

Tertiary Music Education for People with Disability: A Framework for Access

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INTRODUCTION

This report proposes a framework for tertiary music education providers in Australia to increase the accessibility of their services for people with disability. The research combines best practice recommendations in education and live music performance by drawing on national and international leaders in these fields. The current research points to a gap in literature regarding best practices for accessibility in tertiary music education, and that filling this gap may help to redress the underrepresentation of musicians and composers with disability in the Australian music industry. The study was undertaken during a placement at the Disability Innovation Institute UNSW (DIIU) as part of a Masters in Cultural Leadership at the National Institute of Dramatic Art. The Director of the DIIU, Professor Jackie Leach Scully, supervised the research.

The DIIU is dedicated to disability research across multiple disciplines. It is “grounded in inclusive research where people with disability are involved not just as participants, but as co-creators of knowledge” (DIIU 2021). Staff members of the DIIU are leaders and advocates in their various fields, and a placement at the DIIU offered expert knowledge in disability inclusion as well as observation of leadership in action within a tertiary education context. This foundation was then expanded upon to include interviews with national and international leaders in accessible tertiary arts education and accessible music.

The findings indicate that by adopting the principles of Universal Design for Learning, best practice in live music accessibility, and cultural change through staff training and support, tertiary music education providers may be able to improve the experience of all students as well as provide increased access for students with disability. These three focus areas work together to remove barriers and take the onus of responsibility for access off the students.

I bring my lived experience of disability to this project, as well as my experience as an academic lecturer in music composition and production. As a teacher, I have been frustrated at my own lack of knowledge of accessibility in an education context, particularly in my attempts to support neurodiverse students who are experiencing barriers. As a person with disability, I am often frustrated by barriers that prevent me from participating in live music both as a performer and an audience member. This research has given me more insight into how I can support my students, and also how I can articulate my own access needs to venues and event producers.

RATIONALE

According to the Australian Bureau of Statistics, 16.1% people with disability over the age of 15 have a bachelor degree or a higher qualification (ABS 2018), compared to 31% in the general population (ABS 2021). Throsby and Petetskaya (2016) found that in Australia, 7% of musicians and 10% of composers identify as having a disability compared to 17% of the wider population, and that artists with disability earn half the income from their creative work as artists without disability. While the National Arts and Disability Strategy (Cultural Ministers Council 2009) led to significant change in the awareness of disability and increased accessibility in the arts sector, the research overview conducted by the Meeting of Cultural Ministers (MCM) in 2018 indicates that only 9% of people in creative and cultural occupations in Australia have a disability, compared to 17.7% of the general population. This research also indicates that formal education is a useful avenue to forming essential networks and mentor relationships, and that there may be barriers for people with disability to accessing formal education (MCM 2018), therefore these networks and relationships may be more difficult to establish for people with disability.

Education providers in Australia are required to provide reasonable adjustment for people with disability according to the Disability Discrimination Act 1992 and the Disability Standards for Education 2005. Many tertiary education providers do this by providing disability services for students to access adjustments such as flexible assignment deadlines and alternative examination arrangements (Monash University 2021; Melbourne University 2021; University of Sydney 2021; University of Adelaide 2021). Others also promote Universal Design for Learning (Edith Cowen University 2021; UNSW 2018), an accessible learning framework developed by CAST (previously the Centre for Applied Special Technology) that focusses on removing barriers to learning by creating learning environments and materials that cater for the natural variability of learners (Meyer, Rose & Gordon 2014). Morwenna Collett, Australian disability arts consultant, completed a Churchill Fellowship in 2020 which focussed on the accessibility of the Australian music industry. She identified a gap in the current literature for “investigation into the role of higher education institutions in providing training pathways for disabled musicians” (Collett 2020, 22).

About The DIIU

The DIIU is situated within the Division of Equity, Diversity, and Inclusion at UNSW. Staffed by internationally recognised leaders in research from various fields, all with lived experience of disability themselves, the Institute aims to “promote genuinely disability-inclusive and interdisciplinary research, teaching, and engagement across the university” with a strong focus on co-producing research with people with disability (Scully 2021).

The Institute is focussed on research and connects researchers in different departments within UNSW with the theme of disability, offering guidance and support. The DIIU also provides support for education in the form of UDL resources for staff and students, but this is not the core of its operations.

