

Deepening a sense of belonging: A LAS and Faculty collaboration to build inclusive teaching

Maree Keating^a, Andrew Rixon^b, and Aron Perenyi^b

a. Learning and Academic Skills, Swinburne University of Technology, Melbourne, Victoria, Australia

b. Faculty of Business and Law, Swinburne University of Technology, Melbourne, Victoria, Australia

Email: mkeating@swin.edu.au, arixon@swin.edu.au and aperenyi@swin.edu.au

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Over the past decade a sense of belonging has become widely recognised as an important predictor of success. Consequently, universities must consider how teaching approaches impact on student sense of belonging amongst diverse student cohorts. This article compares the sense of belonging reported by students from diverse sub-cohorts before and after a tutor-focussed intervention. Tutor awareness of diversity and inclusive teaching practices were developed through tutor training, which positioned tutors as dominant actors in the unit habitus. When analysed across age, gender, cultural and linguistic background, caring responsibilities, social networks and disability, student survey data over three semesters indicated shifts in the student experience of learning. Findings suggest that changes in tutor awareness and teaching practices are correlated with a greater sense of belonging and positive experience of learning across a diverse student cohort. The article discusses the applied benefits of our mixed-methods research process, particularly of developing inclusive pedagogies amongst tutors in the time-poor higher education environment.

Key Words: diversity, sense of belonging, inclusive teaching, group-based learning, mixed methods research.

1. Introduction

A sense of belonging and team skills for broader application are promoted through group-based projects and assessments (Chanda-Gool & Mamas 2017). However, tutors have a key role in establishing and maintaining a learning environment which fosters students' sense of belonging, ability to learn and trusting relationships (Moore & Kuol, 2007; Pichon, 2016; Carter, Hollinsworth, Raciti & Gilbey, 2017). Therefore, it is vital for tutors to understand the range of experiences students have of group-based learning.

This article reports on a collaborative research project undertaken by a Learning and Academic Skills (LAS) advisor, a unit convenor and a discipline lecturer of a large undergraduate unit in the Faculty of Business and Law in an Australian university. One of our aims was to discover how students' sense of belonging in the unit of study was experienced by different sub-cohorts, and how this related to other dimensions of their learning experience. We also aimed to determine the extent to which tutor awareness of and responsiveness to student diversity influences student sense of belonging. Our analysis therefore focussed on both student responses to a sense of belonging survey and tutor narratives on themselves and their teaching.

Prior to commencing our project, student feedback indicated that while overall students were positive about the unit, the group-work component persistently presented problems for some students. Some students also reported that the unit failed to reach their expectations of learning. Given the diverse range of first to third year students undertaking the unit, it was important for the unit convenor to understand how student identity factors such as age, gender, language and cultural background related to the unit feedback. It was not clear whether certain sub-cohorts of students experienced group-work more positively than others. It was also not clear how tutor awareness of student diversity impacted on the student experience.

The unit is delivered to a diverse range of students across the whole of the university. The Learning Objectives of the unit were for students to be able to:

1. demonstrate creativity, originality and forward thinking in problem solving
2. self-reflect to identify their personal strengths so that they may begin to develop a personal and professional brand and identity
3. apply innovation frameworks and tools to evaluate a need and/or problem
4. demonstrate professional skills, including written, verbal, and presentation, in order to effectively articulate an idea and convince others of its merit
5. work collaboratively and effectively in a multidisciplinary team to derive innovative outcomes.

Self-assessments allowed students to consider their preferred role in teams and their strengths and weaknesses. In teams, students selected a problem and developed a solution ‘pitch’ which was written up and presented for 40% of the mark. They then developed an individual portfolio worth 60% of the unit mark. Students were instructed to evaluate their own as well as their team members’ contributions to the group projects.

Reflecting the broader staffing profile of universities, the unit was taught by a pool of fifteen tutors over the project. Most were women on casual contracts, some had PhDs and others were acquiring one. Although tutor participants in this research varied from semester to semester, all participated in at least two semesters of this research. The casualisation of the academic workforce in countries such as Australia has contributed to the creation of learning environments in which academic teaching staff themselves may have a fragmented and fragile sense of belonging to the profession and their universities (Beaumont 2009). While this issue is under-researched, it clearly generates challenges for university faculties in developing effective pedagogies and teaching and learning approaches for the promotion of strong student sense of belonging.

Our research seeks to address a gap in the research by explicitly measuring the impact of inclusive teaching on student relationships, sense of connectedness to each other, and learning experiences in a unit. There is a growing interest in teaching and learning strategies which promote class communities and a sense of belonging. However, these strategies are rarely measured in terms of their impacts on students. Tett, Cree, and Christie (2017) and Cree, Croxford, Halliwell, Iannelli, Kendall, and Winterstein (2006) argue that university tools often measure things other than student sense of inclusion or the quality of relationships. Whilst universities are concerned about student engagement, the neoliberal emphasis on ‘individual responsibility’ continues to dominate approaches in the academe, in effect downgrading ‘the affective dimensions of teaching and learning’ (Tett et al., 2017, p. 168).

