Centre for Digital Transformation of Health

THE UNIVERSITY OF MELBOURNE

Embedding diversity, equity and inclusion in digital health education: A reflective tool for inclusive learning design

Authors: Dr Belinda Davey, Dr Kara Burns, Ms Leslie Arnott, Dr Maya Panisett

Date published: January 2026

Introduction

This tool provides structured guidance for evaluating diversity, equity and inclusion (DEI) within learning and teaching activities. It is designed for educators and course designers working across diverse educational contexts, including digital health. The tool supports systematic reflection on how DEI principles are embedded in course design, content and delivery. The tool covers key areas such as stereotypes, prejudice, unconscious bias and the use of inclusive language, with a core set of items applicable to any course and additional items tailored to digital health–specific teaching.

Each area comprises multiple evaluative items, with **Yes**, **No** or **Not Applicable** response options. Where a "No" response is selected, the tool prompts educators to consider targeted improvements to better support inclusive, equitable and accessible learning experiences. By guiding reflective practice and practical course enhancements, the tool supports the development of learning environments that promote inclusion and reduce the risk of reinforcing educational inequities.

[Links to some examples and additional resources are provided for some items, signalled by the icon ].

Alignment with MDSH Advancing Health 2030

Evaluating diversity, equity and inclusion (DEI) within learning and teaching activities aligns with the MDHSDI strategic direction and the Advancing Health 2030 mission to:

- Empower researchers to gain valuable diversity and inclusion knowledge, skills, and capacity preparing them to be leaders, change agents and global citizens.
- Building community trust by working closely with our communities who will see us as active partners who plan jointly to help them meet their needs.
- Engage health consumers, particularly from disadvantaged populations, to ensure our cross-cutting research and education addresses current and future needs.
- Engage with the communities that we and our partners serve by understanding their needs and co-designing solutions to the problems they face
- Promoting health equity ensuring research benefits build equitably across populations rather than concentrating among already-advantaged groups.

Practical suggestions for including diverse and inclusive curricula

- Ensure diverse contribution to course curricula from people from various backgrounds
- Ensure equal space provided to various diverse voices in readings, tasks, examples etc
- "Make space" and foster conversation for diverse voices and viewpoints in classroom settings, discussions, meetings, and interactions with others. For example, provide opportunities to reflect on and discuss perspectives and ethical positions as this ignites conversation, pluralism and self-awareness as well as awareness of other perspectives (discussion boards, webinars, polls, break out rooms)
- Utilise counter-storytelling, a method outlined in Critical Race Theory (CRT), as an effective strategy to challenge the "narratives and normative behaviour of dominant groups" (Cooke, 2016) [for the principle: concentrating on peoples' nuance; people are multi-faceted, not *just* their 'one story'].
- Include group-based activities to encourage exposure to diversity of views and backgrounds. Encourage tasks that elicit DEI experiences.
- Avoid immediately seeking comment from someone from a priority population, just because you happen to be discussing that population – be sure to make your own judgements.
- Provide some agility in the curriculum to respond to contemporary issues relevant to diversity (e.g. if the subject is on political movements, case study/material should be recent e.g. #metoo or BLM etc rather than anti-Vietnam war protests from the 70s).
- Promote "direct action" in coursework to move beyond anti-DEI language and knowledge to actual change, where possible e.g. shift students from discussing DEI issues to intervening in real systems —using evidence, stakeholder engagement, and iterative improvement— to reduce inequity within a defined educational, clinical, or community context.

How to use this tool

Please evaluate your learning materials across each of the areas listed below by working systematically through all items in the tool. For each item, review your course content, teaching activities, assessments and learning resources, then select Yes, No or Not Applicable based on current practice.

Where you select Yes, ensure the item is demonstrably reflected in your materials. Where you select No, pause to consider whether and how your course could be improved to better address this area—for example through changes to content, language, examples, teaching approaches or assessment design. If an item is marked Not Applicable, confirm that this is appropriate for your course context.

Items are structured so that some apply to all courses, while others are specific to digital health teaching. Users are encouraged to document planned actions or reflections as they progress, particularly for items marked No, to support continuous improvement and accountability. The tool can be used during course development, review, or accreditation processes, and revisited over time to track progress in embedding diversity, equity and inclusion in teaching practice.