UNIVERSAL DESIGN FOR LEARNING (UDL)

Terry Cumming is the Academic Lead Education at the DIIU and Professor of Special Education in the School of Education. Cumming is an advocate for the Universal Design for Learning framework and has implemented its principles in her many years of teaching in special education as well as tertiary education settings. Her 2021 review of literature in UDL in higher education, written with Megan Rose, Adjunct Associate Lecturer at UNSW, found that the UDL framework offers “best practice for supporting all university students in accessing the curricula”, and argues for UDL to become standard practice within higher education in Australia (Cumming & Rose 2021, 11).

UDL was developed by CAST, originally the Centre for Applied Special Technology in Boston, U.S.A. During the 1980s, CAST endeavoured to apply technology to help students with disability overcome barriers to learning. One of their outcomes was a digital book publishing platform that is accessible to readers with varied needs, featuring a text-to-speech function, embedded definitions of jargon words, embedded multimedia supporting materials, and more¹. By focussing on the curriculum and the way it was delivered rather than the individual student, CAST were able to remove barriers and improve the learning experience of many students, not just those with disability (Meyer, Rose & Gordon 2014). CAST then focussed on designing learning environments for a wide range of students instead of the traditional “mythical average learner” (Meyer, Rose & Gordon 2014, 2). This work, combined with research in neuroscience and education, led to Universal Design for

¹ Their seminal text, *Universal Design for Learning: Theory and Practice* (Meyer, Rose & Gordon 2014) is offered in this platform for free on the CAST website

Learning and the first publication on the topic, *Teaching Every Student in the Digital Age: Universal Design for Learning* in 2002 (Rose & Meyer).

There are three core principles of UDL: “provide multiple means of engagement; provide multiple means of representation; and provide multiple means of action and expression” (Meyer, Rose & Gordon 2014, 4).

Multiple means of engagement

The UDL framework aims to support all students to become what CAST calls ‘expert learners’ – students who are interested and motivated to pursue continuous learning. It acknowledges that the inherent variability in student cohorts requires multiple means of engagement to ensure that all students remain interested in learning. The aim is to create an environment that engages all students regardless of their strengths, weaknesses, and preferred media, and helps them to sustain motivation for learning (Meyer, Rose & Gordon 2014). This also gives students a chance to explore new methods of engagement and experiment with what works best for them.

In the tertiary context, Cumming recommends providing clearly articulated weekly learning outcomes, as giving students a choice of materials to engage with puts the onus of achieving the learning outcomes on them (personal interview, December 15, 2021). The DIU recommends providing visual aids such as videos, diagrams, and interactive media as well as traditional lectures and reading materials (DIU 2019). Cumming suggests using automated captions as a means of providing multiple media simultaneously with minimal effort.² Meyer, Rose & Gordon (2014) suggest providing lecture slides, checklists, and guides for notetaking in advance to aid information management and cater for variability in executive function. They also recommend providing opportunities for both independent and collaborative work, as well as a balance of structure and novelty in order to engage a range of students (Meyer, Rose & Gordon 2014).

Offering a range of media and recording all classes may ease the burden of attendance for some students. Neurodiverse students may find it difficult to engage in traditional in-person classes for a myriad of reasons, whether it be the physical environment, social expectations, or diverse attention styles (Spaeth & Pearson 2021). Developing an accepting culture by welcoming latecomers and openly acknowledging that students have different access needs may help to put students at ease. While some disciplines such as performance require punctual attendance, easing the burden of attendance in academic units will help students to balance competing time management demands.

CAST (2018) recommends including diverse materials to engage diverse cohorts of students.

² Zoom, Microsoft Teams, and Microsoft PowerPoint all support automated captioning

Students of various ages, cultures, genders, races, and abilities are better able to engage with content when they see themselves reflected in the materials. James A. Banks' (2013) framework for multicultural curriculum reform is a useful tool for achieving this, and Patricia Shehan Campbell (2018) provides possible applications of this approach in tertiary music education. Banks' approach is graded with four levels of increasing consideration of a topic from various cultural perspectives (Banks 2013). For example, a music theory class could consider musical concepts from the perspective of different cultures, acknowledging that each perspective is valid (Campbell 2018).

Multiple means of representation

CAST emphasises the importance of context when considering whether a person is disabled, arguing that it is the environment that disables a person rather than their impairment. For example, someone with visual impairment will struggle in a learning environment that relies solely on text to communicate information. By providing multiple means of representing the same information, all students with their varied strengths and weaknesses will be able to access the material and will not experience disability in the learning environment (Meyer, Rose & Gordon 2014).