2. Review of the literature

2.1. Student identity and sense of belonging

Student sense of belonging and inclusion in class communities is an important predictor of their academic success, satisfaction and retention (Kernahan, Zheng, & Davis, 2014; Kift, Nelson, & Clarke, 2010; Strayhorn, 2018). Group-work can play an important role in developing relationships which promote a sense of belonging and inclusion. Collaboration between students with

different abilities, for instance, has proven an important strategy for building group affinity and affiliations in higher education (Bjornsdottir, 2017). The potential benefits of group-work and other interactive teaching strategies in higher education include increased student motivation and improved communication between students in culturally diverse classes, as well as a deeper engagement with discussion and analysis. However, there are calls for more initiatives that focus on diverse aspects of student identity in our teaching approaches (Read, Archer, & Leatherwood 2003).

In Australia, higher education research repeatedly shows that ‘the discourse of belonging is still too often shaped by a narrow student profile’ (Thomas, 2014, p. 38). This has potentially serious consequences for some sub-cohorts of students. Small-group activities in the university setting do not necessarily lead to greater engagement between local and international students in a given class (Strauss & Young, 2011). This limits the learning and intercultural development of local students from mono-lingual and mono-cultural backgrounds (Leung & Chiu, 2010) and raises questions about whether group-work contributes to the sense of belonging and associated benefits for students from culturally and linguistically diverse backgrounds. Similarly, students from non-dominant age groups or socio-economic backgrounds may be missing out on the academic as well as social benefits of belonging (Devlin, 2013).

Trujillo (2014) points out that while a sense of belonging has been correlated with motivation, academic achievement and wellbeing, more research is needed to determine how other constructs are involved and how sense of belonging impacts on student performance in their classes.

2.2. A theoretical lens for analysing teaching and learning

The role of the teaching academic is central to power relations that arise within a student cohort. There is a considerable body of literature that highlights the importance of academic communication style (Bryson & Hand, 2007; Dawson, 2008), expression of empathy (Hoffman, Richmond, Morrow, & Salomone, 2003) and particular pedagogies (Grosling, 2009; Richardson & Radloff, 2014) in the development of student sense of trust, support and belonging within a unit, and subsequently within the university. Freeman, Anderman, and Jensen (2007) found that there was an association between student perceptions of tutor openness and encouragement and their sense of belonging to a unit cohort. Whilst there is broad agreement that university lecturers should develop effective pedagogies for supporting successful group projects, this requires them to consider how diverse student capital impacts on student experience of learning in their units (Pymm & Kapp, 2013; Pokorny, Holland, & Kane, 2017). Such capital includes any cultural, social and economic resources which are valued in the Australian university system, and which create advantages for learning success.

Bourdieu’s theory of ‘habitus’ (Bourdieu & Wacquant, 1992) provides a useful lens through which to consider student learning experiences in a unit and the role of academic teaching practices. Bourdieu’s work is concerned with the processes by which power dynamics are established and maintained and why they are so difficult to change. This is highly relevant to our understanding of variable student learning experiences during group-work. A habitus arises in any field through a process where members struggle to utilise their social, cultural, economic and symbolic capital. Because the habitus of a given field is a self-perpetuating system wherein dominant members always determine which particular social, cultural or economic capital has value, it can be difficult to conceptualise how power relations can be effectively changed. According to Bourdieu and Wacquant (1992), developing reflexivity, or the ability to observe and challenge dominant values, is the only way through which inequitable power relations can be shifted.

Success in small group assessment is often achieved through the group members’ abilities to interpret and respond appropriately to the spoken and unspoken expectations, rules and norms underpinning the unit learning objectives. Some groups of students are better able to capitalise on the learning opportunities arising from student diversity (McKee & Scandrett, 2016). Colvin,

Fozdar, and Volet (2013) applied a Bourdieusian analysis of students involved in small group-work to expose how cultural and academic capital held by domestic students is privileged, both in terms of activity structure and the expected student learning dispositions. They found that the capital most valuable in successful group-work included verbal confidence, culturally dominant approaches to group-work processes, and English language backgrounds. They also found that mono-lingual and mono-cultural students tended to seek out group members with familiar linguistic, social and symbolic capital, thus limiting their exposure to diversity.

It is clear that linguistic, cultural and other forms of diversity are often not seen by students as valuable capital and instead, diversity can introduce tensions in group processes. This presents a challenge for tutors. Tutors are seen by students as models, signalling what knowledge and behaviour is most valued during class discussions. Tutors are often also charged with encouraging students to venture beyond their familiar habits, in order to learn from diverse others. However, in the increasingly casualised higher education system, tutors often lack time for exposure to relevant pedagogies and reflection on class dynamics. Yet academics play an important role in designing and monitoring group activities, and in deliberately creating learning environments in which all students can draw on their cultural and other capital in the learning process (Kimmel & Volet, 2010).