1. Diversity

My learning materials and tasks include diverse populations and perspectives, historically marginalised voices, and some intersectionality (i.e. different, overlapping aspects of someone's lived experience, such as someone from a low-income country who is also part of the LGBTQI community). Specifically, please indicate whether you have included people with some of the following:

Yes/No/NA	**Different body types**
Yes/No/NA	**Abilities** e.g. cognitive, physical, intellectual, neurological, perceptual (such as different visual or auditory abilities)
Yes/No/NA	**Ages** (older adults, children, adolescents)
Yes/No/NA	**Family types**
Yes/No/NA	**Sexualities**
Yes/No/NA	**Genders**
Yes/No/NA	**Income brackets or socioeconomic backgrounds**
Yes/No/NA	**Housing status**
Yes/No/NA	**Refugee or immigration status**
Yes/No/NA	**Health status** e.g. people living with chronic conditions
Yes/No/NA	**People who identify as First-nations**
Yes/No/NA	**Locations** e.g. people living in rural and remote communities, or majority-world countries/countries not often mentioned.

Yes/No/NA	My learning materials and tasks include people with **names that represent various countries of origin, genders, and ethnicities**. (Here are some multicultural names and popular names from different countries.)
Yes/No/NA	My learning materials and tasks **use a mixture of male and female names that do not adhere to gender stereotypes or use gender-neutral names**.
Yes/No/NA	My course uses a **calendar** that includes events, holidays etc. **relevant** to **various cultures** and celebrates these e.g. https://www.diversityresources.com/2022-diversity-calendar/ (Note that this calendar is not exhaustive – it provides some examples of some dates you might include – you can build upon this)
Yes/No/NA	My course structure allows **flexibility around culturally significant dates** e.g. Lunar New Year, Diwali
Yes/No/NA	My learning materials **consider cultural differences** and **different educational norms** e.g. people from some cultures may value social harmony and so avoid rigorous debate and speaking up in class, or they may not like to speak before someone who is older than them; hence, structure learning tasks that elicit a response from each student, and structure tasks that focus on collaboration and communal achievement.
Yes/No/NA	My learning materials **consider and elicit multiple cultural perspectives and voices**, and encourage **culturally sensitive feedback** (e.g. avoid providing public feedback, instead elicit self-feedback or provide feedback in private)**.**
Yes/No/NA	My learning materials are **multicultural** (ie not Eurocentric).

2. Prejudice / Stereotypes

Be sure to inwardly reflect on how the learning content may unconsciously perpetuate stereotypes and how you perceive a given community. Please indicate below whether your learning materials:

Yes/No/NA	**Use strengths-based language** eg “she learns well with concrete examples”, rather than “she does not learn well with abstract examples”**.**
Yes/No/NA	**Challenge stereotypes.**
Yes/No/NA	**Avoid simplistic portrayal of specific groups** (eg an ‘Asian’ student is hard-working, a person from the southern states of the US is an evangelist, a person from Italy loves to cook)**.**
Yes/No/NA	**Avoid negative portrayals of diverse populations.**
Yes/No/NA	**Avoid “othering” communities** eg assuming a majority-group perspective, treating a given group as uniform, inferring that community is a problem group and ignoring structural barriers
Yes/No/NA	**Do not mention ethnicity or gender if not relevant to the context.**

Items specific for digital health courses, to be evaluated when relevant or possible:

Yes/No/NA	Avoid assuming all users have equal access to **bandwidth, devices, data plans, or private space** for telehealth.
Yes/No/NA	Challenge stereotypes that certain groups are "not tech-literate" by highlighting **structural access barriers** rather than personal deficits.
Yes/No/NA	Ensure examples **do not implicitly frame minority groups as "problems to be fixed" by digital tools**.
Yes/No/NA	Highlight how **algorithmic or dataset bias** can perpetuate structural inequities (e.g., training data not representative of darker skin tones, rare diseases, or Indigenous populations).
Yes/No/NA	Avoid portraying AI/ML models as neutral; explicitly acknowledge how **developer choices influence outcomes**.

3. Language

Please indicate below whether your learning materials:

Yes/No/NA	Use strengths-based language that **portrays people with disabilities as active** individuals with control over their own lives.
Yes/No/NA	Use **gender-inclusive language**, including gender-neutral pronouns such as 'them' and 'they'.
Yes/No/NA	Use '**partner' or 'spouse'** rather than 'husband/wife' or 'girlfriend/ boyfriend'. This GenderDecoder will help you avoid gender-biased language.
Yes/No/NA	**Refer** to people, groups, populations, categories, conditions and disabilities **using appropriate verbiage** and do **not** contain any **derogatory, colloquial, inappropriate, or otherwise incorrect language**.
Yes/No/NA	**Refer to First Nations peoples** rather than Indigenous or Aborigines. Be as specific as possible when referring to First-nations people, e.g. refer to specific nations such as Nyungar or Wurundjeri rather than First Nations Australians. Do not use acronyms, such as ATSI for 'Aboriginal and Torres Strait Islanders'. Be sure to provide warnings or disclaimers if representing actual people who have passed away.
Yes/No/NA	**Do not use words like folklore or myths** to refer to the beliefs or values of First Nations people.
Yes/No/NA	**Avoid identity-first language** when referring to people living with various disabilities or mental health conditions (e.g. a person 'living with schizophrenia' rather than 'schizophrenic'), other than **autistic people** who tend to like to be identified as autistic - this varies though, so ask the person how they like to be referred to, if possible.

