The Renaissance of 'The Virtual Conservatorium'

Ian Bofinger July 2021

In 2002, almost two decades ago, Emeritus Professor Greg Whateley and I embarked on a project that we initially named *iCon*, where units at the *Central Queensland Conservatorium* of *Music* were delivered in a variety of modes to suit student learning requirements. The key elements of *i*Con being –*i*nternet, *i*ntensive, *i*ndustry and *i*nnovation.¹ This concept then further developed to become Australia's first Virtual Conservatorium, which began operating under the tagline of 'Anywhere, Anyhow, Anytime' in 2004.

The uses of the *i*nternet in the *i*Con project were threefold, as an asynchronous (non-time dependant), synchronous (real-time) delivery medium and the use of online software training packages. The *i*ntensive mode considered the re-allocation of the equivalent hours of existing weekly, face-to-face (F2F) class lectures into an intense, saturated delivery. This also enabled access to *i*ndustry-based professional practitioners. All this required an *i*nnovative approach to what traditionally was a conservative Performing Arts education environment. As expected, this concept was met by a polarised response from many conservatorium academics of the day.

But as the novelist Stephen King (2005)² wrote, "sooner or later, everything old is new again". The impact of the COVID-19 pandemic on higher education in the performing arts has meant that all institutions have had to adapt to new lecture delivery paradigms. Whilst authors such as Li (2021)³ outline their latest, cutting-edge modes of delivery at the Hong Kong Academy of Performing Arts as "Blended, m-Learning and Hybrid Learning", it is notable that these rely on the same key elements of the original Virtual Conservatorium initiative which came some 20 years before.

In my current position as Executive Dean and CEO of the Australian Academy of Music and Performing Arts (AMPA), I am ultimately responsible for the ongoing delivery of the undergraduate and postgraduate degrees in both Dance and Music. This paper is presented as a case study of the current delivery methods that are being utilized to maintain and evolve the undergraduate Bachelor of Music degree during the volatile times that we have experienced/are experiencing in 2020 and 2021.

As a brief overview of the degree, the overall structure can be broken down into units that either have a strong **practical and performance** focus: (Principal and Second Study, Performance Class, Ensemble and Performance Art) and those that are predominantly **academic** in structure: (Harmony & Analysis, Music History and Ear Training).

¹https://acquire.cqu.edu.au/articles/report/Projects_iCon_and_Uptech_Creating_infrastructure_for_the_virtual_Conservatorium/13429160

² https://www.smartbrief.com/original/2018/08/whats-old-new-again

³ https://link.springer.com/article/10.1007/s10639-021-10612-1

PERFORMANCE UNITS

Principal and Second Study

These units are traditionally delivered in a one-to-one studio environment. The mentor based relationship that evolves from students working individually with a professional practitioner from the music industry is the cornerstone of AMPA's tertiary music education.

During the COVID lockdown periods, synchronous video-conferencing applications have enabled the training to continue and the choice of application is at the discretion of the staff and student involved, this has predominantly been delivered via *Zoom* but also via *Microsoft Teams, Skype* and *FaceTime*.

Ensemble

The key goals of this series of units involve the development of collaboration and musical communication when performing in a group environment. This may be a contemporary band, a classical piano trio or a music theatre company. In a typical mode of delivery this is taught face-to-face in small groups with a lecturer directing the class.

Moving this to online raised significant issues that had to be addressed. If attempting to use traditional video-conferencing technologies, the lag time of each individual connection differs so dramatically that it renders the process ineffective. Blackburn and Hewitt (2020)⁴ report that the use of network music performance (NMP) systems is still "marred by the issue of latency, which remains the primary hindrance for the perceived success of these types of collaborations".

Whilst the AMPA staff have access to Internet speeds of approximately 400Mbps whilst on campus, most students are operating on domestic NBN or 4G at speeds of 20Mbps or less. AMPA tested low latency software applications but even with the automatic buffering designed to align the performance, the audio and video compression algorithms were significant enough to detract from the prescribed outcomes of the unit.

To overcome these problems, it was decided to focus on developing the specific collaborative skills required for a professional studio session musician. These being the ability to either *Multitrack* - i.e. layering of parts, particularly suitable for contemporary ensembles or *Music Minus One* - using a guide backing track. These are created by conversion of digital media files that have the student's individual part removed from the audio. The student then records only their part whilst hearing the rest of the ensemble via headphones. A composite file of the individual acoustic recordings can be created by layering each of the individual parts once they have been uploaded into the LMS (Learning Management System).

Performance Class

The didactic intent of this set of units is to experience the process of a concert environment. In a typical trimester this is achieved by utilizing AMPA's professional theatre stage which includes incandescent and intelligent lighting, digital audio and industry-current staff.

The symbiotic outcome of this unit also enables the students who are not performing on stage on a particular week to complete a critical review and reflection of the concert items. The rubrics used are identical to those that are used by the panel of examiners for the end of unit

⁴ https://onlineinnovationsjournal.com/streams/visual-and-performing-arts/63209b3a0ef5fedf.html

performance exams for Principal Study, so the process enables the students to experience the marking process first hand from the assessor's point of view.

During the lockdown periods, the students have not been able to access the theatre and so have had to record their performances from home, upload their MP4 and submit a URL link. AMPA then combines these individual performances into a 'concert' video and distributes this via the LMS, *eCon* for the class to complete the secondary reflective task.

