims to ensure adherence to the rationale of the Australian music curriculum

(ACARA, 2018), as well as to produce consistent measurable and equitable data for all stakeholders (Government of Australia, 2013). This approach seems to have shown some pedagogical validity, for the value of which we have some positive, albeit anecdotal and impressionistic, evidence. This is a field for further systematic research.

Data collection

In Victoria, the final destinations for music classroom students who want to focus on performance in the senior years of schooling are VCE Music Performance and VET Music Performance (Victorian Curriculum and Assessment Authority, 2017). The method of data collection discussed here can be used any music subject, and in fact any subject at all, but for this article data collection will focus on only the VCE Music Performance subject and preparations towards this end. The rationale is stated in the VCE Music study design as follows:

Music learning requires students' active engagement in the practices of listening, performing and composing. (Victorian Curriculum and Assessment Authority, 2017)

This subject includes performance and preparation for performance, creation (improvisation, arrangement and composition), music analysis and music language (theory and aural). More specifically, it is broken down into the following components (the percentages denote the components of the final result):

- Performance and Rehearsal 50%
- Improvisation and Composition 20%
- Music Language Aural 15%
- Music Language Analysis 9%
- Music Language Theory 6%

The percentage of each area of study in VCE Music Performance can be used as a guide for both assessment and the allotment of time in class throughout ELC, primary and secondary education. The curriculum in many schools allows classroom

music only as a relatively small portion of the whole; it is therefore important to focus on a few skills that are practised regularly. This means that these skills can be tracked accurately, because they can produce a significant amount of comparable data.

The software that I have used is Microsoft Excel (2006). Software such as this has facilities to collect data and analyse it in a variety of ways. The way in which the data is recorded that is shown here is not particularly innovative or new: in fact many of these types of recording methods are routinely used in many secondary school subjects. It is pertinent to note that it is not explicitly engagement that is being measured here: what gives music its rigour are the skills and knowledge attained and the ability to transfer and recall across different areas of the subject. Given the relatively small amount of time spent in a music classroom, it is vital to capture each time that a student displays a particular skill or knowledge, and then to be able to return to the specific point of need when he or she is in the classroom again, which may be the next day or the next vear.

The skills and knowledge captured in the data collection tools described below include:

- Aural and theory skills by musical element
- Practical instrumental skills for a beginner musician
- Analysis, improvisation, composition and rehearsal techniques
- Advanced performance

The ultimate goal for the information that teachers receive in both formative and summative assessments is that they inform the many stakeholders in order to increase the student's understanding (Black & Wiliam, 1998): not all of this information needs to be given to students. Although the information can be used for reporting processes, its main use is for informing teaching practices, and for focussing on students' own priorities (Black & Wiliam, 2004).

The additional benefit of these data collection tools is for engagement. These benefits include

- Time spent in class The choice of activity aren't based around summative, silent written tasks in order to generate data. This data can be collected through practical and student led tasks.
- Focus on the next step The data generated from these activities can serve as a focus for subsequent activities, either led by the teacher or by the student.
- Teacher tasks these data collection tools can ensure that the teacher can spend time with the student, and engaged in teaching, rather than collecting and marking assessments.

Running record

A running record (Ross, 2014) proves to be useful to track progress in anything that requires regular practice. I am currently using this method in VCE Music Performance to track each element in aural and theory through fortnightly tests.

This music language data collection can be paired with a computer program (I use Auralia and Musition (Rising Software)) as it is easy to collect results without also having to correct student work. The program produces the results immediately to the student and in many forms as a report to the teacher. For this reason I have set up the syllabus to work in increasing difficulty, so that I can see the progress clearly:

WRITE / READ INTERVALS (up to and including one octave)

Level 1 - major and perfect ascending

Level 2 – major and perfect ascending and descending

Level 3 – major, minor, perfect and augmented 4th ascending

Level 4 - major, minor, perfect, augmented and diminished ascending

Written intervals Written intervals intervals intervals Written Written 1. topic name 2. date of data collection 5/3 20/3 Date 30/4 22/5 4 3. maximum grade allocated 4 Maximum grade Student Numbers Percentage achieved in year group 4. percentage of each class that 6 Y10 0 achieved the maximum grade Y11 Total 10 5. percentages of the whole class Percentage achieved each grade that achieved each grade 0 20 6. each student's data - note a the 2 30 10 20 10 3 30 20 30 50 cell will change into one colour if a 10 30 50 40 4 decrease, and another if an increase Student Individual student data YΓ Student Y10 Student Y11 2 4 4 Student 2 4 4 4 Y11 Student 0 0 Student Y11 3 Student Y10 0 Student Y10 0 0 4 Student Y10 Student Y10 3 3 Student Y11

Figure 1: Running record for written intervals Years 10 and 11.

Level 5 – major, minor, perfect, augmented and diminished ascending and descending

I decided on these levels using data from a large sample size (multiple whole-year levels over three tests in one year) and I have used them as a benchmark of skill by increasing difficulty.