Yes/No/NA	**Explain the context**, **include an attribution, and use quotations** for historical **references that use old-fashioned language,** now considered offensive.

Trinka provides various inclusive language checks.

Items specific for digital health courses, to be evaluated when relevant or possible:

Yes/No/NA	Ensure examples of chatbot, SMS, or app-generated messages use **inclusive, plain, and culturally respectful language**.
Yes/No/NA	Avoid clinical jargon in screenshots or examples of digital interfaces unless relevant to learning objectives.
Yes/No/NA	Ensure translations used in examples are **culturally safe, linguistically accurate**, and not dependent solely on automated translation tools.
Yes/No/NA	When demonstrating personas, prototypes, or UX content, ensure **non-gendered, non-stigmatising wording** for health behaviours (e.g., "people managing diabetes" rather than "diabetics").
Yes/No/NA	Avoid language that frames technology as inherently beneficial or neutral—acknowledge its **social, cultural, and political context**.

Accessibility

My learning activities or tasks:

Yes/No/NA	Use **plain language** e.g. write in an active rather than passive voice, use short words and sentences, and use contractions. MS Word provides readability statistics, as detailed at Get your document's readability and level statistics.
Yes/No/NA	**Avoid** the use of **slang, jargon, metaphors or colloquialisms** (unless the relevance is clear).
Yes/No/NA	**Provide flexibility and choice** to support various ways of learning (eg provide written text, figures, and audio-visual alternatives where possible).
Yes/No/NA	**Provide alternative ways** to access information and activities (e.g. transcripts for videos, screen readers).
Yes/No/NA	**Use in-built headings for screen-readers**. Use in-built list functions for screen-readers to identify lists.
Yes/No/NA	**Avoid referring to page locations** e.g. 'subject-menu' rather than 'left-hand menu'.
Yes/No/NA	**Provide simple, informative text descriptions of all images** for screen-readers.
Yes/No/NA	For all text and images, **use foreground/background colours** that have **high contrast**.

Yes/No/NA	**Avoid colours** that are **difficult to distinguish** for people with colour vision deficiencies, and use easily readable fonts (e.g. Sufficiently large, easily distinguished from the background, a style that is easy to read, avoid italics)
Yes/No/NA	**Do not rely only on colour to convey information in images**.
Yes/No/NA	**Title URL links**, rather than stating click 'here'.
Yes/No/NA	**Use accessibility checkers** to identify areas to improve regarding accessibility.
Yes/No/NA	Provide **multilingual resources and translations where possible**, or link to educational resources that provide this.

- Further detail on accessibility can be found at Web Content Accessibility Guidelines (WCAG) 2.2.
- Making Digital Health Equity a Practical Reality (Dr Lutza Ireland) is also an excellent video resource.

Items specific for digital health courses, to be evaluated when relevant or possible:

Yes/No/NA	Demonstrate compliance with **WCAG 2.2** by showing students how to evaluate actual health apps, portals, or telehealth systems.
Yes/No/NA	Provide alternative formats for digital health artefacts, such as accessible mock-ups, alt-text for dashboards, descriptions of UX flows.
Yes/No/NA	Use examples of digital platforms with accessibility failings and ask students to critique and redesign them.
Yes/No/NA	Ensure case tasks consider **older adults, low-literacy patients, neurodiverse users, and users with limited English proficiency**.
Yes/No/NA	Highlight how accessibility barriers can constitute **clinical risk** in digital health (e.g., unreadable medication reminders).

Enhancing DEI for digital health

My learning tasks and materials:

Yes/No/NA	**Activities** that invite **learners** to **share** academically relevant **applications, examples, and resources**.
Yes/No/NA	Ensure the course includes **consideration of DEI issues** relevant to the subject area.
Yes/No/NA	Provide options to **enhance digital literacy** for students who feel less digitally confident.
Yes/No/NA	Provide **access to instructions for required digital skills** (this can be links to further instructions).

