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Vocal Inclusivity in Improvisation Pedagogy: Developing Cultural Awareness, Vocabulary, and Self-Efficacy for Tertiary Vocalists

Leigh Carriage and Rachael Thoms

Southern Cross University and *Australian National University*

ABSTRACT: Within higher music education, the teaching of improvisation has previously focused on instrumental approaches; however, this disadvantages vocalists' learning improvisation because a strictly theoretical, notation-based approach to improvisation training negatively impacts the vocalist's self-efficacy. Reflecting on our respective methods for vocal improvisation training, in this article we present eight teaching approaches to improve ear training to enhance vocal improvisation achievement for tertiary vocal students. We provide examples of our practice from the Bachelor of Contemporary Music at Southern Cross University and the Bachelor of Music at Australian National University. We suggest ways that educators in higher education can provide a more equitable experience of learning for improvisation for singers.

KEYWORDS: Music education, vocal improvisation, vocal pedagogy, aural skills, hybridity, culture, self-efficacy, gender

Research and practice show that one size does not fit all when it comes to teaching jazz improvisation—vocalists and instrumentalists have different learning preferences, limitations, and values (Bell, 2013; Hargreaves, 2013; Madura, 1992; Rooney, 2016; Sandgren, 2019). Despite this, it is common for instrumentalists and vocalists to be taught to improvise using similar approaches. The authors Leigh Carriage (Southern Cross University) and Rachael Thoms (Australian National University) have developed the teaching approaches outlined in this article iteratively in response to anecdotal and observational insights gathered over several decades of combined evidence-based vocal teaching, learning, and performing practice.

Leigh and Rachael describe their use of Western and non-Western scales as a platform for ear training for tertiary vocal students that promotes improvisation participation and achievement, while expanding research frontier opportunities into non-genre specific vocal improvisation techniques. This approach aims to improve vocalists' improvisation skills and participation, potentially increasing their self-efficacy for improvisation and self-confidence in mixed vocal-instrument ensembles. The authors wish to dismantle the notion that improvisation is solely a jazz skill and suggest that the inherent instrumental bias in many areas of tertiary music pedagogy fails to cater to the needs of the vocalist.

Existing research on vocal improvisation achievement reveals that vocalists often experience diminished requirement, opportunity, expectation, and motivation to improvise (Hargreaves, 2013; Madura Ward-Steinman, 2014; Wahl & Ellingson, 2018). This seems, in part, based on the belief that vocalists are subpar musicians and inferior improvisers (Hargreaves & Forbes, 2022) and may be impacted by some disagreement among practitioners regarding what qualifies as vocal improvisation (Hargreaves, 2014). The notion that vocal improvisation is restricted to jazz "scatting" neglects to acknowledge the role that improvisation plays in various contemporary commercial music (CCM) and World Music genres.

Furthermore, there is a growing body of research from the fields of music education and music psychology concerning gender differences in psychological factors such as self-efficacy, confidence and stereotype threat. Self-efficacy is a type of self-perception linked with achievement, motivation, and willingness to participate in music performance, improvisation, and education. Researchers have revealed that males report higher levels of self-efficacy than females (identifying) in

male-dominated domains, and that tertiary jazz education environments are plagued by sexism and a culture of exclusion that result in tokenism and stereotype threat, disproportionately impacting female students (Jacobs et al., 2002; Pajares, 2002; Steiner & Manfredo, 2022; Wahl and Ellingson, 2018; Watson, 2010; Wehr-Flowers, 2006; Wehr, 2016, 2022). Given the notable differences in gender distribution among music faculty and student cohorts and the predominance of female-identifying vocal students in tertiary education, the authors argue that it is necessary to facilitate experiences, opportunities, and pedagogical approaches to improvisation that acknowledge the potential for diminished self-efficacy among vocal students, control for stereotype threat, facilitate experiences of mastery, provide constructive feedback and encouragement, and call attention to psychological states, all of which are reported to increase self-efficacy (Gangloff & Mazilescu 2017; Wehr, 2022).

We have noted similarities between the vocal students who study at our respective institutions. In general terms, incoming vocal performance majors are often polished performers but tend to have lower levels of music literacy and less experience with formal training, mixed vocal-instrumental ensemble performance, and improvisation than their instrumental peers. The commencing tertiary vocalist is often focused on melody, tone, emotion, and intuition, with a lack of harmonic awareness, and is less inclined to identify as a "musician" (a term often used interchangeably with "instrumentalist", to the exclusion of vocalists). While the attributes mentioned above are considered by the authors to be essential qualities and strengths for the student vocalist, a high value is also placed on the acquisition of musical and stylistic literacy. This approach focuses on vocalists' natural strengths to expand their musical range and creativity. It avoids imposing pitch-based or theoretical methods that favour instrumentalists and ignore vocal strengths and limitations. The result is a fairer, student-centered method for teaching and practicing vocal improvisation.

In the following sections, we each outline our experiences and practices within ensemble teaching.

1. SCU BACHELOR OF CONTEMPORARY MUSIC: ENSEMBLE EXPERIENCE AND APPROACH

At the commencement of my career in the Bachelor of Contemporary Music, I (Leigh) was employed solely to teach first, second and third-year vocalists. The vocal studio had the largest student enrolment and regularly had 25 to 30 vocal students in total. The delivery consisted of one-hour individual classes and a weekly two-hour combined vocal-specific workshop with one of those hours assigned to performance. Gradually, the teaching role was expanded to include multiple core unit lectures and a decade of combined (all years) masterclass concert performance. Mixed vocal-instrumental ensemble delivery was also required across all years, affording greater awareness of the ill-fitting standard instrumental ensemble teaching approach. While there is no industry-wide consensus or definition of an "instrumental method", a de facto one is applied in the context of studio instruction in an institution led predominantly by instrumentalists. Although some of the discrepancies and impacts on vocalists in this setting were apparent, I continued to model similar instrumental-type approaches (see Zeichner, 2012; Abramo, 2016) previously employed, aligning with the time restrictions in the unit and the approaches already experienced in my own tertiary education.