2.3. 'Othering' and the role of the academic in higher education teaching and learning

The process of othering has been shown to negatively position aspects of student identity that do not conform with the dominant culture within university cohorts (Reay, Crozier, & Clayton, 2010). This can introduce profoundly emotional dimensions to the learning process for students who are positioned outside the dominant culture within a unit of study.

The process of othering can also be compounded through inequitable distribution of care from academic staff. The majority of care provided by academic staff tends to flow to students from dominant groups, who are better able to articulate their needs and seek support (Johnston & Simpson, 2006). Whilst students trust academic staff to care about their experiences, from a holistic approach, this would require students and staff to proactively 'include emotions in the construction of knowledge' (Tett et al., 2017, p. 177). It is particularly important to consider tutor abilities to support students' learning throughout group-work processes, where students are often exposed to a range of social and emotional behaviour which is central to the learning experience.

Social and emotional cues from tutors can send strong signals of inclusion or exclusion to students and strongly influence student academic trajectories. In a study by Glass, Kociolek, Wongtrirat, Lynch, and Cong (2017), academics who found culturally sensitive ways to communicate fostered feelings of belonging and inclusion amongst their international students. This included modelling an open mind, emphasising the importance of student contributions during class, and spending time in caring one-on-one conversations with students. Personal experiences with the tutor led some students to reflect that they had become more actively engaged in class discussions and in broader dimensions of learning such as future career planning. These findings suggest that the tutor plays a pivotal role in modelling inclusive communication and stimulating individual engagement in learning.

2.4. Measuring student belonging

Several different scales have been developed for measuring student sense of belonging. Common to these scales is how they handle sense of belonging as a self-reported metric and relate it to the respondents' attitudes and beliefs towards membership of a group (Bollen & Hoyle, 1990). In a review by Trujillo and Tanner (2014), a variety of survey tools were identified for measuring student sense of belonging of sciences students, with the purpose of identifying gendered differences. Common in these attempts to capture student sense of belonging was the central role of group membership.

In the Humanities discipline, the Psychological Sense of School Membership (PSSM) (Goodenow, 1993) and the Classroom Climate Inventory (CCCI) (Dwyer, Bingham, Carison, Prisbell, Cruz, & Fus, 2004) are commonly used scales to measure student sense of belonging to a discipline and a unit. However, it was important that we use a scale with discipline-specific application, which could help to identify particular divides in the sense of belonging amongst business students. Consequently, we used a scale developed by Rovai (2002), who consolidated prior research into a 20-item Classroom Community Scale to measure the ‘sense of community’ in a learning environment. He proposed that spirit, trust, interaction and commonality of goals are the four key elements that are present in class communities where learning occurs (Rovai, 2002b). This scale was validated by Dawson (2008) in a study of student social networks and their relationship to their sense of community. The scale included measures of inter-dependency with other students and is well suited to exploring links between social inter-connectedness of students and their experiences of learning in a group-oriented unit of study.

3. Research Methodology

3.1. Overview

There were two stages in our project. Stage One was undertaken over semester two 2018, to develop a baseline measure of student sense of belonging and of tutor perceptions of their role, the teaching challenges they faced, and approaches used to build an inclusive learning environment in the unit. In this stage, the student survey was administered to all students who attended class in week 11 of the semester. The data was analysed according to overall responses, and results broken down according to identity factors. Tutors were then invited to join a one-hour focus group discussion with the LAS Advisor, which was recorded and transcribed.

Stage Two of our research involved implementing two rounds of tutor training and debriefing sessions and collecting survey data from students over two semesters. The data from Stage Two was compared to the qualitative material arising in earlier tutor reflections and the survey data reported on student experiences of learning across the research period. Our mixed-methods research approach allowed us to consider the student experience from experiential as well as observational perspectives. Our action-research approach allowed us to then build in tutor reflections and observations on the student survey data with each iteration of the training-reflection cycle.

Our training materials aimed to build the ability of tutors to be reflexive about their own role in student power dynamics, provide instruction about student diversity, and model inclusive communication. We used excerpts from Colvin et al. (2015) and Reay et al. (2010) to introduce tutors to Bourdieu’s theory of habitus to help them consider power relations. In analysing tutor reflections at the end of each semester, we looked for shifts in their levels of reflexivity regarding their role in classroom power dynamics. Using a thematic textual analysis, we analysed tutor reflections to see how they perceived students, themselves, and the observable impact of inclusive practices.

