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## **Indigenous and International Student Experiences of Navigating Higher Education in Post-Covid and Post-AI Universities**

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### **ABSTRACT**

*This article contributes a novel perspective on the common vulnerabilities of the Indigenous and international student experiences at higher education institutions in Australia. Through a review of 88 publications in the leading journals we show that the majority of these articles focus on international students rather than Indigenous students. This literature treats Indigenous and international students as separate categories, although they share the campus and common vulnerabilities that have intensified in the post-Covid and post-AI university. While the vulnerabilities of each group in isolation may be considered minor, that serious challenges effect more than one group of students underscores the urgent changes required in the higher education system. We argue that understanding the commonalities of Indigenous and international student experiences could help universities develop more effective support strategies and programs. This research provides valuable insights about the assumptions of Western higher education that must be communicated to students to minimize the culture shock as they navigate the higher education space.*

**Keywords:** Higher Education, International students, Indigenous students, culture shock, Covid-19, student support

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This paper contributes a novel perspective on the literature on the First Nations (or Indigenous)<sup>1</sup> and international student experiences in higher education. Even though these students' study in the same classroom on campus or online, current research separates First Nations students from international students. This is the first comparative review of the literature on the experiences of these two cohorts within the Western education system, using Australia as an example. We drew upon our perspectives as former international and Indigenous students and current academics that enabled us to identify those insights valuable to this research. This paper aims to locate the major similarities in the experiences of First Nations and international students to assist universities in creating a sense of belonging by designing or re-using effective support systems and programs for overall student wellbeing.

Our main assumption is that the effective communication to students of Western cultural norms and higher education practices would minimize culture shock. This would also better prepare them for navigating higher education, leading to an overall improvement in experience and retention within universities (Johansson & Felten, 2014; Naylor & Mifsud, 2019). These strategies, in turn, would result in equity in educational opportunities, with students realizing their intellectual and occupational potential (Bauman et al., 2005; Milem et al., 2005). We focused on university-wide support and the personal strategies that enabled students to navigate and address the challenges they faced during their higher education journey. This included an understanding of the role and benefits of the support and advice available to them in regards to their education (Forbes-Mewett & Nyland, 2013; Gower & Dantas, 2021); settlement, integration into and engagement with their new environments (Asmar et al., 2015; Hughes, 2010); cultural orientation to the country and the region in which they undertook their studies (specific to international students; Hughes et al., 2016; Tran, 2009; Zhou et al., 2008); achieving and maintaining overall wellbeing (Burgess et al., 2019; Forbes-Mewett & Sawyer, 2019; Woodroffe et al., 2021); finding employment (Forbes-Mewett et al., 2009; Tran et al., 2022) at the Australian post-Covid-19 and post-Artificial Intelligence (post-AI) university (Doidge & Doyle, 2020; O'Flynn, 2020; O'Shea et al., 2021).

There were two key motivations for adopting the comparative perspective. First, recent literature has little or no recognition of the many shared characteristics and needs of these two cohorts in the Western education system. Recognizing and understanding these commonalities, we argue, would help

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<sup>1</sup> The authors use the terms 'First Nations' and 'Indigenous' interchangeably to identify all Aboriginal and Torres Strait Islander First Nations peoples of Australia, connecting with Article 3 of the United Nations Declaration on the Rights of Indigenous Peoples. We acknowledge the traditional lands of the Larrakia People, where this article was written. In respect, we acknowledge the traditional lands of all students and universities, locally, nationally, and internationally.

universities develop effective support strategies and programs. Second, studies published in the second part of 2020, when Covid-19 was still globally prevalent, suggested that First Nations and international students returning to class in the late and post-Covid-19 environments were likely to require more and better support than traditionally used in the past (Baker et al., 2022; Brennan et al., 2021). However, we do not propose that the support strategies and programs for First Nations and international students be combined. Indigenous students represent a minority on the Australian university campus. The programs could be detrimental to them if combined in their entirety. As an estimate, since enrolment figures change from year to year, the number of international students in higher education in Australia surpasses the number of First Nations students by around 27 to 22 times, which we discuss in Section 2.

Both student cohorts confront identical issues on campus - for example, encouraging First Nations students' engagement on campus is a continuing problem that the university must address in a culturally acceptable manner (Behrendt et al., 2012). Likewise, an understanding of international student engagement difficulties reveals the inability of Australian institutions of higher education to create inclusive learning environments for students with diverse cultural and linguistic characteristics. The present research therefore introduces a new research avenue and provides an opportunity by which to inform the teaching and support practice of those working with these two student cohorts, as well as an opportunity to learn from their experiences about the cultural assumptions of Western higher education.