The mixed vocal-instrumental ensemble classes were gender imbalanced with approximately 85 percent male-identifying students and often less than 15 percent female-identifying students. Vocalists were expected, as part of their "lead vocalist" role, to sight read and memorise melodies and forms, maintain a good time feel, understand the function of the harmony, follow all signage, use stylistically appropriate embellishments or ornamentation of the melody, and if requested, develop this further by improvising over the chord progression (most often introductions, interludes or outros), leading the dynamics and entertaining. After the first year of ensemble teaching, I reflected on my approach, noting that time was not taken to provide additional support for gaps in vocalists' harmonic background, but rather the vocalists were expected to simply catch up. There was an expectation that vocalists would also have the technical ability to accurately play rhythmic passages of the melody or chord progressions on the keyboard without any prior technical keyboard training. To counter this disparity, I developed a three-step student-centric

approach that included providing support for vocalists and developing student awareness among instrumentalists of the specific requirements of vocalists:

Step 1. Foster an environment based on enjoyment and respect, encourage student input and creativity, set clear achievable expectations of effective practice, and provide clear definitions and examples of the degree of difficulty of repertoire required. The first ensemble class commenced with each student outlining their specialisation, their strengths and areas they are working on, their goals, and any aspects of which they wish the other ensemble members to be aware.

Step 2. Instrumentalists and vocalists began with ten minutes of individual analysis of the repertoire (melody, harmony, form, rhythm) then a short group discussion of their findings; if required, additional analysis was provided.

Step 3. All students were given the tonic note and key centre, then ear training began using chord notes, arpeggios and passing notes as an "ear warm up". All students took turns sight singing four bars of the melody; here register accessibility became a noticeable challenge for many students, which sparked discussion on the essential inclusion of key transposition requirements. This final step provided instrumentalists with collective edifying insights into the vocalist's experience and afforded vocalists a practical shared experience of their additional transposition tasks.

2. ANU BACHELOR OF MUSIC: ENSEMBLE EXPERIENCE AND APPROACH

My (Rachael) tertiary education career began as a principal studies tutor. I would typically teach around 25 students, exceeding all other instrument areas in enrolment, and spanning first, second, and third-year performance majors, which consisted of weekly one-hour one-to-one vocal lessons and a combined weekly one-hour vocal workshop. When ensemble tuition was added to my duties, I became more aware of several inequities and challenges faced by vocalists in ensemble settings, starkly similar to those already reported by Leigh. The predominance of male-identifying instrumentalists among the student cohort meant that female-identifying vocalists were often the only or one of very few female-identifying students in each ensemble. This fact alone is reported by researchers to have a significant impact on the female vocalist's self-efficacy and confidence to participate in improvisation and group discussions, and their willingness to ask questions due to fear of appearing less knowledgeable and more vulnerable than their peers (Bandura, 2003; Wehr-Flowers, 2006, 2007; Wehr, 2022). Unfortunately, I observed vocalists more often than not being sidelined rather than triaged and supported. Additionally, many ensembles were assigned repertoire with no advance notice for prior listening and preparation, neglecting cultural and stylistic diversity and the consideration of suitable keys, lyrics, or specific parts that encouraged equitable opportunities for vocalists to participate.

Similar to the method developed by Leigh, I attempted to address the apparent educational inequity and create a safe and supportive environment for the vocalists to participate in improvisation.

Step 1. Repertoire was discussed and provided in advance of the weekly two-hour rehearsal. This was disseminated in the form of scores and parts, and a collaborative playlist that included exemplary reference recordings. Students were encouraged to add suggestions to the playlist which were then included in the repertoire, based on democratic agreement.

Step 2. Music was transposed into suitable keys for the vocalists' range and the expected aesthetic outcomes of the genre. The repertoire included contemporary jazz, neo-soul, and R&B/soul/pop. Examples included: "Trouble" by José James, "Will You Sing" by Kamasi Washington, "Ponta de Areia" by Esperanza Spalding, "Forget Regret" by The RH Factor (Roy Hargrove), and "Unaware" by Allen Stone.

Step 3. Repertoire was arranged to incorporate ensemble participation that expanded the role of "lead vocalist" to include background vocals, soli, shout-chorus, textural elements, percussion parts, and the addition of harmonically simplified solo sections, suited to the level of the student vocalist's understanding of functional harmony.

Step 4. All ensemble members participated in singing during the preparation and performance of repertoire. This involved singing the root movement, chord tones, and arpeggios. In some cases, vocal parts for the instrumentalists were added to arrangements for a large chorus or vocal harmony effect. The group singing activities had the added benefit of strengthening the ensemble connection and communication, exposing the instrumentalists to the vocalists' experience, and encouraging them to tap into their aural imagination, rather than relying exclusively on a theoretical or mechanical approach to idea generation when soloing. Regarding cultural

context, students were encouraged to conduct their own research outside of class and contribute any significant findings to the class discussions that preceded musical rehearsal.

It is worth noting that efforts were made to explore repertoire in both courses drawn from Black, Queer, and female artists, making discussion and research about cultural contexts an important area for future development.