Student survey data was analysed each semester to determine whether there were statistically significant variations in responses from different sub-cohorts of students. The analysis allowed us to see how student responses shifted throughout 2019 from the baseline 2018 data. Finally, the three semesters of student data were put through a factor analysis to validate the scale, and to conduct comparative analyses between semesters and student sub-cohorts. This allowed us to determine whether there were significant changes in key dimensions of learning synthesised from the student responses.

3.2. The student survey

The team adapted the validated the Sense of Class Community scale reported in Rovai (2002) by adding nine questions, which asked students to identify their age and gender, whether they were

international students, or had a disability, whether they had carer responsibilities, how many social groups they belonged to, and whether they felt connected to many social networks within and outside the University. The student survey was administered in class at the end of each semester during the research period. Generally, we expected students not older than 20 to have entered higher education straight from high school, and to be lacking in substantial work experience. We expected students from diverse backgrounds to differ in terms of their cultural approaches, perceptions and attitudes towards teaching and learning. We used language spoken at home as another differentiator, indicating exposure to diverse forms of cultural and linguistic capital. Caring responsibilities and experience of disability potentially provided students with resilience, whilst potentially limiting access to time and other learning capital. Finally, we wanted to group respondents based on how connected they were to others, as this connectedness may have also been an indicator of advantageous social capital or the lack thereof. We identified students who cited belonging to fewer than four social networks as isolated, and more than three as connected. Students in this unit explicitly learned the difference between social groups and networks and were exposed to common definitions of these terms.

Students were asked to identify the extent to which they agreed or disagreed with twenty-three statements. These included statements about their experiences working with other students such as, 'I had an overall positive experience during the group-work components in this unit', 'I feel that students in this unit care about each other', and 'I feel that I can rely on others in this unit'. Other statements were more focussed on tutor feedback and the learning environment, including, 'I feel that I was encouraged to ask questions in this unit', 'I feel that I received timely feedback in this unit', and 'I feel that I was given many opportunities to learn in this unit'. A third set of statements were about their internal experience of learning such as, 'I feel isolated in this unit', 'I trust others in this unit', and 'I feel uneasy exposing gaps in my understanding in this unit'.

3.3. Tutor interventions

The tutor training was implemented at the start of semesters one and two of 2019, and at the end of both semesters, the same tutors engaged in a reflection.

Tutors play a crucial role in helping students to deal with issues arising in groups. Students in the unit are expected to use sophisticated groupwork skills which are not explicitly taught through unit content. These include negotiation, decision-making, listening, assertiveness, problem-solving, and conflict resolution. Students with varying home responsibilities need to be able to negotiate meeting times out of class and agree on methods for rapid communication. In addition, students with varying life and work experience must agree on a social problem and a business solution to which they can contribute. Our tutor training aimed to:

- raise tutor awareness of diverse student identities and the ways in which this may influence their experience of learning
- allow tutors to reflect on their observations of student interactions and their own teaching, with a focus on how diversity is proactively valued
- share teaching strategies that implicitly or explicitly place value on diverse perspectives and inclusive behaviour.

The three-hour training sessions were attended by most tutors engaged that semester and were organised into three parts. First, tutors were reminded of the research aims and the core concepts underpinning the research. These concepts included that students brought a diverse range of learning capital to the unit, that this capital was not always given equal value, and that tutors could play a key role in transforming power dynamics in the unit by explicitly and implicitly valuing diverse kinds of capital. Tutors were then exposed to a breakdown of the previous semester's data from the student sense of belonging survey and were given opportunities to reflect on what the

data revealed as well as questions it raised. Finally, tutors were asked to consider upcoming tutorial activities and reflect on how these could provide opportunities to explicitly and implicitly place value on diverse kinds of linguistic, cultural and other capital.

The week after semester ended, tutors were invited to attend a one-hour focus group discussion, during which they were asked to reflect again on their role as tutors and any challenges they faced in their teaching. They were invited to share any observations about student interactions during group-work and how they had explicitly or implicitly placed value on diversity during class time through instructions, advice, mentoring or modelling.

4. Findings and Discussion

Using an extended validated scale, this research measured student experiences of learning, teaching and belonging in a unit of study. This intervention was designed to discover whether increased tutor awareness and more developed strategies for inclusion would correlate with positive changes in the student experiences of learning in the unit.

4.1. Shifts in the Student Experience of Learning

4.1.1. Demographics

The survey allowed us to collect key demographic data about student respondents (see Table 1).

Table 1. Respondent demographics and population characteristics. (Percentages represent the percentage of each year's cohort.)