Although this is not ideal, the students and staff, as identified by Whateley (2020)⁵ as either 'digital natives, immigrants or convicts,' have still managed to meet all of the unit's outcomes and obligations.

Performance Art

These units are created for students to cultivate a synthesis of stylistically appropriate musical performance. This is achieved by dissecting and analysing genre-significant works and then applying these concepts when performing these pieces in a staged performance. Students then align their practical development of technical skills with the academic understanding of the stylistic components of the genre.

To deliver this unit during the current pandemic limitations, a tripartite blended learning mode has been implemented. Online lectures have been created and uploaded, music minus one MP3s have also been developed so students can rehearse their specific part along with a unique backing track and the final assessment comes after the culmination of an intensive delivery period in the last week of the course.

Rather than opt for ongoing videoconference sessions to prepare for the final performance, the F2F interactions gained by the intensive classes have been considered to be educationally stronger and also allow for a true sense of occasion. AMPA also considers that maintaining the student's academic progress and mental health and wellbeing are equally important during the period. As David and Phillips (2021)⁶ note, "A lack of equity around digital connection resulted in some students not being able to access their learning. Other environmental factors in the home prevented some students from engaging with their work in a meaningful way." By combining these three delivery modes, students can work through the materials at their own pace and the intensive component encapsulates the learning with a concert performance of the 12 works studied during the trimester.

⁵ https://www.campusreview.com.au/2020/09/full-marks-for-educators-the-digital-convicts-of-covid-19/

 $^{^6 \} https://www.campusreview.com.au/2021/07/new-research-looks-at-how-performing-arts-teachers-and-students-are-coping-in-a-time-of-remote-learning/?utm_medium=email&utm_campaign=CR+BN+Email++19+Jul+2021%2A%2CSAS&utm_content=New+research+looks+at+how+performing+arts+teachers+and+students+are+coping+in+a+time+of+remote+learning%2A4%2AIS%2AWZ&utm_source=apneducationalmedia.writemsg.com$

ACADEMIC UNITS

Harmony & Analysis

In 2020, these units which concentrate on musicianship (reading, writing and analysis of music), were delivered as a Hybrid lecture. In this mode, the lecturer delivered the class simultaneously to an on-campus F2F audience and online (via Zoom). This delivery mode still allows for synchronous communication between lecturer and students. AMPA further enhanced this to be an 'extended hybrid mode', where lecture recordings are also be used as an asynchronous study resource.

Software applications had to be deployed to further enable the digital upload of music notation. As many of the commercial packages are either platform specific or financially burdensome for the students, it was decided to use the multi-platform, open source application *Musescore*.⁷

Music History

AMPA delivers over 12 different Music History units. These were traditionally delivered as a F2F lecture. The density and volume of the material that was required to be delivered meant that the lecture was predominantly a dissemination of the information using PowerPoint presentations as the stimulus material for the lecture. This left little or no time for questions, let alone significant discussion or debate.

During 2020, AMPA moved into a Blended mode of delivery for these units. The existing PowerPoint files were extensively developed to become similar to a documentary with audiovisual annotations, enriched multimedia (external edited/short video sections) and a conversion to MP4 for viewing on computer, television or mobile phone. The material can be observed at the student's preferred time and repeat viewings are possible. The 'lecture' is then followed up with short a Zoom based tutorial.

Our experience found that although this involved extra time (and finances) to cover the initial creation of the material, over an extended period these resources can be easily finessed and updated for future dissemination of the academic content. This has meant that the tutorial has become the essential tool for synthesis of information. Owston et al. (2019)⁸ recommend that a successful Blended Learning delivery comprises of 80% high quality online learning integrated with 20% classroom teaching. The paradigm shift to the focus being on synthesis via the tutorial interaction has seen a stronger sense of engagement by the student body.

Ear Training.

It took the COVID-19 pandemic for staff to evolve from their long-established pedagogical comfort zone to consider delivering this unit using Blended technologies. Ear Training units develop aural recognition skills for both music notation and sight-reading. These have been delivered for centuries by Conservatoire via a F2F mode with the lecturer presenting from a grand piano. As the Conservatoire name implies, the model has been deliberately restrictive in development to 'conserve' the old traditions. AMPA has not replaced this proven mode of aural training but instead enhanced and modernised the delivery. Studying via a blended mode of software-based learning in addition to tutorial-based learning, students now have

⁷ https://musescore.org/en/download

⁸ https://link.springer.com/article/10.1007/s10758-020-09477-z

access to the self-paced teaching modules incorporated into the software *Auralia*⁹ as well as attending to the traditional tutorial-based class. (The grand piano however has been replaced by an electronic keyboard that can seamlessly deliver both acoustic performance and digital recordings for online transmissions.)

In this instance, AMPA also is blurring the lines between 'Hybrid' and 'Blended' modes, where students also have the option of attending the tutorial 'in person' or via *Zoom*. The tutorials are also recorded and uploaded into the LMS for student viewing at their discretion.

The 2021 Renaissance of notion of *The Virtual Conservatorium (Anywhere, Anyhow, Anytime)* has demonstrated that the concept was indeed ahead of its time. The significant development in computational power and digital transmission speeds over the past 20 years have enabled the original notions of *i*Con to become mainstream in today's Higher Education sector. The four pillars upon which it was founded, *internet*, *intensive*, *industry* and *innovation*, are the foundations upon which current tertiary courses are now being constructed.



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⁹ https://www.risingsoftware.com/auralia