3. ANU BACHELOR OF MUSIC: AURAL SKILLS COURSEWORK EXPERIENCE AND APPROACH

In 2020, my (Rachael's) teaching responsibilities expanded to include lecturing in the core aural skills and music theory course. This combined first-year class is required for all Bachelor of Music students and attracts a small cohort of elective non-music students (engineering, psychology, arts, to name a few). The enrolled students' musical skill sets, experience, and creative practices are highly variable. Some students begin with excellent music literacy skills and paraprofessional playing abilities, while some have never encountered Western notation or had an instrumental or vocal lesson. Some students compose using intuition and DAW (digital audio workstation) software, are fluent in guitar tablature, or play "by ear". For many years before lecturing in this course, jazz and contemporary vocal students had reported feeling behind, excluded, and incapable of keeping up with the pace, assuming their instrumental peers were all more advanced in their aural and theoretical understanding of music. They described feeling intimidated by the level of assumed knowledge that had not been part of their pre-tertiary music experience and struggled to connect their innate musicality with a more academic and theoretical approach to musical understanding. Interestingly, while the student instrumentalists in the course often had more experience with theoretical thinking and formal music training, they were equally timid about using their voice to demonstrate musical understanding due to the lack of physical location for pitch. Singing does not provide access to the tactile and visual strategies available on an instrument, and the type of motor feedback experienced by the singer can be confusing due to the complexity of the vocal motor system and the dampening of resonances created by bodily tissues (Erickson, 2023; Hargreaves, 2012; Helding, 2020; Pressing, 2001).

Helen Russell (2017) argues that a cappella singing as ear training for all musicians (instrumental and vocal) develops performance and aural confidence, improves listening ability, and directly converts theoretical knowledge to sound. Russell found that using a cappella singing as ear training directed students to link specific notes to their harmonic context and encouraged instrumentalists to access their ears over their fingers, strengthening the connection with their innate musicality and fostering increased feelings of trust and responsibility for fellow musicians and the music. Improvisation training literature reveals that critical listening, imitation, and singing are legitimate and potentially superior to notated or cognitive-based approaches to improvisation training (Blake, 2010; Prouty, 2006; Watson, 2010). Encouraged by findings reported in vocal improvisation pedagogy literature (Bell, 2013; Hargreaves, 2013, 2014; Madura, 2014; Oney, 2022; Shapiro, 2015; Spradling, 2000), and influenced by approaches borrowed from several renowned vocal and instrumental improvisation practitioners (Michelle Nicolle, Gian Slater, Kristin Berardi, Andrea Keller, Gemma Turvey, and others), I implemented an aural skills curriculum that used singing as ear training and embedded vocal improvisation as an aural skills exercise for all students, free from aesthetic, genre, or instrumental bias. The following steps outline the singing system implemented in the aural skills classroom.

Step 1. Aurally identify and sing simple intervals (within the range of an octave) in both ascending and descending directions, complemented by developing personalised song lists for all intervals.

Step 2. Aurally identify and sing triads and four-note (seventh) chords. A singing drill requiring single note adjustment for each new example precedes randomised exercises (see Appendix 1).

Step 3. Sing the entire root movement of a musical excerpt to establish harmonic rhythm and sequence.

Step 4. At this stage, all remaining chord tones were gradually added (first root and third, then root, third, fifth, and finally the seventh), and students were asked to experiment with rhythmic variation and permutation of chord tones to create an improvisation that demonstrates their ability to audiate the harmony.

Step 5. Guide tone exercises were added for awareness of voice leading and harmonic quality. The class could be split into four parts at this stage: Group 1 singing root movement, Groups 2 and 3 singing guide tones, and Group 4 singing the melody. A more advanced exercise excludes the

melody and includes a single voice improvising while three groups provide the harmonic accompaniment. While this process is rudimentary by jazz improvisation pedagogy standards, the requirement for all participants to sing their part requires active listening and aural memorisation of the harmony, devoid of the usual visual and mechanical strategies that instrumentalists have previously relied upon. I found this approach to produce greater confidence and engagement from the vocalists due to the realisation that the instrumentalists often found this approach to aural skills equally challenging without the benefit of an external reference for pitch, which created equity in the group class environment. I have found this to be the case even with the small but guaranteed yearly cohort of perfect-pitch students, who often rely on their absolute pitch abilities to the detriment of relative pitch, harmonic function, and theoretical understanding.

The major assessment task linked to this activity was the aural skills demonstration project. Students were required to select repertoire from a list of examples including several styles of music and prepare and perform an improvisation using the steps taught and practised in class. The task required all students to first sing through the exercises applied to their choice of repertoire, and then perform an improvised solo with their voice or a pitched instrument of their choosing. The improvisation should provide evidence of the aural memorisation of the harmony and include some arpeggiation of chords and targeting of chord tones. A solo constructed entirely of chord tones that includes expressive phrasing and novel rhythmic sequences is highly valued. There was no requirement to achieve a specific stylistic outcome, such as swing feel, the use of chromaticism, or idiomatic articulations. Students were not assessed on their vocal quality, only their ability to effectively predict and outline the harmonic content of the work.

Although many of the students, particularly those with a classical background who were mostly unaccustomed to improvising, approached this task with trepidation, the response over several years has been overwhelmingly positive and students have reported several unexpected learning insights. Using an improvisation task as the basis for aural skills development has reportedly improved harmonic literacy and awareness, developed listening skills, encouraged listening outside of the self, and encouraged participants to think beyond the notated score and their individual part. Improved confidence has been observed among even the most timid and resistant students, as they realised that improvisation is not an innate ability, but a skill that can be acquired and scaffolded by concepts they are already familiar with. Significantly, the composition students who have previously relied upon theory or intuition noted an improvement in their compositional thinking through increased awareness of harmonic structures.