Variable		2018	2019	Total*
Gender	Female	93 (55.7%)	99 (44.4%)	195
	Male	73 (43.7%)	122 (54.7%)	192
	Other / not stated	1 (0.6%)	2 (0.9%)	3
Age	≤20	108 (65.1%)	152 (68.2%)	260
	>20	58 (34.9%)	71 (31.8%)	129
Origin	International	39 (23.4%)	66 (29.5%)	105
	Domestic	128 (76.6%)	158 (70.5%)	286
Language at home	English	123 (73.7%)	156 (69.6%)	279
	Not English	44 (26.3%)	68 (30.4%)	112
Caring responsibilities at home	Yes	43 (25.7%)	67 (29.9%)	110
	No	124 (74.3%)	157 (70.1%)	281
Living with disability (physical or psychological)	Yes	7 (4.2%)	8 (3.6%)	15
	No	160 (95.8%)	216 (96.4%)	376
Membership in social groups	≥ 3	67 (40.9%)	110 (50.5%)	177
	<3	97 (59.1%)	108 (49.5%)	205

* Totals in this table vary from the total response numbers, due to missing demographic data

Table 1 shows that non-binary gender identification is under-represented in the sample, as well as respondents living with disability, therefore statistical analysis of these sub-groups was not possible. Comparison of responses between categories is possible due to the presence of a sufficient number of observations in each sub-group (see Hair et al., 2006).

4.1.2. A refined scale for analysing four dimensions of learning

Exploratory Factor Analysis (EFA) of student responses showed that eleven items of the adapted Rovai survey consistently coalesced around four clear dimensions of learning, which could be conceptually validated.

The first dimension of learning relates to what we have termed a ‘Positive Sense of Belonging to the Unit Cohort’. This dimension allows us to evaluate how our interventions impacted student attitudes towards being a member of the class community. This can be measured through student responses to the following three statements:

- I feel connected to others in this unit (Q4),
- I trust others in this unit (Q12), and
- I had an overall positive experience during group-work components in this unit (Q1).

The second dimension of learning we termed ‘Negative Sense of Individual Learning Capital’. Students’ subjective perception of the learning capital they bring with them to the unit is an important measure, as it will impact on their experience of the learning habitus. Where students lack confidence that they have the requisite learning capital, it can affect their sense of themselves as a respected member of the class. This dimension is characterised by the following three statements:

- I feel uneasy exposing gaps in my understanding in this unit (Q9)
- I feel reluctant to speak openly in this unit (Q11)
- I feel that it was hard to get help in this unit when I had a question (Q5).

The third dimension of learning we termed ‘Negative Sense of the Learning Environment’, which contextualised student perceptions of the class experience provided by the learning design and the tutorial team. The literature indicates that student perceptions of their learning environment is an important aspect of the overall learning experience. In Bourdieusian terms, if students are not clear on ‘the rules of the game’ in the learning environment, they are unlikely to be enthusiastic about the unit. This dimension is indicated by the following statements:

- I feel this unit does not promote a desire to learn (Q21)
- I feel that my educational needs are not being met in this unit (Q19)
- I feel that this unit results in only basic learning (Q13).

The fourth dimension we termed ‘Positive Perception of Interaction with Others’. This dimension relates to students’ ability to build and draw upon their ‘social capital’ through interaction with other students and tutors within the field of the tutorial:

- I feel confident others will support me in this unit (Q20)
- I feel that I can rely on others in this unit (Q14).

Identification of the eleven elements involved in the four dimensions of learning allowed us to see broad shifts in student experiences of learning in the unit field across three semesters. For the purpose of comparative analysis, we grouped the 2018 observations and the 2019 observations into two groups.

4.1.3. Comparison between whole cohort responses: before and after

Table 2 shows that baseline student survey (2018) results and the post tutor training (2019) survey analysis indicated no statistically significant differences at the macro level.

Table 2. Comparison between before (2018) and after (2019) tutor training student survey results on a five-point Likert scale. (All p -values were calculated using two-sided t -tests assuming equal variances.)

Dimension	Year	N	Mean	Std. Dev.	Difference
Positive Sense of Belonging (Higher scores are more desirable)	2018	167	2.12	0.77	$\Delta = -0.09$
	2019	224	2.21	0.93	$t = -1.037$ $p = 0.300$
Negative sense of individual learning capital (Lower scores are more desirable)	2018	167	3.43	0.87	$\Delta = -0.06$
	2019	224	3.49	0.94	$t = -0.610$ $p = 0.542$
Negative sense of the learning environment (Lower scores are more desirable)	2018	167	3.05	0.97	$\Delta = -0.05$
	2019	224	3.10	0.91	$t = -0.526$ $p = 0.599$
Positive perception of interaction with other students (Higher scores are more desirable)	2018	167	2.27	0.79	$\Delta = -0.11$
	2019	224	2.38	0.92	$t = -1.233$ $p = 0.218$

When considering diversity across the student cohort, different sub-groups are likely to experience positive responses to an intervention at different times. This may disguise differences in the student experience across the total sample. Furthermore, as the student population changed between the two time periods, ‘noise’ from this change could have hidden the improvement effects (note in particular, differences in the gender and membership in social groups make ups of the 2018 and 2019 cohorts shown in Table 1). To investigate further, we explored changes in responses from specific sub-groups, and how those manifested in terms of a diversity of student views.