Just as the use of a range of media allows students to engage with materials, it also helps them to understand materials as various media spark different cognitive processes (Meyer, Rose, & Gordon 2014). CAST recommends presenting key concepts, including goals and feedback, in alternative forms as well as text, e.g., an illustration, diagram, movement, table, video, storyboard, etc.; and displaying information in a flexible format so that students can reformat according to their access needs, e.g., MS Word, EPUB³, and video with playback speed controls (CAST 2018). CAST also suggests clarifying vocabulary and symbols by embedding hyperlinks to definitions and explanations of potentially unfamiliar references, connecting new information to prior knowledge, and removing unnecessary distractions (CAST 2018).

³ ProQuest E-Book Central offers books in EPUB and PDF and Web Content Accessibility Guidelines 2.1 level AA. The accessibility of ProQuest e-books is limited by what is supplied by the publishers, and not all books are fully aligned with accessibility standards despite being published in an accessible format. However, ProQuest offers extensive accessibility information and support for both readers and publishers (ProQuest 2021). For more information about e-book publishing and accessibility, please see Kasdorf, B. 2019. Mainstreaming Accessibility: A Progress Report. NISO. <http://www.niso.org/niso-io/2019/05/mainstreaming-accessibility-progress-report>

The DIIU (2019) recommends beginning each lecture with an outline of what will be covered, summarising key point and linking them to unit learning outcomes and providing alternatives to readings such as audio and video resources. Cumming also suggests providing alternatives to lectures where possible, such as podcasts and articles, but acknowledges that this is not always possible (personal interview, December 15, 2021).

Multiple means of action & expression

There are many factors that impact students' abilities to express information in particular formats, e.g. motor impairments affecting handwriting or typing, hearing impairments affecting speech, sensory processing issues affecting screen tolerance, and language barriers affecting academic writing. UDL also acknowledges the "variability in students' working memory, or the ability to hold and manipulate information in your mind" (Meyer, Rose & Gordon 2014, 55) and the need for teachers to cater for this variability in the classroom. By communicating clear goals regularly and allowing students to express their knowledge through multiple means, all students can develop confidence in their ability to become successful learners (Meyer, Rose & Gordon 2014).

In the tertiary context, Cumming suggests designing broad assessment briefs that allow students choice in how they communicate their learning outcomes, e.g., offering a choice of a test, an essay, or a presentation (personal interview, December 15, 2021). The DIIU recommends offering students multiple means of contacting teachers, e.g. in person, online chats, email, and phone (DIIU 2019). The Royal Conservatoire of Scotland offers options for students to submit assessments in text or video recordings of presentations in English or British Sign Language (Claire Lamont, personal interview, January 14, 2022).

Education providers should not assume that students with disability have already worked out their ideal means of engaging in learning or music (Jackie Leach Scully, personal interview, February 14, 2022), and education providers can play a role in helping students to access assistive technology and alternative instruments to enhance both the learning environment and artistic practice. American composer, performer, and disability advocate Molly Joyce talks about her search for the right instrument to support both her musical ideas and her physical impairment: a 1960s Magnus vintage toy organ that she bought on eBay when she was studying at Juilliard (Joyce 2018).

It's been a challenge to find an instrument that suits my body...
with the organ... it feels very comfortable for me to physically
perform on. I feel that it's almost made for my body, and I say
made for my form and made for my deform. It challenges me to

interact and engage with my impairment on a different level. A level that allows my body to navigate a unique environment in its own manner without comparison or concern for whether it's able or not, formed or not (Joyce 2018)

Allowing flexibility within course structures will help students to explore different instruments and multiple means of musical expression.

LIVE MUSIC ACCESS

While UDL addresses the accessibility of the learning environment, tertiary education providers can also consider the built environment to make sure that campuses and events are accessible to staff, students, and visitors. Arts access organisations like Accessible Arts (NSW) and Arts Access Victoria offer consultation services to help arts organisations improve their accessibility. Attitude is Everything is a UK-based disability-led organisation that has been leading live music accessibility for 20 years, and Australian access advocates Morwenna Collett and Tibi Access are leading change in the live music and events industries in NSW and Victoria. Many of the recommendations of these advocates are directly applicable to the tertiary music context.

Collett, Tibi Access and Attitude is Everything all recommend the following:

- **Wheelchair accessibility** including all performance areas and stages, and accessible toilets available in convenient locations. For large performances with standing room, it is useful to provide a designated **accessible seated viewing area** for wheelchair users and those who cannot stand for long periods. Any food and drink services should be accessible for wheelchair users and accessible bars should be set up where high counter tops inhibit sightlines (Collett 2020).
- **'Chill' spaces** offer relief from sensory input for those who experience sensory overload and can make the difference between someone being able to engage with a performance or not, either as a participant or audience member (Collet 2020, Attitude Is Everything 2017). These spaces offer refuge from crowds and noise.
- **Companion cards** are available to "people with significant and permanent disability" in all states and territories of Australia and allow free entry for the card holder's carer to public transport and participating venues and events (State Government of Victoria 2019). Event organisers and venues should advertise the companion card logo and offer a companion card option at checkout to help people with disability access their ticketed events.