4. ANU BACHELOR OF MUSIC: EXPANDING THE APPROACH TO IMPROVISATION BEYOND GENRE

The ANU Bachelor of Music combines jazz and contemporary performance into one specialisation. Vocal students are required to combine jazz repertoire (from a "graded" jazz standards list) with CCM repertoire that includes a commensurate level of musical challenge. Similar to the dearth of suitable jazz-fusion repertoire, students often struggle to identify CCM repertoire with comparable musical challenges outside of the jazz canon. Jazz repertoire commonly includes complex, non-diatonic harmony, with melodies that span a large range and incorporate unusual and/or difficult intervals, often emphasising dissonance.

At the respective institutions, there is an understanding among the various studios, guitar, drums, keyboards, etc., that each head teacher has an established method. Given that there is an established instrumental method, the majority of music practitioners expect vocalists to first understand and apply theory and analysis via the piano, then transfer these instrumental approaches back to the voice. The inverse is relevant to vocalists, for whom aural abilities supersede theoretical knowledge. Due to the lack of physical location for pitch and the invisible nature of the vocal instrument, the vocal musician must possess superior aural abilities. For the vocalist, music theory has little relevance without aural understanding and proficiency. As Blake (2010) points out, the instrumentalist does not need to hear in order to play. The vocalists can only sing that what they "honestly hear" (p. 33).

5. SCU BACHELOR OF CONTEMPORARY MUSIC: THIRD-YEAR INDIVIDUAL STUDIES "CREATIVE EXPLORATION" APPROACH

The majority of research into pedagogical approaches to improvisation is jazz based. Jazz-fusion was a genre outlined in earlier incarnations of the BCM curriculum for third-year students; however, there was a dearth of vocal repertoire, as the jazz-fusion style is predominantly instrumental. The redesigning of the vocal studio's approach utilises improvisation on non-Western scales as a pathway to stretch the required "fusion" label to better accommodate vocalists, thus establishing a non-jazz-based pedagogical approach.

Vocal students were presented with fifteen different scales: Algerian, Balinese, Byzantine, Egyptian, Hawaiian (Melodic Minor), Hindustan, Hungarian Gypsy, Japanese (Hyojo), Jewish (Magen Arot), Kumoi, Neapolitan, Persian, Raga (Hanunat Todi), Raga Todi and Spanish Gypsy (see Appendix 2: BCM World Music Vocal Scales).

Students were required to sing all scales (five scales every four weeks) for assessment purposes. In addition, they could select any three of the fifteen to embed within their contemporary exam repertoire either by adding an interlude, changing the song's chord progression to align with scale notes, or including a vocal solo section. Students tended to combine aspects of all three options, with the most effective and popular of the scales being Algerian, Hungarian Gypsy, Raga Todi and Spanish Gypsy. I observed that learning new scales and learning to apply these to improvisational contexts appeared to broaden the students' vocal and compositional palettes considerably, but further research is required to substantiate this. There were significant and noticeable increases in confidence in vocalists at their exams, demonstrated not only in strong melodic contours and rhythmic note choices in interlude or solo sections, but also in leadership; by encouraging experimentation and spontaneity, one is also nurturing a sense of artistic freedom and individuality for vocalists. As Westerlund (2023) asserts, "musical experience is gained through navigating the world of musics" (p. 16). Whether or not the vocalist chooses to incorporate virtuosic and lengthy improvisations into their performance practice is ancillary to the benefits of acquiring understanding of a shared language with other musicians that can enhance artistry, expressivity, and connection.

The third-year unit Advanced Music Studio Practice I (AMSP1) in the BCM was delivered over two terms (dual term). The unit consisted of fortnightly two-hour group vocal studio workshops, six in total, and fortnightly individual forty-minute lessons held in alternating even weeks. The unit offered vocalists a highly practical introduction to broader scale and improvisational opportunities, as well as approaches and pathways to using these skills within contemporary popular music. Students were strongly encouraged to research and explore their own cultural and musical backgrounds. The repertoire of all artists presented in the workshops could be used in exams. The outline of vocal studio assessments was in two parts, progressive and performance. The progressive part of the vocal assessment was worth fifty percent of the overall grade and was based on the AMSP1 Technical Scale Sheet (scale development improvisation) and live performance recital (exams). The performance component of the vocal assessment was centred on a thirty-minute live performance exam, also worth fifty percent of total assessment. All repertoire selected was approved by the studio lecturer.

Immersive student engagement was the challenge ahead. How do you fully engage students, who are currently and predominantly interested in pop repertoire, into a new world of sound? The engagement must also demonstrate that this pathway is highly beneficial to the student's own lifelong learning, beyond the student centred assessment foci. The workshops below provide insights.

The first vocal workshop outlined and provided audio examples and excerpts, case studies, transcriptions, scores and examples of a range of vocalists globally that elect to immerse themselves more broadly musically. Their pathway and approaches were explored, including cultural heritage, musical influences, exploration of scale knowledge and aspects of improvisation and invention—often rearranging existing repertoire and/or incorporating a range of genres of music from classical (Western and Eastern) to popular (bluegrass, electronic, rock, klezmer, Brazilian choro), as well as the inclusion of other art forms such as literature, film, photography or other visual and digital arts. Westerlund's (2003) research presents culture as a respectful multi-versatility of various elements taken into education to enrich the life of a student and enhance understanding and growth (p. 203). Students were provided with an introduction to Indian classical vocal music, with the similarities and differences defining Hindustani and Carnatic presented as the two main forms. The eight vocalists selected as exemplars were: Sheila

Chandra, Cheb Mami, Nicki Wells, William Barton, Lior, Ngaiire and Gretchen Parlato. The workshop concluded with a student-led reflective discussion on cultural research, inclusion and repertoire selection best aligned with the unit's degree of difficulty requirements.