4.1.4. Comparison between diverse student group responses: before and after

We analysed the student data again across the seven diverse demographic groupings of the respondents. Groupings were determined by (1) gender, (2) age, (3) student origin: domestic/international, (4) language spoken at home: English or not, (5) having caring responsibilities, (6) living with disability, and (7) social connectedness: connected/isolated. We measured age in years and defined two age groups: 20 or younger and older than 20. We proceeded with testing responses of students split into sub-groups by these variables, in the base line survey (2018) and after the tutor training (2019). Table 3 shows how students responded to the survey before and after our tutor training intervention, broken down by demographic groupings.

Table 3 shows a range of positive shifts based on the student survey responses, over the period of the tutor training:

- the less positive sense of belonging amongst female students in 2018 disappeared
- the more negative sense of individual learning capital amongst international students in 2018 disappeared
- the more negative perception of the learning environment amongst students not speaking English at home in 2018 disappeared
- the more negative perception of individual learning capital amongst students with disabilities in 2018 disappeared.

Table 3. Differences in responses from diverse student cohorts in 2018 and 2019 on a five-point Likert scale.* (All *p*-values were calculated using two-sided *t*-tests assuming equal variances.)

		2018		2019	
		<i>n</i>	<i>M</i> (<i>SD</i>)	<i>n</i>	<i>M</i> (<i>SD</i>)
Positive Sense of Belonging (Higher scores are more desirable)	Males	73	2.23 (0.734)	122	2.20 (0.879)
	Females	93	2.02 (0.789)	99	2.22 (0.999)
			<i>p</i> = 0.080		<i>p</i> = 0.917
Negative Perception of Individual Learning Capital (Lower scores are more desirable)	Males	73	3.42 (0.789)	122	3.34 (0.944)
	Females	93	3.45 (0.948)	99	3.68 (0.923)
			<i>p</i> = 0.795		<i>p</i> = 0.009
Negative sense of the learning environment (Lower scores are more desirable)	Males	73	2.95 (0.929)	122	2.99 (0.937)
	Females	93	3.14 (0.986)	99	3.26 (0.860)
			<i>p</i> = 0.230		<i>p</i> = 0.031
Positive Perception of Interactions with Others (Higher scores are more desirable)	≤20	90	2.17 (0.905)	113	2.49 (0.964)
	>20	75	2.05 (0.577)	109	2.27 (0.868)
			<i>p</i> = 0.319		<i>p</i> = 0.075
Negative sense of Individual Learning Capital (Lower scores are more desirable)	International	39	3.70 (0.822)	158	3.51 (0.916)
	Domestic	128	3.35 (0.874)	66	3.43 (1.001)
			<i>p</i> = 0.026		<i>p</i> = 0.592
Negative sense of the Learning Environment (Lower scores are more desirable)	International	39	3.44 (0.784)	158	3.09 (0.935)
	Domestic	128	2.93 (0.987)	66	3.12 (0.856)
			<i>p</i> = 0.004		<i>p</i> = 0.850
Negative sense of Individual Learning Capital (Lower scores are more desirable)	English at home	123	3.44 (0.857)	156	3.56 (0.924)
	Not English	44	3.39 (0.924)	68	3.32 (0.968)
			<i>p</i> = 0.757		<i>p</i> = 0.078
Negative sense of the Learning Environment (Lower scores are more desirable)	English at home	123	2.94 (0.989)	156	3.12 (0.955)
	Not English	44	3.35 (0.832)	68	3.04 (0.804)
			<i>p</i> = 0.015		<i>p</i> = 0.556
Negative sense of individual learning capital (Lower scores are more desirable)	Caring responsibilities at home	43	3.64 (0.765)	67	3.33 (1.017)
	No caring responsibilities at home	124	3.36 (0.899)	157	3.55 (0.904)
			<i>p</i> = 0.072		<i>p</i> = 0.112

* For students with a disability, there were not enough observations to calculate statistical significance. No significant differences between students with different levels of social connectedness were found in both the 2018 and 2019 cohorts.

4.2. Shifts in tutor perspectives and practices

4.2.1. Baseline tutor reflections

The baseline focus group was conducted with nine tutors in November 2018. It revealed shared perceptions amongst tutors regarding learnings they hoped students would take from the unit and their role as tutors. Tutors referred to themselves as playing a primarily caring and supportive role during group-work. When asked what they wanted to convey through their teaching approach in the unit, their comments suggested their intention was to reduce perceived power differentials between themselves and the students. For example:

“No one is judging you.”

“We are in this together.”

“Don’t avoid having the conversation.”

“This is a safe place to share opinions, develop friendships.”