This paper identified and examined 88 scholarly articles (60 dealing with international students and 28 focused on First Nations Australian students) published in the last decade (2012 to 2022) in leading journals such as the *Australian Educational Researcher*; *Higher Education*; *Journal of Higher Education Policy and Management*; *Higher Education Research and Development*; *Race Ethnicity and Education*; or *Studies in Higher Education*. Focusing on the experiences of and informing the current debates specific to Indigenous and international students in higher education, these articles have provided an impetus for quality improvement, student engagement and support, as well as informed policy and legislative developments.

The analysis was conducted through the lens of the cultural interface theory (Nakata, 2007), with the primary goal of informing improved educational experiences. We critically reviewed the 88 papers with a view to (a) establish the similarities and differences, challenges, needs and effective forms of support of both First Nations and international students and (b) identify the strategies, approaches and programs currently offered in support of each of these groups, that might be extended or adapted for the other. The latter enabled us to suggest potential instances of fruitful learning between the academic and professional staff supporting the two student cohorts. This, in turn, would provide staff with additional ideas and strategies to consider in their respective practices, thus potentially enhancing the quality, effectiveness and efficiency of their services. Sharing existing knowledge and practices that are practical and readily available to better serve the students is a valuable proposition, especially in the current

financial climate in which Australian universities have had to review their finances due to the impacts of Covid-19 (Doidge & Doyle, 2020; Marshman & Larkins, 2020; O’Flynn, 2020; Thatcher et al., 2020).

## **CULTURAL INTERFACE THEORY**

The theoretical lens of the cultural interface theory is most fitting for this research because it proposes that students of different backgrounds come to interact with what is essentially Western university with underlying assumptions, written and unwritten rules, and ways to work and communicate. Cultural interface theory is relevant because it enables the exploring of the potential of a shared space where understanding and learning can be co-created by members of different cultural backgrounds (Nakata, 2006, 2007, 2011). In this paper, we extend this notion of a shared space to learning between students (both First Nations and international) and teachers and professional staff in higher education. Nakata’s work is well known in the Australian Indigenous context, and we propose that the cultural interface theory may be usefully applied also to understand the engagement of international students with Australian higher education.

The cultural interface theory constructs a safe cultural space in education to facilitate connection of Indigenous and non-Indigenous people and their respective knowledge systems, with the ultimate goal of bringing reconciliation in Australia to fruition. Nakata (2006, p. 272) suggests that

what is needed is consideration of a different conceptualization of the cross-cultural space, not as a clash of opposites and differences but as a layered and very complex entanglement of concepts, theories and sets of meanings of a knowledge system.

The main three principles of knowledge production by Nakata (2007, pp. 215–216) are:

- recognition of the fact that the ‘cultural interface’ is a contested knowledge space,
- acknowledgement of the continuities and discontinuities of Indigenous agency, and
- being conscious of the continual tension that informs and limits what can/cannot be said in the everyday education environment.

First Nations and international students operate in this contested space, sharing vulnerabilities and needing increased involvement and participation. Their common vulnerabilities have intensified in the post-Covid-19 environment in Australian higher education (Dodd et al., 2021; Doidge & Doyle, 2020; Walker et al., 2021). While the vulnerabilities of each group of students in isolation may be considered minor, that the challenges affect more than one group of students underscores that this issue requires the attention of the education system. University educators and professional staff should enhance their understanding of the characteristics and support requirements of students by being cognizant of the continual tension at the cultural interface.

The above principles of cultural interface theory informed the research design of this study and the literature selection and review criteria.

## **LITERATURE REVIEW**

The papers included in this literature review were identified through an extensive search of the top percentile journals (25%) according to SCImago. The review encompassed a critical, comparative review of the literature published from 2010 to 2022 in Australian and international outlets, using the ‘Education’, ‘culture shock’, ‘Indigenous students’, ‘First Nations students’, ‘international students’ and/or ‘pedagogy’ field filters. In addition to the guiding principles of the cultural interface theory, the selection was informed the authors’ experiences as former First Nations and international students and now academics teaching at an Australian university.

The policy in the last decade aimed to increase the number of Indigenous and international students enrolled in the Australian universities but a decline in enrolments occurred due to Covid-19, and calls for increased student engagement and support within the higher education sector in the post-Covid-19 environment were made (Baker et al., 2022; Teague et al., 2022). The number of international students in higher education in Australia exceeds the number of First Nations students by ~22 to ~27 times, varying from year to year. According to Austrade (2021), the number of international students in 2020 (during Covid-19) and 2021 were 440,667 and 552,000, respectively (Department of Education, 2021). By comparison, there were only 19,935 First Nations students enrolled in higher education in 2020 (Universities Australia 2020).