In addition, a detailed list of specific albums was provided, aligned with a student-led reflective listening activity. The vocalist and works of art include: *Gling Gló*, *Vulnicura* and *Biophilia* by Björk; *Dead Man Walking* theme by Eddie Vedder and Nusrat Fateh Ali Khan; *Gone, Without Saying* and *In My Head* by Gian Slater (with Invenio on the former); *Live in NY*, *Flor*, and *In A Dream* by Gretchen Parlato; *Future to Future* by Herbie Hancock; *Autumn Flow* by Lior; *Do You Be*, *Dolmen Music* and "Travelling" by Meredith Monk; "Falling", *Ocean*, and collaborations with Nitin Sawhney by Nicki Wells; *Blastoma* and *3* by Ngaiire; "Boy In The Bubble" by Paul Simon; *Weaving My Ancestor's Voices* and *The Zen Kiss* by Sheila Chandra; "A Thousand Years" by Sting; "No Boat" by Theo Bleckmann and Ben Monder; *Waking World* by Youn Sun Nah.

6. SCU BACHELOR OF CONTEMPORARY MUSIC: CASE-STUDY (PATHWAY TO IMPROVISATION) AND CULTURAL EXPLORATION, APPROACHES.

Third-year vocal students were presented with a case study mapping vocalist Nicki Wells's pathway to improvisation. The aims were to encourage students to pursue deeper student-led research of each vocalists' unique improvisation journey and to access available research on vocal improvisation outside of the jazz genre. For example, in Wells's case, the Hindustani North Indian classical music tradition that focuses on vocal training for all instrumentalists in the Sangit Vidyapith. Three years of vocal training are required for the first diploma, so the students can internalise the music before playing instruments for their second Visharad diploma. Wells's song "Sunrise", a collaboration with Nitin Sawhney, was a particularly popular model, with students transcribing the introduction and regularly including this song in exam repertoire.

The UNESCO World Heritage Recording of the folk song "Donal Ogue" (anonymous origins) performed by Joyce Fisher, from the album *The Fisher Family* (1966), was used as an example in comparison to Sheila Chandra's adaptations and improvisations on the songs "Dhyana" and "Donalogue" from the album *Weaving My Ancestors' Voices* (1992). Chandra provides CD liner note details about her approach

> . . . I've drawn upon a lot of musical traditions— it makes me feel strong to absorb these influences and yet remain an individual . . . I chose to record a simple voice and drone album because I wanted to say that "fusion" doesn't just happen when you put different instruments from different cultures together—or even if you layer different vocal styles—it can happen in one voice, one mind.

Schaefer in Potter (2000) provides insights into Chandra's experimentation and the development of her style as finding "threads connecting [from] apparently disparate traditions … with the challenge to produce the fusion in a single vocal line" (p. 12). In the liner notes from the album *Moonsung* (A Real World Retrospective), Chandra also offers, "I believe that my musical heritage comes not specifically from my own culture. I believe I am heir to a universal form of inspiration" (1999).

The AMSP1 vocal scale sheet (see Appendix 2) provided a minor key arpeggio exercise with a flattened 9th in the descending dominant 7th arpeggio, a chromatic pivoting exercise and half diminished broken-chord exercise. Then four scales were presented for scale development: Spanish Gypsy, Raga Todi, Hungarian Minor and Algerian. Students researched and memorised the four scales, then developed melodic material similar to the given models to incorporate into existing exam repertoire.

Students worked with each other in ensembles to reinforce coordination, organisation, leadership and communication skills.

The workshop that followed the scale study was more practically orientated and focused on the technical and practical application of scale development concepts and the incorporation of new scales and specific vocal techniques appropriate to the music selected by the students. The range of examples in the workshop is small due to time constraints, but additional links and online activities were made available to all students.

Four examples were explored. The first, a small sample of West and South African songs, discussing the variety of vocal techniques required, with reflections on ethnomusicologist Sarah-Jane Gibson's research; the second, traditional Irish Celtic music examples that required vocal agility for diatonic ornamentation of the melody; the third, the predominance of microtonal alterations and a neutral third in some traditional Australian Aboriginal and Torres Strait Islander music; and

lastly, a small sample of improvisers such as Cheb Mami, William Barton and Jane Ashegh with the Mah Banoo Ensemble.

7. SCU BACHELOR OF CONTEMPORARY MUSIC: THIRD-YEAR LIVE PERFORMANCE APPROACH

A third year BCM vocal student's live recital exam was observed. It commenced with the song "Red Room" by the Australian band Hiatus Kaiyote. The performance began with a two-chord vamp played by a student keyboardist, the vocal student improvising using a small subsection of one of the four scales explored during the term, the Raga Todi scale (see Appendix 3).

As Ranganathan (2023) offers, "the study of Indian Classical Music's melismatic singing style can provide valuable insights for the development of effective techniques in teaching vocal agility and ornamentation across various genres" (p.7). The repertoire selected aligned with the criteria. The student presented two Hiatus Kaiyote songs, "Red Room" which was rearranged featuring two 8-bar sections reharmonised by the vocalist to include three improvisational sections, and "Molasses", a song with a very high degree of difficulty that was also rearranged by the vocalist to include a short improvisational section. The utilisation of the Raga Todi scale lifted the student beyond simple emulation of the recorded vocal performance.