Tutors recognised that students come into the unit with different English language and cultural approaches to learning, and these were described as ongoing ‘challenges’, often requiring extra ‘patience’ and ‘repetition’. Tutors volunteered few specific observations regarding how diverse student identities impacted on the learning environment, or how they taught inclusively. In addition, when asked how they transmitted their values and beliefs to students, tutors mainly talked about drawing from their lived experiences. One gave the following example:

“I sometimes tell them like I used to be very shy and it was difficult for me to go in front of crowds you know? Now I’m in front of you doing a tutorial and I feel good about it so it’s something everybody can achieve.”

Another talked about being humble and encouraging students to draw from their own knowledge:

“I never underestimate who is there – I’m not as clever as some of the people in that room ... and I always say that each of you brings a richness into the space you know.”

The advice they provided to students in group-work emphasised the impact of individual ‘personality’ differences:

“I encourage them to try to solve these problems within the team because it’s always depending on the students’ personality, and also I think it’s very important to get to know each other.”

Tutors were asked what kind of training they would find useful. They wanted an opportunity to share teaching experiences and learn strategies for teaching group-work. One said:

“[We need] case studies...like solving issues through communication. Are there different ways as a tutor to deliver. I mean...I’m always happy for more training on what to do because they [the students] are very independent. I feel like it would be good to get some tips.”

Tutors seemed to have little awareness of how their teaching influenced the learning environment, positioning themselves more as observers of student learning.

4.2.2. Changes in Tutors: Semester 1 2019

At the first workshop, tutors were given information from our preliminary analysis of the baseline student survey. For instance, they were told that international students were more likely than domestic students to feel isolated in the unit, and less likely to believe that others depended on them. Domestic students were much more likely to report their learning needs were not being met. Tutors were asked to reflect on their observations of student dynamics in class in the light of these responses. They listed a narrow range of attributes that students valued in their classmates:

- ability to socialise

- focus on high marks
- ability to talk and present easily
- local work experience.

In considering how to teach in ways that would encourage students to value a more diverse range of attributes, tutors were invited to consider a number of possible teaching strategies. These included:

- explicitly observing and noting non-verbal forms of student communication
- insisting that all students contribute to discussions
- getting students to move around and share with different classmates
- being attentive to and encouraging of conflicting points of view
- modelling communication to flesh out deeper discussion by asking ‘What do others think?’ and ‘Can you clarify what you mean?’

At the end of semester 1 2019, tutors met with the LAS Advisor and reflected on student interactions and their teaching practices throughout the semester. Tutors struggled to see how their teaching influenced the students’ behaviour towards each other. One noted that:

“We knew we had to create a sense of belonging...but did it bring out a sense of belonging between the students? ... I don’t think it did.”

Another agreed that the dynamic between students seemed hard to shift, observing that, *“As always the more dominant students would take on the mantle of participation.”*

As the discussion progressed, one tutor explained her role helping to resolve tensions brought about by different student backgrounds and learning styles, and the impact it had when she took charge. She had two very diverse groups in terms of academic and cultural backgrounds. In one group, a dominant student tended to take the lead and the others were following. She explained:

“I decided to intervene, and I said, ‘OK we want to hear from the rest of you’. I told him ‘you may choose not to say a word today’ and he was relieved, and he thanked me after for doing that because it changed the dynamics of their group...he was a very happy person in the beginning and he had started going down into the vortex. And the other students stepped up.”

4.2.3. Changes in Tutors: Semester 2 2019

At the second tutor training, tutors were asked to fill in the student survey from the perspective of a mature-aged student, a student with caring responsibilities, an international student with a first language other than English or a domestic student straight out of school. Their responses closely matched the breakdown of data from the 2018 student-survey responses. The tutors reflected that they had an experiential understanding of how student identities impacted on the learning experience. This opened them to the possibility that they have a pro-active role to play in explicitly creating student awareness of different perspectives between them.

Tutors considered opportunities for validating students’ various life experiences and guiding students to think of their social and cultural advantages for learning. Tutors were supported by short regular meetings in which they shared observations and inclusive teaching strategies.

At the end of semester, tutors described how their teaching had subtly shifted as a result of regular exposure to training and reflection. They observed the difference it made when they interacted with students on a personal level. They had started explicitly communicating interest in students’ lives and knowledge outside of the class context. They noticed that modelling influenced the behaviour of students towards each other. The following accounts illustrate these observations.

“I’ve been spending more time with the groups, sitting at the table. A lot more than I’ve done in the past. I’ve noticed that this creates a more effective relationship... I might just sit with them at the beginning of the tutorial and say, How’s your week been? What’s been going on? Did you get out on the weekend?”