We initially performed a wide search to ensure comprehensive coverage of the research topic. This led us to identifying 88 papers that were suitable for a review and a detailed analysis. Of them, 28 focused on First Nations students and 60 on international students. This paper reveals—unsurprisingly, given the promotion of and investment in international higher education in Australia over the last decade—that there are more works dealing with the experiences of international students than of First Nations students. However, the literature on the Indigenous student experience in navigating higher education in Australia is growing (Kirkness & Barnhardt, 1991; Nakata, 2011; Sarra, 2014), particularly that published by First Nations authors. By comparison, the literature on the experiences of international students at universities is well established (Carroll & Ryan, 2007; Zhou et al., 2008).

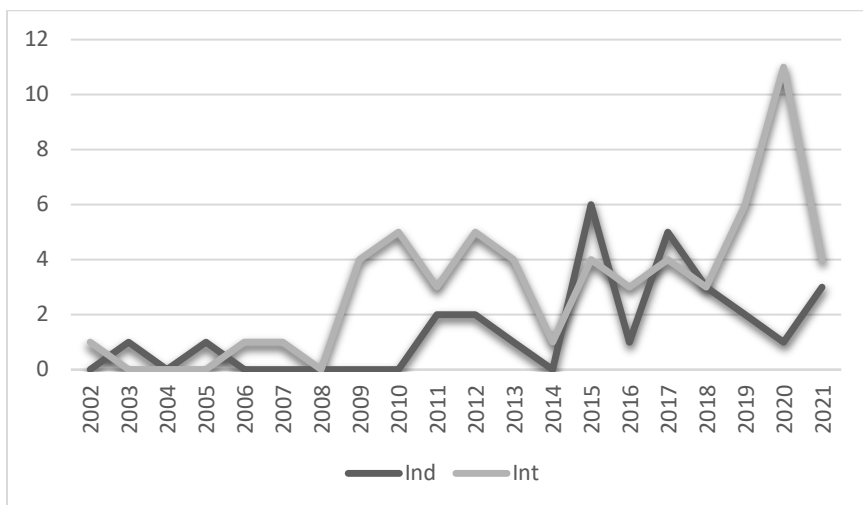
As our research progressed, we found that scholarly works in this period were published by a relatively small number of academics in a relatively small number of journals. For example, *Australian Educational Researcher*, *Higher Education*, *Studies in Higher Education*, and *International Journal of Qualitative Studies in Education*.

For completeness, we noted that several studies outside Australia considered the experiences of Indigenous students and students with immigrant backgrounds (not international students) together (Glick & White, 2004; Quaye et al., 2019; Trebbels, 2014). Immigrant students are those who already live in a country and

possibly have some social and financial safety net, as opposed to international students who arrive to a country to study and have little or no safety net. In the United States context, the book by Quaye et al. (2019), *Student Engagement in Higher Education: Theoretical perspectives and practical approaches for diverse populations*, discussed engagement strategies with several student cohorts, including Indigenous, international students, students’ activists, justice-involved students, student who are parents, first-generation students and undocumented students. As such, this paper adds to an emerging international area of research and, for the first time, contributes the Australian experience.

### Count of publications by year, methodology used and theory applied

As Figure 1 demonstrates, there has been much variability in both the volume and trends of scholarly literature in Australia regarding First Nations and international students. The exception was the period between 2010 and 2018, when the patterns aligned, though the volume of publications differed. A sharp increase in the number of publications regarding international students can be observed in the years of the Covid-19 pandemic, 2019–2021. It should also be noted that between 2017 (peak) and 2020, the number of scholarly works focusing on First Nations students declined.



Note: Ind: Indigenous students; Int: International students.

**Figure 1: Count of publications by year. Source: Authors’ own calculations based on 88 papers published in the top 25% of journals in education 2010–2022, according to SCImago.**

Forty-two (of 60) of the papers on international students included case studies in their methodologies. The remaining 18 papers employed focus groups and used content and thematic analysis. In contrast, scholars researching First Nations students in Australian higher education preferred to employ systematic reviews and Indigenous methodologies (19 of 28 papers), such as yarning (n = 23), with only four papers employing case studies. This might point to a more practical research study focus when dealing with international students and a greater emphasis on theoretical and conceptual aspects of research relating to Indigenous students.

The theories applied in the papers focusing on Indigenous students included the Indigenist Standpoint (Woodroffe et al., 2021), cultural interface (Carey & Prince, 2015; Day et al., 2015; Kruk-Buchowska & Wood, 2019), critical race (Hollinsworth et al., 2021) and social determinants (Chirgwin, 2015) theories. When studying the experience of international students, the applied theories included Bourdieu's notions of field of power and disciplinary hierarchy; dialogic feedback cycle; and standpoint theories.