I have observed that this type of data collection is also useful in ensemble classes with numbers of 20 or more, and with staff who were visiting experts, such as instrumental teachers. Teachers can use a three-point scale to mark each skill, such as: 0 – emerging, 1 – applying, 2 – mastering.

This has been useful in particular when checking whether the record of home practice follows improvement in class performance, as well as giving a starting-point or a place to review in the curriculum. The benefit to the teacher in both scenarios is that it gives information about whether skills have been learned by the student at a class level, which is invaluable when evaluating teaching practices. For instance, comparing written and heard intervals can help decide what to review. This kind of data collection can also be extended to multiple-choice questions and to comparing data with external benchmarks.

The function of the running record is to track individual improvement or decline at a grain size (Leighton, 2016), comparing classes (or in the case of Figure 1, year levels in the same class group) and

identifying trends with each level of difficulty. In particular, when tracking improvement at regular intervals over a long period, such as a school term or semester, the data can give information about whether the student understands the tasks. whether the student knows how to move to the next level of difficulty, and whether the student is spending regular time practising the skill. These running records are simple and quick to fill in, and they can be used either during a class while the student is engaged in the task, or out of class time by using the results generated by the computer program. In both of these scenarios, the teacher can ensure that the student is engaged both in and out of class, as well as collect the information that is measurable, trackable and in small enough steps for it to be useful.

Multi-point rubric

The multi-point rubric (Figure 2) generates information about skills and knowledge demonstrated, as well as generating a grade. The grade can be either in numbers or in qualitative descriptors, such as *rarely, sometimes, often, consistently*. It is very similar to the traffic light system, which checks for student understanding (Black & William, 2004).

This multi-point rubric in Figure 2 can be

Figure 2: Multi-point rubric for Middle School improvisation task.

C – consistently, M – most of the time, S – sometimes, N – never

C M S	LEVEL 1 used notes of the blues scale	LEVEL 1 used repetition	LEVEL 2 used contrast in either pitch or rhythm	LEVEL 2 used variation in pitch or rhythm	LEVEL 3 changed notes in anticipation of the chord change	LEVEL 3 has a melody shape with a climax	LEVEL 4 used notes in harmony	LEVEL 4 incorporated style within the improvisation	LEVEL 4 demonstrate d complexity in pitch and rhythm choices	Previous score	Level 1 Level 2 Level 3 Level 4
student	С	С	С	С	m	S	n	s	n	Level 1	Level 2
student	m	m	s	s	5	n.	n	n	n	Level 1	Level 1
student	c	c	c	c	С	С	m	m	m	Level 2	Level 3
student	s	s	m	s	n	n	n	n	n	Level 1	Level 1
student	С	С	С	С	С	С	С	С	С	Level 2	Level 4
student	c	С	С	С	С	С	С	С	С	Level 3	Level 4
student	m	с	С	m	s	n'	n	n	n	Level 3	Level 2

used in any context in which the student can demonstrate more than one skill at one time: for instance improvisation (Figure 2 above), rehearsal, composition and analysis. There are three levels in the example showing increasing skill levels. The level given is based on the teacher's judgement of the level that is consistently, or mostly, demonstrated. The traffic light system (Black & Wiliam, 2004) has been adapted here to show an increase, maintenance or decrease in level from the previous assessment. It is worth noting that I have attempted to generate automatically an overall summative grade (in this instance a level number) based on how many of the highest level (consistently) are given; the results were, however, found to be less consistent compared with the own subjective judgements. The multi-point rubric gives an objective view, as it records how often the student demonstrates a skill; further, it also requires teacher judgement to create the final grade. It still, however, is more rigorous than the teacher's general hunch, and provides more detail. Additionally, the rubric can highlight areas on which the teachers can focus. In the example above, not many students have shown that they have chosen to use notes in harmony in their improvisation. Therefore, the next step could be to teach how to choose notes in harmony or chords to improve the improvisation. The students who received "consistently" in this area can be given extension work, or they can help to lead teaching this element.

Finally, the multi-point rubric can then generate comments for reporting and feedback to the students, and inform the next step in their learning. For instance, the first student in the list above may receive feedback such as, well done on using repetition, contrast and variation in your rhythm. Next time, focus on changing your notes when the chord changes in the accompaniment. These word phrases can be generated in Microsoft Excel (2006).

The multi-point rubric requires a small amount of time to fill out (usually during the assessment itself in a practical context), with an additional short time to create the final mark and feedback. It

provides useful detail, not found otherwise, in that it records what skills are demonstrated, which can aid in teacher judgement to reach the final mark. The questions that can be generated by this kind of data include:

- Trends between classes Which teacher seemed to have taught a certain part of the curriculum most effectively?
- Trends for the whole year level What elements/skills are higher or lower than others?
- Marking rubric Is there anything that we need to alter so the descriptors are more accurate and cumulative?
- Comparison to previous years What are the differences?
- Task Is there anything that needs to be changed in the task? Do the resources allow the student to show a knowledge or skill fully enough and with enough detail?
- Are the trends within the classes Particularly those very high and those very low consistent with their overall grade for the subject? Why or why not?
- Are the skills genuinely becoming cumulative across the year levels and towards VCE?