An interesting and yet unsurprising outcome worthy of mention occurred in the second term. The previous term featured a technical assessment that was orientated around several modes: Dorian, Aeolian, Phrygian, Mixolydian, Lydian and Lydian dominant. The approach to transitional learning was to assist students to embed these scales using a range of student-centric pathways: appoggiatura to target scale notes, singing arpeggios within modes and using improvisation on modes. The modes were also presented as exercises, as seen in Appendices 4 and 5. Students were encouraged to record, review and reflect on each practice session and improvisation of each mode. The following term presented new scales, in particular the Spanish Gypsy scale (see Appendix 6).

Students in their assessment recordings recalled and clearly sang Phrygian. Although incorrect at the time, and a practitioner could perceive this as a term late, it is in fact representative of student demonstrations of new competencies, migrating into long-term learning where they now recall a once unfamiliar mode at will.

8. ANU BACHELOR OF MUSIC: THIRD-YEAR INDIVIDUAL STUDIES "CREATIVE EXPLORATION" APPROACH

The third-year individual studies unit (Performance 5) in the Bachelor of Music at Australian National University is delivered over a twelve-week semester (two six-week terms). The unit consists of a weekly one-hour group vocal seminar, combined with first- and second-year vocalists, and weekly individual 60-minute lessons. This unit expands on the previous units, incorporating all seven major modes, melodic minor, whole tone, whole/half diminished, and the altered scale. Arpeggiated chord qualities, improvisation exercises, transcription, and functional piano accompaniment skills are assessed along with repertoire from the jazz standard cannon and contemporary popular music. Commensurate with the approaches and standards embedded in the instrumental curriculum, vocal students must be familiar with the major modes in the program's first year. After several years of observing students struggle to utilise modes with intention when improvising, it was clear that a more vocal-specific approach was required, one that transforms the mode from a seemingly abstract technical exercise (one octave ascending and descending) into a creative exploration of the sonic and expressive possibilities of a scale/mode applied to music. In other words, the rote learning approach is relinquished in favour of a conceptual approach. This idea aligns with the work of Augusto Monk (2012) who argues that while traditional jazz improvisation pedagogical methods that emphasise procedural, stylistic, and technical skills can be effective, this method of training neglects the conscious creation of musical material, stymieing the development of the improviser's individual sound.

The "creative exploration" approach requires students to compose original licks and phrases using only the notes of a given mode. A way of thinking about major modes that has proven to be successful for many students is to compare each mode to the major scale of the same starting pitch, altering the scale degrees according to the requirements of the mode. For example, A Aeolian includes a flat three, flat six, and flat seven when compared to the A major scale. Likewise, the F Lydian scale includes a sharp 11 when compared to the F major scale, meaning the student only needs

to adjust one note, the Bb from the F major scale, raising it by a semitone to achieve the desired modal outcome (see Appendices 7 and 8). While this can be a less overwhelming way for the vocalist to think about each mode, given how familiar the major scale is, they can still struggle to assimilate and successfully target the distinctive, and often more dissonant, less stable tones when performing. Thus, the sixth scale degree in Aeolian is often omitted or unavailable to students when improvising, as is the 11 in the Lydian mode. The seventh and second (or ninth) scale degrees are generally perceived as dissonant, unstable, or tense, making them compelling colours to add to the vocalist's vocabulary to expand expressive possibilities. Vocal students are therefore also encouraged to reflect on the feelings evoked when certain notes are targeted and how these choices enhance emotive intent, word painting, and individual sound.

Students are advised to vary the feel (for example, swing/latin/hip-hop), meter, and duration of their composed mode phrases, facilitating diverse stylistic choices and connections. Each phrase is performed along with a corresponding one-chord vamp, such as a min seven chord vamp for a Dorian or Aeolian lick, or a major seven chord vamp for Lydian. The purpose of this approach is to illuminate the vocalist's understanding of chord/scale relationships in a way that circumvents the instrumental finger-based approach and gets straight to the heart of the musical/aural application of chord/scale theory. Voice students are supported to identify ways they can assign and practice their collection of phrases using the repertoire they are preparing, ensuring they comprehend the utility and transferability of the ideas bank and vocabulary they are developing.

A pivotal stage of repertoire learning that assists the vocalist in creating extemporaneous musical ideas, be that expressive phrasing, stylistic runs and embellishments, or longer form improvised solos, mirrors the aural strategies embedded in the aural skills course.

Step 1. The vocalist learns the melodic line of a given work (see Appendix 9).

Step 2. The vocalist commits the root movement to memory, maintaining the harmonic rhythm throughout. This is achieved by singing the note names and pitches, which assists with aural and theoretical memorisation. The student is also encouraged to explore their entire range at this stage, so large interval leaps are preferable.

Step 3. The vocalist sings the lyrics using the roots of the chords in place of the melody. As demonstrated in Appendix 10, singing lyrics places rhythmic demands on phrasing in order to observe the harmonic rhythm, while also connecting the vocalist directly to the harmony using the text, which is a familiar and specific vocal tool.

Step 4. The vocalist memorises the thirds of all chords, ensuring that the tonality (major/minor) is embedded in their aural memory to allow for accurate harmonic prediction and creation of melodic ideas that are consistent with the quality of the chords moving through each bar and across the bar line (see Appendix 11).

Step 5. The vocalist memorises the sevenths of all chords (see Appendix 12), completing the outline (shell) of each chord (root, third, and seventh). As instructed at the root movement stage, the vocalist is directed to explore as much of their range and different registers as possible, ensuring they can audiate the target pitches across their entire range. Taking such an approach also facilitates their ability to confidently negotiate wide intervals and make the necessary technical adjustments to air pressure, flow, and vocal fold postures to transition efficiently between vocal registers.