Yes/No/NA	When discussing solutions to challenges, **include** some **accessible and affordable solutions** if possible (e.g. consider providing written, audio, visual where possible such as and transcripts for videos, audio versions of written texts, images with helpful descriptions).
Yes/No/NA	**Ensure all students** have **access** to **relevant materials** e.g. provide free access to required readings.
Yes/No/NA	**Ensure due dates for assessments provide ample opportunity for all students**, taking into consideration other subjects likely studied at the same time if relevant
Yes/No/NA	Allow **consideration of cultural factors for assessment extensions**
Yes/No/NA	**Learning materials allow** for some degree of **choice** to meet learning objective and activities.
Yes/No/NA	Provide **access to additional supports for students with additional needs**.
Yes/No/NA	**Scaffolds assessments** into **smaller deliverables**.
Yes/No/NA	Provides **templates, examples and rubrics** that incorporate DEI and accessibility options.
Yes/No/NA	**Assessments support learning** and enable students to **build on** their **strengths**.
Yes/No/NA	**Assessments** provide opportunities to **practice authentic applications** of course concepts.
Yes/No/NA	**Assessments** ensure activities are **suited** to the **level** of the course.
Yes/No/NA	**Assessments** are **accessible**.
Yes/No/NA	Assessments provide a **fair workload**, taking into consideration other subjects likely studied at the same time if relevant.
Yes/No/NA	**Activities** that invite **learners** to **share** academically-relevant **applications, examples, and resources**.
Yes/No/NA	Ensure the course includes **consideration of DEI issues** relevant to the subject area.
Yes/No/NA	Provide options to **enhance digital literacy** for students who feel less digitally confident.
Yes/No/NA	Provide **access to instructions for required digital skills** (this can be links to further instructions).

Yes/No/NA	When discussing solutions to challenges, **include** some **accessible and affordable solutions** if possible (eg consider providing written, audio, visual where possible such as and transcripts for videos, audio versions of written texts, images with helpful descriptions).
Yes/No/NA	Scaffolded activities guide learners through **progressive skill-building** at varying cognitive levels, preventing cognitive overload.
Yes/No/NA	As the course creator, i**nclude a position statement** e.g. 'I [Name], the author of this work, am a [description of gender identity/sexuality/race/ religion/gender, etc. – e.g. cisgender white woman] from [country]. I have not experienced the types of bias that affect those from priority populations related to race, cultural background and sexual orientation. I have tried to keep this course simple and to link to external resources whenever applicable, however, there may be cases where my writing betrays my lack of experience with these topics. If there is any part of this book you find to be one-sided or dismissive of any aspect of your identity, please contact me at [insert email address]. I welcome any comments or feedback that might improve my work and help inform my own understanding of this topic. Thank you.'

For digital health courses specifically, you may like to add DEI reflexivity elements, such as:

- Acknowledge relationships to technology (e.g., "I am a clinician-researcher who has not personally faced barriers related to digital literacy or device access").
- Declare assumptions about data, AI, and digital health tools.
- Invite feedback from students with lived experience of digital exclusion or algorithmic bias.

Digital Equity & Inclusion	
Yes/No/NA	Explicitly address the **digital divide** (affordability, connectivity, device access) in learning examples.
Yes/No/NA	Include options for students to critique or redesign digital pathways for patients who cannot access video-based care.
Yes/No/NA	Provide explicit guidance for evaluating whether digital tools exacerbate or reduce health inequities.
Data Equity	
Yes/No/NA	Encourage examination of dataset representativeness, including **race/ethnicity, gender identity, age, language, disability, socioeconomic status, and geography**.
Yes/No/NA	Include exercises about missing data, biased sampling, and misclassification in digital health datasets.
Algorithmic Fairness & Safety	
Yes/No/NA	Ask students to identify potential areas where digital tools (e.g., recommender systems, triage algorithms) could produce **biased outcomes**.

Yes/No/NA	Include prompts to consider fairness metrics, transparency, and explainability for digital health AI.
Co-Design & Lived Experience	
Yes/No/NA	Include tasks where students gather insights from **priority populations**, patient advocates, or community-controlled health organisations about digital health design.
Yes/No/NA	Encourage co-design principles such as **reciprocity, inclusion, and Indigenous governance over data**.
Culturally Safe Digital Practice	
Yes/No/NA	Incorporate examples where digital systems must adapt to culturally significant dates, community norms, and safe communication practices.
Yes/No/NA	Include mobile-health scenarios for First Nations clients where community governance and local knowledge shape digital system use.