- **Auslan interpretation and captioning.** Many deaf and hearing-impaired people enjoy music both as audience members and participants. Deaf artists like Evelyn Glennie and Christine Sun Kim have not only shown that the deaf community can participate in music making but have also enhanced our understanding of the nature of sound and listening (Glennie 2020, Kim 2015). As a result of increasing awareness of deaf experiences of music, sign language interpretation and captioning is becoming more common at music festivals in America (Collett 2020), and some interpreters like Amber Galloway Gallego are enhancing the artform through performative approaches to sign language (Galloway Gallego 2018). It is important to remember however that not all deaf people use sign language, and that both interpretation and captions are needed to achieve ideal accessibility (Attitude is Everything 2017, Collett 2020).
- **Audio description.** This is a live or recorded vocal description of the visual elements of a work or performance. Opera and musicals require audio description for blind and low vision audience members and performers to access all elements of the work (Collett 2020). As with sign language interpretation, audio description can be performative and incorporated into the development of work from the beginning, offering new lenses with which to explore material (Collett 2020).
- For printed posters and signs, 18-point font and contrasting colours can increase accessibility for people with low vision (Tibi Access 2022).
- **Relaxed performances.** These are performances tailored to those with sensory sensitivities and often involve programs without abrupt loud sounds or flashing lights. Often house lights will be left on low, doors left open, comfortable seating provided, and audiences encouraged to make sound and move around as they wish (Collett 2020). In all performances, strobe and flashing lights should be avoided, and warning should be provided ahead of time if they will be used (Attitude is Everything 2017).

ONLINE ACCESS

Online spaces also require specific measures to achieve accessibility. Auslan interpretation and audio description are helpful for online performances, as well as closed captions and clear formatting with large font and contrasting colours (Attitude is Everything 2020). Video materials with flashing lights and rapid movement are inaccessible to some neurodiverse people and so should be avoided or accompanied with a warning.

Web pages and digital texts are not automatically compatible with screen readers and therefore limited in their accessibility for those with vision impairments. The Web Content Accessibility Guidelines (WCAG) is an international standard developed by the World Wide

Web Consortium following four key principles: that content should be perceivable, operable, understandable, and robust (W3C 2022). Following these guidelines will ensure that web content is accessible for people with disability. The guidelines require all images to be accompanied by alternative text and image descriptions, and this is also advisable for social media content (Tibi Access 2022). Any key information that is presented in images or video should also be communicated in another medium so that blind and low vision users have access (Tibi Access 2022).

COMMUNICATING ACCESS

‘Access starts online’ is a phrase that is becoming very common in the disability arts community (Collett 2020, Attitude is Everything 2022, Tibi Access 2022). The core message is; it doesn’t matter how accessible a venue or event is, if that accessibility isn’t communicated in advance, people with disability will not attend. Attitude Is Everything recommends communicating the following clearly:

- Whether or not the venue is wheelchair accessible
- Whether or not there is an accessible toilet, and if not, where the nearest accessible toilet is
- Whether or not a quiet/chill space is available
- A map of accessible parking and transport in the area
- Whether or not companion card tickets are available
- Whether or not a seated viewing area is available
- Whether or not captions, sign language interpretation, hearing loops, and audio description are available
- Whether or not relaxed performances are programmed
- Contact information for further questions

(Attitude is Everything 2017)

It is also useful to provide Social Stories online. These are step-by-step photo guides to a venue or experience that gives a clear picture of what a person can expect when they attend campus or an event (Tibi Access 2022).

Finally, it is common practice in disability spaces to ask for participants’ access requirements in advance. In performance contexts, this may be in the form of an ‘access rider’, a document that outlines the needs of the performer and the responsibilities of the venue or host organisation (Hemsley 2020). In a teaching and learning context, students are often expected to discuss their requirements with disability support services as well as their teacher at the beginning of every unit of study (Cunninghame, Costello & Trinidad 2016).

This is an inefficient approach that can cause distress for students and lead to further barriers. Higher education providers can help to reduce this burden by asking students their access requirements in advance, offer opportunities to update them, and communicate this information to teachers. It is also important to note that students, including students with disability, may not know what requirements they can reasonably ask for. For example, a neurodiverse student may not have come across automated captions before and might find it helpful. Therefore, information about access and communicating access will be helpful to students.