The combined study and memorisation of chord tones and conscious creation of melodic material informed by modes and scales ("creative exploration") in the method outlined above is a vocal/aural approach to harmonic awareness and security that underpins the vocalist's ability to deviate from the original melody of a given work free from any dependence on outside instrumental support. Creative exploration of scales/modes is assessed as a single scale/chord exercise; however, the exercise is intended to serve as a gateway from the standard approach to learning scales to a more directly applicable approach. An important learning outcome is the student's ability to transform any scale from an abstract theoretical concept into a melodic phrase that responds to a specific harmonic context, thereby providing clear utility and context that has meaning to the vocalist, especially when building a bank of ideas that can be drawn upon during improvisation. The conscious creation of scale-based melodic ideas alongside thorough study and internalisation of a song's harmonic content adds to a bank of sound sources that through practice are made available in the subconscious to enable the conscious creation of new musical ideas, as well as an accurate prediction of the song's harmonic architecture during real-time improvised performance. This phenomenon is noted by Blake (2010), who writes, "… when the singer is not good on a scat solo, it says to me that the contours of the harmony have not been internalised. If they had been, this preparation would have come to the performer's aid during the improvisation on that tune" (p. 33).

All these steps can be applied to popular music examples and can be modified (as demonstrated in Appendices 13 and 14) to honour stylistic and cultural expectations, as well as extending established genre norms to allow the vocalist to develop their individual and unique sound. The use of pentatonic scales and "blue notes" might be considered more desirable for the development of melisma and other ornamentation in certain genres, in which case the voice student may develop a collection of melodic phrases based on such scales that correspond with the repertoire. Regarding basic cultural and stylistic awareness, the harmony in neo soul (a genre that incorporates elements of jazz fusion, hip hop, African music, and electronic music) often includes major seven chords (as opposed to simple triads) and extensions such as the nine and flat nine, so including these sounds in chord tone exercises or the creative exploration of scale choices is encouraged in process of studying the song.

RECOMMENDATIONS AND LIMITATIONS

There are many established pathways to improvisation. Most are based on institutional jazz hierarchies that accentuate theoretical knowledge and technical virtuosity and de-emphasise audiation, expressivity, and meaning, leading to the prioritisation of skills and pedagogical practices that marginalise the vocalist. The authors have presented eight approaches that subvert challenges in the areas of educational equity and diversity arising from an instrumental and jazz bias to improvisation training. While there is much common ground between studio practice and student profiles across the two institutions featured, which has facilitated cross-institutional benchmarking and sharing of teaching strategies and assessment that promote a student-centred, vocal-specific pedagogical approach, several potential limitations have been identified. Impressions about improved improvisation ability and participation are limited to the authors' observations and do not include supporting qualitative or quantitative data such as surveys or semi-structured interviews. The student perspective is beyond the scope of this current research, which was solely focused on outlining the practical approaches we have used in our teaching. Future projects could include insights from students regarding how they viewed the approaches provided, what learning outcomes where achieved, and how improvements in aural skills and improvisation ability impact their confidence, self-efficacy, and participation in combined vocal-instrumental ensembles. Secondly, the perspectives and approaches described and discussed are based on the personal experiences of two vocal pedagogues. Future research could include the collection and analysis of data from a wider range of sources, including Australian and international tertiary vocal and instrumental pedagogues, along with expert vocal improvisers from other cultures. The inclusion of diverse and potentially divergent viewpoints regarding vocal improvisation in multiple genres of music and the role of the vocalist in improvised music performance would broaden the dataset, prevent bias, and lead to a deeper understanding and acceptance of different ways of learning, teaching, and performing vocal improvisation.

The authors encourage the inclusion of cultural awareness and inclusivity, promoting wider use of World Music scales and vocal-specific, harmony-focused aural training within CCM, jazz, and classical curricula. The inclusion of cultural awareness that encompasses the perspectives, knowledge, soundscapes, and pedagogical insights from varied sources and traditions, including our own First Nations people, encourages student engagement, respect, inquiry, and innovation. Further, the authors advocate for vocal educators to view the use of improvisation as a highly effective musicianship and creative device for the tertiary student vocalist that should not solely be aligned with a particular genre (namely jazz). The proposed modification of the pedagogical application of improvisation offers a more flexible and subtle method of extemporaneous experimentation, enhancing the vocalist's sound vocabulary and scaffolding new intervallic and harmonic knowledge. Positive outcomes of such approaches include the development of advanced skills that are deeply embedded and stored within the subconscious as an internal repository, the fostering of greater individuality in contemporary improvisation performance, interpretative skill, and the development of a unique personal sound. These skills are also transferable to other musical tasks relevant to the contemporary vocal musician, such as songwriting and arranging ability, increased self-efficacy and musical autonomy, and enriched musical communication with instrumental collaborators.

Anecdotal experience indicates that vocal teachers in tertiary education settings are predominantly female-identifying, and either do not have access to or do not seek opportunities to teach outside of principal studies. It is recommended that

tertiary voice teachers lobby for increased opportunities for professional development and partial redeployment to ensemble tuition and core coursework. Increased visibility and input into curriculum, assessment design, and pedagogical approaches can positively impact the vocal student's experience, and the general perception of the vocalist's knowledge, role, and skillset. Furthermore, the authors encourage all faculty who interact with voice students to be mindful of the deleterious effects of gender hegemony and instrumental bias on the vocalist's self-efficacy that occur in ensembles and combined classrooms and recommend ensuring the vocal student has equal access to mastery experiences. To achieve this, the authors advocate for an inclusive and diverse pedagogical approach that acknowledges the vocalist's unique strengths, preferences, and limitations, thereby enriching the student experience and making vocalists more inclined to understand the broader value of improvisation training, strengthening the likelihood of participation in improvisation by choice rather than by academic requirement.

