Supplementary Table 1: Common types of student diversities and barriers they experience at university.

Diversity	Definition	Barriers
International status (Titrek, Hashimi, Ali & Nguluma, 2016; Kanno &Varghese, 2010)	Students who are not residents of the country in which they are studying	Diverse educational backgrounds Culture shock Academic expectations Financial challenges Discipline-specific terminology
English as a Second Language (Mesler, Corbin & Martin, 2021; Liton, 2019)	Students studying at an institution taught in English but whose native language is not English	Lack of student and educator interactions Lack of confidence in abilities Lack of motivation Stigma
Neurodivergence **(Clouder et al., 2020; von Below, Spaeth, Horlin, 2021)**	Students who are neurodivergent, including dyspraxia, dyslexia, attention deficit hyperactivity disorder (ADHD), dyscalculia, autistic spectrum, and Tourette syndrome	Difficulty staying organised Hyper-focusing Problems managing workload Communication skills Inattention Emotional regulation strategies Dissonance between teacher ability and teaching style
Mature age (Fragoso et al., 2013; Osam, Bergman & Cumberland, 2017)	A student who is not an immediate school leaver upon beginning tertiary study	Struggles to find time to study Work commitments outside of the university Power imbalance with being taught by younger educators Different life experience
Low socioeconomic status (Bektas-Centikaya & Oruc, 2011; Jury et al., 2017)	Students who come from backgrounds with limited financial resources or economic means	Less access to opportunities Poorer mental health Less motivation Identity management
Rural, regional, and remote origins	Domestic students who originate from outside metropolitan areas	Culture shock Program breadth School size

**(Murphy., 2020; Vernon,
Watson & Taggart., 2018)**

Supplementary Table 2: Themes, descriptors and examples of diverse learner definitions identified by tutors (n = 7) and students (n = 66). Respondents could report multiple themes. [!] indicates themes reported by tutors only, [#] by students only.

Theme	Descriptor	Subtheme(s)	Example(s)
Cognitive process	How learners acquire knowledge and skills, like information processing styles and learning modalities.	• Information processing • Learning styles	*"Everyone thinks differently and thus learn and process information differently".* *"Different people have different preferred learning styles".*
Disability	Learners with disability (unspecified), and with a specific mention of neurodivergence.		*"Learners who are neurodiverse [sic], have a disability that may affect learning, attendance, or attention".*
English as a Second Language [!]	Learners whose native language is not English.		*"Yes, I am a non-native English speaker, therefore I have this language barrier".*
Family and religious views [!]	How familial and religious backgrounds shape learner values and perspectives.	• Family values • Religion	*"... because I come from women in my family that value education, so I understand the privilege I have to be able to study at university".* *"I'm Islam so I'd say I'm quite the diversity character".*
Learner demographics	Cultural and societal backgrounds of learners.	• Cultural origins • Student status • Social background • Rural, regional, remote [!] • First in family [!]	*"... because i [sic] am from a rural town".* *"I believe I am a diverse learner as my sister, and I are the first people in my family to complete both high school and university in Australia".*
Prior experience [#]	Prior experience, knowledge, skills, and study strategies	• Unique experiences • Prior knowledge	*"I believe that I am a diverse learner who brings unique characteristics, experiences,*

			and perspectives to the learning environment". *"Level of prior knowledge in the disciplines".*
Sexual orientation and gender identity	Sex and/or gender identity. Identification as lesbian, gay, bisexual, transgender, queer, intersex and/or asexual.	• Gender • LGBTQIA$^{+!}$	*"genders".* *"Part of the LGBTQIA".*
Student psyche	Cognitive and emotional aspects relevant to a learner's academic abilities	• Self-esteem, confidence • Mindset • Attention, focus $^{\#}$	*"Low self-esteem/confidence etc which affects their ability to learn".* *"[Because] i [sic] really struggle to focus and get the motivation to study".*

Supplementary Table 3: Themes, descriptors, and examples of TSE factors reported by tutors in the pre-intervention survey (n = 7) and intervention workshop (n = 6), as enhancing their confidence for working with diverse learners. [++]themes reported only in the intervention. Tutors could report multiple themes.