“When you show a learning attitude to the students and ask them to explain something they know about, they actually become very confident explaining ideas and thoughts... I say, Oh thank you thanks for sharing that with me, I learn a lot from you guys. That’s a great idea go for it. Let me know if you need any help. You have to let them know you are learning from them. That’s a way to build up the relationships.”

Tutors observed that inclusive behaviour changed the learning environment. Some said that they now invited students to share about their backgrounds and out of class responsibilities so that students could learn about each other at the beginning of semester. They later observed that some domestic students tended to avoid working with international students whilst others went out of their way to learn from them. They observed this changed the class dynamics dramatically. Others observed that mature-aged students often enjoyed playing a leadership role and that this worked well for everyone.

Tutors recounted benefits for their teaching experience when the learning environment was more open, stating that they received fewer email queries about assignments because confusions and concerns were being dealt with in discussion.

Finally, for the first time, tutors confidently volunteered their ideas about future strategies that could be used in teaching the unit to create a more level playing field for all students. This reflected a growing sense of themselves as teachers and as influential actors in the classroom dynamics. Their suggestions included:

- the tutorials could include more audio-visual resource material that is not language dependent
- students could be given a few minutes to jot down ideas about a topic before the tutor opens discussion
- teams could be actively encouraged to use an Australian and International lens to view their chosen social problem and business solution, allowing more students to draw on their lived experiences.

5. Conclusion

This article has reported on findings from an 18-month project undertaken by a cross disciplinary team of LAS and academic staff. We set out to explore multiple dimensions of a complex puzzle facing higher education educators. Students bring with them a variety of identities and lived experience, positioning them with different strengths for responding to learning challenges. A LAS/Faculty collaboration enabled us to investigate how differences between students affect their learning experience. Our research included multiple perspectives on the learning environment, comprised of spoken and unspoken rules, hierarchies and relational dynamics between all actors.

Tutors play a significant role in establishing a learning environment in which student diversity is actively valued (Bacon et al., 1999; Colbeck et al., 2000; Trees, 2013; Soares & Lopes, 2020), but fails to address how universities can build these skills in a time-poor work context. Our research addresses this gap, demonstrating that in the highly casualised higher education environment, short but regular team sharing can effectively build tutors’ strategies for creating a sense of belonging amongst diverse cohorts. Our findings suggest that tutors’ increased familiarity with diverse student perspectives and their growing awareness of power-relations amongst their students enables them to proactively support and model inclusive practices. In a unit heavy with

team-based activities, our findings also suggest that tutor training can impact positively on the student sense of belonging and the overall learning experiences of diverse students.

Drawing on Bourdieu's conceptual framework, our team sought to build reflexivity amongst the tutors in a unit of study. Bourdieu's theory of habitus is concerned with how power relations are created and maintained in any field through the systemic structuring of conditions, as well as dispositional and relational interactions. Social hierarchies arise in higher education unit cohorts as students struggle to draw on their social, cultural and other forms of capital to get good grades. Our project conceptualised tutors as 'dominant actors', with the power to influence explicit and implicit 'rules of the game' between students. The mix of individual student dispositions delimits how the 'game' is played out each semester. However, Bourdieu's framework allows us to consider the potential to increase student sense of belonging when tutors develop a higher level of reflexivity about their role, and consciously develop inclusive teaching practices.

Our analysis of student data over three semesters gave us a refined and validated four-dimensional measure of student experience. This allowed us to quantify the links between growing tutor reflexivity about diversity and inclusion, and the shifting experiences of learning and belonging amongst diverse groups of students each semester. A purely quantitative study would have been limited by the small sample of tutors, whilst a purely qualitative study may have been biased by teacher-student power relations. Analysing both data sets, we were able to see substantial changes in the experiences of international students, female students, and students who speak languages other than English at home over the period of the tutor intervention.

It is worth mentioning that casually employed tutors were enthusiastic about having regular opportunities to share their classroom experiences and reflect on inclusive teaching strategies. They valued the chance to make links between diversity, inclusivity and student experiences of learning in their classes. Because of our flexible, action research approach, we were able to respond to tutor requests by adding a fifteen-minute reflection on student diversity and inclusive teaching approaches to the monthly unit meetings. It is likely that this added element to the tutor intervention generated the higher level of reflexivity in tutor reflections.

The project researchers were also educators and thus protecting student privacy imposed certain limitations on connecting student data from different sources. In addition, student performance and regular student satisfaction survey information was not possible to integrate into the analysis. However, our learning from this project will inform any future extension of the research. For instance, more specific data regarding diverse student groups will require larger survey samples. Ascertaining causality between intervention and outcome may benefit from a longitudinal research design with control groups, although the current higher education context can make this difficult. Consideration could, however, be given to qualitative research with students and their tutors, to explore more deeply the causal relationships between tutor training and shifts in student experiences. This approach may allow us to advocate for an institutional commitment to tutor training and reflection time, to build a stronger sense of belonging amongst students as well as their tutors.

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