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BIOGRAPHY

Dr Leigh Carriage is senior lecturer at Southern Cross University, Australia within the Bachelor of Contemporary Music. Her research interests include creative processes in composition, vocal hybridity, equity and diversity and improvisation. Her compositional works include two books, *Mandarin Skyline: Complete Piano and Vocal Transcriptions* (2021) and *Weave: Complete Transcriptions for Piano and Vocal* (2021). Leigh has published on jazz performance during COVID in the journal *Perfect Beat* (2021). Her recent book chapter 'The Subtle Art of Resistance: Re-hearing the Music of Na Yoon-sun (Youn Sun Nah)' is featured in the book *Guerrilla Music: Surveying the terrain* (2024).

Rachael Thoms is a hybrid vocalist, singing voice expert, and aural skills lecturer. She is a graduate of the ANU School of Music, with a rare combination of jazz and classical performance degrees. She has recently completed a multidisciplinary doctoral research project encompassing vocal pedagogy, brain sciences, gender and improvisation. Rachael recently recorded with Australian jazz luminary, Andrea Keller on her latest release *Flicker & Polar Bird*, and has presented at several major national and international conferences, including the International Jazz Voice Conference (Helsinki, 2019), ANATS National Conference (2020), AJIRN 6 (2023), and the inaugural Jazz Futures Symposium (2024) hosted by the ANU.

APPENDIX 1

Figure 1: Triad and seventh chord singing/aural drills

Major
Minor
Diminished

Major 7
Dominant 7
Minor 7
Half-diminished 7
Diminished 7

APPENDIX 2

Figure 2: BCM world music vocal scales

Fusion World Music Scales

Algerian
Balinese
Byzantine
Egyptian
Hawaiian (Melodic Minor)
Hindustan
Hungarian Gypsy
Japanese Hyojo (Dorian)
Jewish (Magen Arot)
Kumoi
Neopolitan
Persian
Raga (Hanunat Todi)
Raga Todi
Spanish Gypsy

APPENDIX 3

Figure 3: AMSP1 vocal scale sheet

Advanced Music Studio Practice I Voice

Technical Assessment

1. Arpeggios - minor and V7(b9) (110 BPM)

Am E7(b9) Am F7(b9) Bbm F7(b9) Bbm F#7(b9) Etc

2. Chromatic pivoting on primary vowels. (90 BPM)

Ah

Etc

Ee

3. Broken chord - half-diminished. (100 BPM)

Etc

Oo yeah oo yeah oo yeah oo yeah oo.

Scale and Improvisation Development

Spanish Gypsy

Raga Todi

Hungarian Minor

Algerian

Model Spanish Gypsy Scale Improvisation on this exercise.

Model Raga Todi Scale Improvisation on this exercise.

Construct similar exercises on Hungarian Minor and Algerian scales.

APPENDIX 4

Figure 4: Raga Todi scale exercise

Raga Todi

APPENDIX 5

Figure 5: Aeolian/Dorian exercise

APPENDIX 6

Figure 6: Lydian Dominant exercise

APPENDIX 7

Figure 7: Spanish Gypsy scale exercise

APPENDIX 8

Figure 8: A Aeolian melodic phrase – swing feel

APPENDIX 9

Figure 9: F Lydian melodic phrase - straight feel

APPENDIX 10

Figure 10: Excerpt: We'll Be Together Again (Frankie Laine and Carl T. Fisher, 1945)

G6 Eb9 Am11 D7 Em Em7 A9(#11)
tears no fears, re - mem - ber there's al - ways to - mor - row, so
Fm7 Bb7 EbΔ Aø Eb9 D9sus D13
what if we have to part, we'll be to - geth - er a - gain, your

APPENDIX 11

Figure 11: Example of root movement sung with lyrics and altered rhythmic phrasing

G6 Eb9 Am11 D7 Em Em7 A9(#11)
No Tears, No Fears re - mem - ber there's al - ways to - mor - row
Fm7 Bb7 EbΔ Aø Eb9 D9sus D13
what if we have to part we'll be to - geth - er a gain

APPENDIX 12

Figure 12: Example of thirds exercise

GΔ Eb7 Am7 D7 Em Em7 A7
Fm7 Bb7 EbΔ Aø Eb7 D7sus D7

APPENDIX 13

Figure 13: Example of sevenths exercise

G△ Eb7 Am7 D7 Em Em7 A7

Fm7 Bb7 Eb△ Aø Eb7 D7sus D7

APPENDIX 14

Figure 14: Excerpt: “American Boy” (Estelle, Kanye West, 2008)

Emaj7 Cmaj7 Amin9 D9

Take me on a trip, I'd like to go some-day._ Take me to New York, I'd love to see L.__ A.__ I

Emaj7 Cmaj7 Amin9 D9

real-ly want to___ come kick it with you._ you'll be my A-mer-i-can_ boy.___

APPENDIX 15

Figure 15: Harmonic awareness and security drill with added colour note drill

Roots Emaj7 Cmaj7 Amin9 D9

Thirds Emaj7 Cmaj7 Amin9 D9

Sevenths Emaj7 Cmaj7 Amin9 D9

Ninths Emaj7 Cmaj7 Amin9 D9

Ninths with lyrics Emaj7 Cmaj7 Amin9 D9

Take me on a trip, I'd like to go some-day._ Take me to New York, I'd love to see L.__ A.__ I