CULTURAL CHANGE

Disability advocates call for greater awareness and understanding of accessibility and recommend staff training for organisations to achieve accessibility (Collett 2020). The same is true for the higher education context, as fear and stigma can impact student experiences and accessibility of learning. Molly Joyce recalls her fear as an undergraduate composition student:

I was really intimidated by my composition teachers, these famous composers, and I thought [disability services staff] were going to tell [my teachers] all about my disability and I felt like they would find out about that before my music... as an 18 year old I was terrified , I thought it was going to ruin my career and just put a label to me before I'd met them (Molly Joyce, personal interview, February 4, 2022).

Tertiary institutions can combat this stigma by creating a culture of inclusivity and accessibility. The Royal Conservatoire of Scotland (RCS) offers a useful example with their BA in Performance in British Sign Language (BSL) and English which was established in 2015. Head of Course Claire Lamont describes how by training the entire school including café staff in the basics of BSL, RCS was able to offer a level of cultural competence that supported a positive and inclusive experience for deaf actors in the course. RCS undergraduate students are also required to collaborate with students from different departments each year, so all graduates are familiar with working with deaf actors and creators, and this has had a positive impact on the culture of the campus. As graduates move into the industry, cultural change can be seen as deaf actors begin to take more roles in mainstream companies in the UK (Claire Lamont, personal interview, January 14, 2022).

Within a university context this level of cultural change may be more difficult to achieve. The DIIU offers a useful model in connecting various departments and offering guidance and advice around disability inclusion and accessibility. However, as the DIIU is focussed mainly on research rather than education, there is further need for advocacy and support for accessibility in UNSW's function as an education provider. The DIIU provides resources on UDL, and the UNSW 2018-2020 Disability Action Plan focusses on implementing UDL in the learning and teaching environment (UNSW 2018). However, Cumming & Rose (2021) found that even when staff are aware of it, teacher attitudes to UDL in higher education are often negative despite positive student feedback, and they recommend staff training to help advocate for the value of UDL.

John Napier, Senior Lecturer in music at UNSW, noted the importance of considering the principles of UDL at the very beginning of the course design process (John Napier, personal interview, February 14, 2022), indicating that for successful UDL implementation and for the greatest level of accessibility to be achieved, UDL needs to be understood by staff at all levels of the organisation.

Advocacy for UDL principles within learning management systems (LMS) and student management systems will also help to better implement UDL in higher education contexts. While many LMS providers work hard to provide accessible products (Access Computing 2022), they could go further by offering updatable access profiles for students to input accessibility requirements.

RECOMMENDATIONS FOR TERTIARY MUSIC EDUCATION

Many teachers at all levels of education implement the core principles of UDL naturally as they try to cater to the needs of their students. Within the tertiary sector, music is one of the only disciplines that offers one-to-one coaching, and this further helps teachers to cater for the variability of students. Furthermore, musical concepts are almost always represented in multiple means such as text, spoken word, music notation, and performed or recorded sound. However, the styles of music that are traditionally taught in western tertiary education are often limited to jazz and classical (O'Hagin & Harnish 2003, Bradley 2007), and the rules associated with these styles limit the ways in which students engage with music: traditional instruments with specific sets of technical requirements, traditional notated composition, and improvisation within a strict harmonic framework. This limits the means by which students are able to express their knowledge and engage with music. By consciously implementing the UDL framework into teaching, and offering a diverse range of musical styles, tertiary music educators can gain further learning benefits for their students and make their courses more accessible. The following recommendations offer a framework to achieve this.

Improve access to teaching and learning

Offer multiple means of engagement:

- Provide clearly articulated weekly learning outcomes
- Offer materials in a range of media such as real time and pre-recorded lectures, tutorials, short videos, text notes, articles, books, podcasts, web applications, audio, worksheets, games, etc.
- Use automated captions
- Provide lecture slides, checklists, and guides for notetaking in advance
- Record all classes and make them available to students online
- Develop an accepting culture by welcoming latecomers and openly acknowledging that people have different access needs
- Ease the burden of attendance in units where this is possible
- Offer opportunities for both independent and collaborative work
- Offer content that represents a diverse range of people and styles of music

Offer multiple means of representation:

- Present key concepts, including learning outcomes and feedback, in alternative forms as well as text, e.g., illustration, diagram, movement, table, video, storyboard, etc.
- Display information in a flexible format so that students can reformat according to their access needs e.g. MS Word, EPUB, and video playback with speed controls.
- Offer alternatives to auditory information e.g., captions, visual diagrams, charts, music notation, etc.
- Offer alternatives to visual information e.g., descriptions (text or spoken word), text-speech software, performed or recorded music, braille text and braille music notation
- Clarify vocabulary and symbols by embedding hyperlinks to definitions and explanations of potentially unfamiliar references (jargon, colloquialism, academic language)
- Connect new information to prior knowledge
- Remove unnecessary distractions

Offer multiple forms of action and expression:

- Design broad assessment briefs that allow students choice in how they communicate knowledge
- Encourage students to communicate through multiple media such as text, speech, video, live music, recorded music, music notation, digital audio workstation (DAW) sessions, digital communication platforms, images, movement, etc.

- Encourage students to explore alternative instruments and assistive technology
- Build flexibility into course structures to allow students to explore different instruments and multiple means of musical expression

Many teachers may be hesitant to remove writing-based assessments from tertiary units, citing examples in the industry where these skills will be needed. However, a student does not need every unit to involve writing to master the skill. A music performance degree does not involve performance in every unit, after all. Students for whom writing is a barrier, either through motor impairment, neurodiversity, or language, often face debilitating workloads, stress, and feelings of shame and guilt. By offering students a choice of media with which to communicate, barriers are removed, and students can use their strengths to demonstrate their knowledge. When unit learning outcomes specifically require written communication, students have more space to dedicate to the task, and have increased confidence in their communication skills as they develop their strengths as well as their weaknesses.

Apply UDL principles to administrative and admissions processes:

- Offer course and application information in a range of media
- Accept applications in a range of formats
- Provide contact information for applicants experiencing barriers
- Avoid prescribing a finite list of instruments available for study. Instead, encourage students to explore a wide range of media for musical expression including electronic instruments and adaptive instruments
- Accept auditions as recordings as well as in person
- Provide accessibility information online

Improve on campus access:

- Ensure all areas of campus are wheelchair accessible, including the availability of accessible toilets
- Provide chill rooms for staff and students as a refuge from loud and busy spaces
- Avoid the use of flashing lights
- Use large font and contrasting colours on posters and signs
- Provide Auslan interpretation, captions, and audio description for events
- Offer companion card tickets for any ticketed events

Improve online learning access:

- Provide alternative text and image descriptions on all websites, social media, and online learning materials

- Provide automatic closed captions for all classes, meetings, and events
- Provide Auslan interpretation and audio description for classes, meetings and events where needed
- Avoid flashing lights and rapid movement in all digital materials
- Use simple backgrounds and contrasting colours in all digital materials
- Follow Web Content Accessibility Guidelines (WCAG) for all websites and online spaces
- Record all classes and events and make them available for students online

Communicate access:

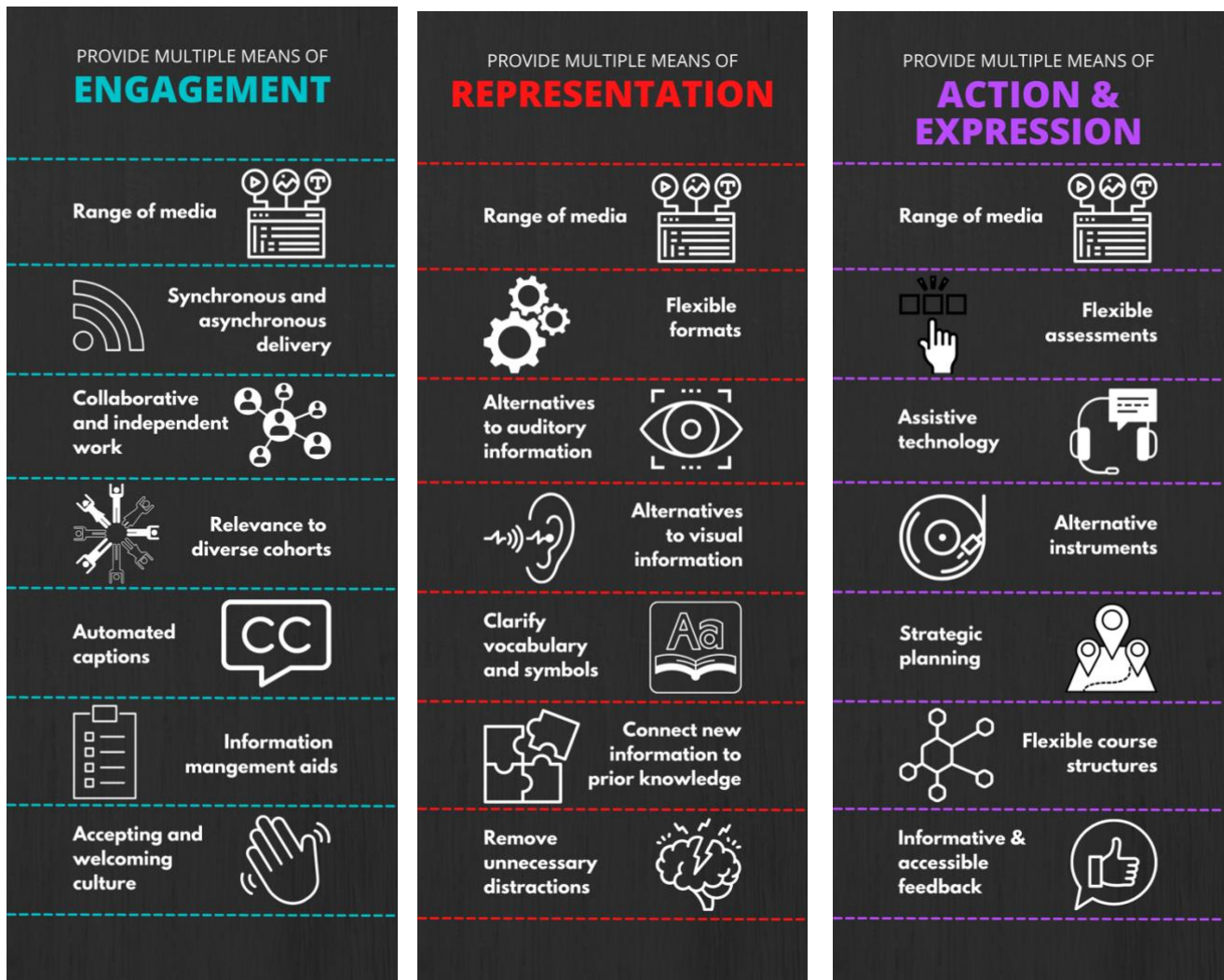
- Offer means by which students can communicate their access needs easily without needing to contact individual teachers. This may require working with learning management software companies to develop updateable access profiles for students
- Provide clear access information on the organisation's website, including wheelchair accessibility, location of accessible toilets, chill room availability, a map of accessible parking, hearing loop availability, and whether or not the use of interpreters, audio description, and captions are standard in classes, meetings, and events.

Develop a culture of inclusivity and accessibility:

- Provide training on UDL for teaching staff, digital learning designers, and academic management
- Provide disability awareness training to all staff and students
- Expand disability support services to include discipline-specific support staff to implement UDL
- Expand views of music and musicians in a higher education context to include diverse forms of musical practice

It is important to keep in mind that changes towards accessibility and UDL do not need to be made all at once. While structural changes such as unit learning outcomes can only be made during course redesign, other changes like use of closed captions and sharing of lecture slides are easily implemented. Many changes to teaching and learning are best made incrementally each time a unit is taught, e.g., using alternative media, collecting further sources as materials, etc. As Terry Cumming explains, "if you can change one thing every term, you're getting there, making it easier for students... change one thing. Change two things. Find a place where you can give students a choice. And maybe be more flexible" (personal interview, December 15, 2021).

REMOVE BARRIERS TO TEACHING AND LEARNING WITH UNIVERSAL DESIGN FOR LEARNING (UDL):



APPLY UDL PRINCIPLES TO ADMINISTRATIVE AND ADMISSIONS PROCESSES:

Course and application information in a range of media

























Accessibility information contact

Accept recorded and in-person auditions

Encourage a wide range of instruments of musical expression

Accept applications in a range of formats

IMPLEMENT STANDARD PRACTICES IN LIVE MUSIC AND EVENTS ACCESSIBILITY:

EXPERIENCE ON CAMPUS	EXPERIENCE ONLINE	COMMUNICATING ACCESS
 Wheelchair accessible	 Alternate text & image description	 Wheelchair accessibility
 Chill room	 Closed captions	 Chill room availability
 Record all events and classes	 Record all events and classes	 Ask for access requirements
 Companion card tickets	 Follow Web Content Accessibility Guidelines (WCAG)	 Access profiles for students
 Auslan interpretation	 Auslan interpretation	 Hearing impairment accessibility
 Audio description	 Audio description	 Visual impairment accessibility
 No flashing lights	 Avoid flashing lights and rapid movement	 Social stories
 Large font & contrasting colours	 Simple backgrounds & contrasting colours	 Accessibility information contact