The multi-point rubric aids in student engagement as it can be filled out while the student is completing practical tasks. It can also identify where the individual, or the class, can focus on for the next step in improvement, and therefore it engages the student at their point of need.

Performance data

In the final performance assessment for VCE, the ten performance criteria are each recorded on a 10-point scale (Victorian Curriculum and Assessment Authority, 2017). During the two years leading up to the final performance, I use the VCE criteria to assign any performance as such: low (marks 1-3), medium (marks 4-7) and high (marks 8-10) per criterion. This data collection does not

Table 1: VCE performance criteria (based on Victorian Curriculum and Assessment Authority, 2017).

CRITERION	Detail (summarised from solo and group foci)	Category
2	Skill in performing accurately and with clarity	Technical
3	Skill in performing a range of techniques with control and fluency	Technical
4	Skill in producing a range of expressive tonal qualities	Interpretive
5	Skill in expressive communication through articulation and phrasing	Technical
6 (solo)	Skill in differentiating musical lines	Social
6 (group)	Skill in placing instrument appropriately in the group	Social
7 (solo)	Skill in differentiating the structures and characteristics of each work	Interpretive
7 (group)	Skill in presenting an informed interpretation of a range of styles	Interpretive
8 (solo)	Skill in presenting an informed interpretation of a range of styles	Interpretive
8 (group)	Skill in performing as a member of the group	Social
9	Skill in performing with musicality through creativity and individuality	Interpretive
10	Skill in presenting a musical program within appropriate performance conventions	Social

necessarily have to be in a recital under exam conditions: it can be done during a music lesson, or a rehearsal class. In fact, it appears to be best used regularly to track improvement.

The first criterion for the VCE Music Performance performance examination is compliance with the task (Victorian Curriculum and Assessment Authority, 2017), and therefore regular data collection is not necessary. The other nine criteria are split up by category (technical, interpretive and social – see Table 1 below) so the relative strengths and weaknesses are clear in each category (see second columns on the right in Figure 3 below: these are sums of the types of categories per student). After an initial collection of data, the focus

for the student becomes evident, whether it be technical, interpretive or social. Improvement has been evident in subsequent performances.

An initial diagnosis of student skills using the template in Figure 3 sets the individual plan for the student, and then improvement can be tracked in subsequent performances. For instance, the first student in Figure 3 received a lowest combined score in "interpretation". This student can subsequently focus on their interpretation of the piece by studying exemplar performances of their works, or working on stylistic improvisations, or deciding how rubato sections can be played. This data can be used to compare students, cohorts, year levels and instruments. A selection of these criteria

Figure 3: VCE performance task

	2	3	4	5	6	7	8	9	10					
	technical	technical	interpretive	technical	social	interpretive	social (group)	interpretive	social	technical	interpretive	social	TOTAL / 27	Percentage
student	3	3	2	3	2	2	3	2	3	9	6	8	23	85.2
student	1	2	1	3	2	3	2	2	2	6	6	6	18	66.7
student	2	2	2	3	2	2	3	2	2	7	6	7	20	74.1
student	1	1	1	2	1	2	2	2	2	4	5	5	14	51.9

can be used in younger year levels. What is being assessed can be narrowed down to the criteria relevant for the particular year levels. For instance, in Years 9 and 10 I use criteria 2, 3, 5, 6, and 10 (see Table 1) which shapes the focus for teaching before the students select their solo works.

The performance data collection tool aids in student engagement as it identifies achievement in all criteria in a complex task such as performance. It can provide a focus point, both in individual criteria as well as categories of criteria. If this is used regularly, then improvement can be tracked. All of these focus the student on specific areas to improve, and therefore improving the complex task as a whole. Practical tasks hold the largest percentage of overall marks for a subject in this context, and so this data collection tool can help with engagement with the task, as well as give robust data for tracking the student over a long period of time and comparing classes. This data can also be used to support practical subjects in discussions with school leadership.

Conclusion

The aim for a music classroom is to develop skills while actively engaging in listening, performing and composing. Often the sequence and focus of the classes are student led. Music classes are rich in engagement: in fact student improvement depends on it. Students do not tend to spend much time at all in music classes over their secondary school years, so the view for improvement is vertical (from year to year), rather than horizontal (throughout a single year). If student understanding can be captured in small enough measures at any one point, then the next steps can be clear. Data collected from student work needs to be trackable, measurable, and comparable, and be a true representation of student understanding. It also needs to be easy to collect and record, without interfering with

student engagement in the classroom. If the data collection tools can generate information from this engagement, then it can inform the students, the teachers, school administration and government policy. This approach in its initial stages has proven to be successful, and it can benefit from further and systematic study.

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