SE Pillar	Theme	Descriptor	Example
Affective State	Analysing student grades[++]	Drawing on learner performance to determine teaching efficacy	*"It can also help to track the progress my students throughout the semester by looking at their grade improvement, knowing I make a difference".*
	Mindfulness[++]	Being aware of one's affective state	*"... making sure I am in a good affective state and understand how that can negatively affect the tasks I am about to do".*
	Mindset	Adopting a positive mindset	*"This takes away the ability for me to feel rejected when they don't understand what I am explaining and reminds me that it's not about me it's about the students [sic] learning and that is what is important".*
Mastery Experience	Changing teaching styles	Using a variety of techniques to engage students	*"Have them engage in e.g. more visual learning (videos or showing them how to dissect etc) or verbal walk-throughs".*
	Professional development	Using tutor training and resources to increase knowledge/skills	*"Reading over any training material".*
	Resolving queries[++]	Successfully answering questions	*"When I successfully help answer questions from students/or other tutors - that boosts my self-efficacy".*
Verbal Persuasion	Peer feedback[++]	Seeking or receiving feedback from other educators	*"I seek encouragement and feedback from respected peers and mentors".*
	Self-talk[++]	Using internal dialogue	*"Positive self-talk".*
	Student feedback[++]	Seeking or receiving student feedback	*"Try to get feedback from students".*

Supplementary Table 4: Themes, descriptors and examples of strategies reported by tutors in the pre-intervention survey[!] ($n = 7$), training intervention[+] ($n = 6$), and post-intervention survey[#] ($n = 6$), for working with diverse learners. Tutors could report multiple themes.

Theme	Descriptor	Sub-themes	Example(s)
Classroom management	Managing student dynamics and task completion.	• Task delegation [+] • Fostering group autonomy [+] • Promoting peer teaching [+#] • Facilitating group discussions [#] • Providing breaks [#]	*"Assigning tasks to students (all feel included) ...allowing for a greater autonomy within groups to take up particular roles in their group".* *"Give breaks when needed".*
Interpersonal skills	Communication and interaction strategies to increase engagement with learners.	• Use of eye contact [!] • Being aware of body language [!+#] • Building rapport with learners [!#] • Articulation [!]	*"Check body language as feedback to see if I have to re-explain".* *"I approach every learner with empathy and a knowledge that I don't know what is going on in their lives that may impact their learning and behaviour".*
Language choices	Thoughtful selection of language to enhance learner engagement and comprehension.	• Inclusive language [+] • Using literal language [+] • Language for clarity, comprehension [#]	*"Use people centred language".* *"Using literal language - not using metaphors. Talk with clear, comprehensive language".*
Personalising teaching	Accommodating diverse learner needs [!#].	• Making accommodations [!] • Adapting teaching approaches[#]	*"Making accommodations were necessary and regularly checking in with them".* *"Adapt my teaching approach to help them individually learn better".*
SE principles	Drawing on the 4 pillars of self-efficacy[+].		*"I didn't know about the four pillars beforehand but now I am more aware ... and can use them in teaching".*
Supporting learner wellbeing	Monitoring and supporting learners' mental and emotional wellbeing [+].	• Positive reinforcement • Monitoring at-risk learners • Awareness of institutional support	*"Asking students who are at risk of being isolated how best I can help them is also good".* *"Educating myself on resources that UQ has to offer".*
Teaching strategies	Pedagogies to engage, instruct and guide learners.	• Encourage student questions [!] • Using real-world examples [!#]	*"Describe things multiple ways, use multiple types of instruction (drawing, demonstrating)".*

		• Using multiple teaching styles to convey/explain information [!+#] • Outlining expectations [+] • Highlighting content relevance [+] • Use of active recall [#]	*"For those not wanting to take the course but have to relate it to the bigger picture of their education".*

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