DEVELOP A CULTURE OF INCLUSIVITY AND ACCESSIBILITY:

Provide UDL training for teaching staff, digital learning designers and academic management

Provide disability awareness training to all staff and students

Discipline-specific support staff to implement UDL

Include diverse forms of musical practice

OUTCOMES OF THE FRAMEWORK:



Increase the number of students with disability successfully graduating

Improve the tertiary education experience of all students

Develop a culture of accessibility in the Australian music industry

Redress the current underrepresentation of musicians with disability in Australia

EXAMPLE APPLICATIONS OF UDL IN TERTIARY MUSIC EDUCATION

The examples below offer possible avenues for tertiary music educators to explore. These examples are ideal goals and should be taken as inspiration for ideas rather than strict instructions. Teachers at all levels of education work with limitations of time and resources and adapting UDL to tertiary music education requires teachers to be creative and to prioritise areas depending on the needs of their students.

Music theory

Engagement:

Learning materials are offered in a variety of media including real-time and pre-recorded lectures, tutorials, short videos, text notes, articles, worksheets, and web applications. The learning objectives for each week are communicated clearly, as the onus of achieving them is on the students. Musical examples are offered in a variety of styles where feasible including classical, jazz, rock, pop, hip-hop and electronic dance music. The means of engagement should reflect the variation in the student cohort and give each student a point of access to the materials.

Representation:

Each concept is represented using text, spoken word, music notation, diagrams, digital audio workstation (DAW) sessions, and performed and recorded audio in various styles of music.

Action and expression:

Students are given a choice of paper or computer-based exams, or take-home assignments to demonstrate their knowledge. The take-home assignments may require a combination of word responses (text or audio), representations of music (notation, DAW sessions), and music (performed, recorded, or produced). Students are encouraged to use assistive technology, DAWs, and instruments as well as traditional notation. Students are encouraged to use their instruments to employ the knowledge in their own music practice.

Performance ensemble

Engagement:

Students are encouraged to explore various genres of music. Instructors employ various methods of practice and rehearsal and support practical sessions with other media such as articles, audio, and video.

Representation:

Support practical sessions which are usually based on spoken word with text, diagrams, movement, and other visual and tactile materials.

Action and expression:

Students are given the option of submitting assessments such as critical reflections in multiple media including text, recorded voice, storyboards, video, oral presentation, etc. Students are encouraged to explore different performance media such as adaptive instruments, electronic instruments, software, etc.

Composition foundation

Engagement:

Learning materials are offered in a variety of media including real-time and pre-recorded lectures, tutorials, short videos, text notes, articles, worksheets, and web applications. The learning objectives for each week are communicated clearly.

Musical examples are offered in a variety of styles including classical, jazz, rock, pop, hip-hop, electronic dance music, and traditional music from various cultures.

Representation:

Each composition technique is represented in text, spoken word, traditional notation, DAW sessions, as well as images and diagrams where possible. Musical examples cover multiple traditions and styles aligning with the variation of musical backgrounds of the students.

Action and expression:

Students are encouraged to explore multiple styles of music with no limitations. Students are encouraged to engage with multiple media including traditional notation, DAWs, traditional instruments, adaptive and alternative instruments, assistive technology, and electronic instruments. Explanatory and reflective assessments can be submitted in a variety of media including text, audio, video, annotated images, storyboards, etc.

CONCLUSION

Tertiary music education providers can increase the accessibility of their services by removing barriers to learning and performance and taking the onus of responsibility for access off students. This can be achieved by implementing the principles of Universal Design for Learning: multiple means of engagement, multiple means of representation, and multiple means of action and expression. The UDL framework can improve accessibility for students including students with disability, and this framework can be adapted to the tertiary music education context. This requires an expanded view of music and musicians than traditional western tertiary music education offers, and higher education providers can

increase accessibility by moving away from the limitations of traditional western music practices and including a wide variety of forms of musical practice and expression.

Staff training and support is needed to better understand the value of UDL and to implement it effectively, and general cultural competence training around disability is needed to remove stigma and improve inclusion and accessibility. Education providers should also implement standard practices in accessibility of live music and events including wheelchair accessibility, Sign Language interpretation, captioning, audio description, chill rooms, Web Content Accessibility Guidelines, social stories, and avoidance of flashing lights.

By taking these steps, tertiary music education providers may increase the number of graduates with disability as well as improving the experience and success of all students.

This may help to develop a wider culture of accessibility within the music industry as well as addressing the current underrepresentation of musicians with disability in Australia.

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