### **Count of publications by location**

In order to gain an understanding of the contributions from the individual states and territories in Australia, we ran an analysis of the combined 88 papers to identify the jurisdiction in focus for First Nations and international students, as detailed in Table 1.

**Table 1: Reviewed Publications' Jurisdictions of Focus**

Location	International	Indigenous
Australian Capital Territory (ACT)	0	2
New South Wales (NSW)	3	2
Northern Territory (NT)	0	3
Queensland (QLD)	3	5
South Australia (SA)	1	0
Tasmania (TAS)	0	0
Victoria (VIC)	9	2
Western Australia (WA)	2	2
Multijurisdictional	2	3
National	40	9
Total	60	28

Overall, most research was conducted at the national level, with 40 articles focusing on international students and nine articles focusing on Indigenous students.

### **Acknowledgement and type of research funding**

Research funding sources for studying First Nations and international student experiences in the Australian university varied between 2010 and 2022. A combination of competitive external and internal university sources funded research on First Nations students, of which 14% originated with the Australian Research Council (4 projects). Other funding sources were the Higher Education Equity Support Program, Women in STEM and Entrepreneurship funding, and the Office for Learning and Teaching from a regional university in Queensland. When we could not find information about funding, we assumed that the researchers conducted their work without any such funding and in their own time.

Research on international students in Australia appears to be more frequently funded through competitive process. The rate of funding was nearly double (27%) the rate of funding for the projects focusing on First Nations students. Examples of funding sources include five Australian Research Council-funded projects and seven university-based research schemes. The Australian Collaborative Education Network was mentioned in several papers on international students; however, the nature of their support (in-kind or financial) was unclear.

One might ask what the percentage value difference between the funding rate tells us. On the surface, it might appear that from 2010 to 2022, there was less focus on funding research pertinent to First Nations students. However, it might also be that such research was funded at a similar rate but does not appear in Q1- and Q2-ranked journals. Regardless of the difference in the funding rates, this review suggests that the research on these two student cohorts was conducted by academics driven by passion rather than success in strategic funding opportunities.

### **Synthesis of the main themes in terms of commonalities between two cohorts**

The literature review points to a more practical research focus for research on international students' experiences and a greater emphasis on theoretical research relating to Indigenous students.. Combining insights of the two research approaches therefore becomes particularly valuable. Synthesizing the findings and discussions of the reviewed research, alongside personal reflections of the authors informed by their respective backgrounds, the following commonalities were found between the two student cohorts:

- English as a second or third language,
- Studying away from their home environment,
- Being the first in the family to study in university or in a university in a different country,
- Lack of existing community support,



- In danger of experiencing stigmatization and racism,
- Knowledgeable lecturers that are approachable, helpful and enthusiastic (approached first, before counselling),
- Peer support by senior students, effective orientation programs to assist with acculturation,
- Institutional atmosphere being free of racism or prejudice, and sufficient time provided to explain the assumptions of library use and other services such as academic support, equity services, emergency support, and scholarships,
- It is usually necessary to find employment and financial support, and
- Precarious position during the Covid-19 pandemic.

Western universities prioritize independent thinking and reasoning; however, these skills are higher-order skills that must be learned through childhood and school education, then further developed in university. It is not unusual for students from non-Western societies to initially lack these skills, as well as the accompanying mindset (Hill et al., 2021). In essence, academic integrity is a social, political, and cultural construct prevalent in Western cultures. In non-Western societies, however, repeating the authority word-for-word can be viewed as correct, while copying from others without providing reference is tolerated by both schools and universities (Ison, 2018). Many students from Asia and other non-Western societies enrol in Australian universities every year and they need to learn the importance of, and practice these independent reasoning skills.

Further inquiry into the cultural dimension of academic integrity and critical thinking skills is significant to “understanding how students think about, and their attitudes toward, academic dishonesty could help to reduce the incidence of academic dishonesty”, as these differences “have serious implications for educators and administrators in today’s globalized world” (Yukhymenko-Lescroart, 2014, p. 30). In the post-Covid-19 environment, where students are under additional economic and financial stress, contract cheating is already widespread (Hill et al., 2021), with the potential to become more prevalent as a tool to circumvent and bypass the system with the development of generative AI.

Thus, universities and educators must come together with ideas and understanding to reach a point of shared knowledge on the cultural interface through cultural academic adaptation. We propose that this should be reflected on not as a loss of student culture, but as an additional consideration of their social and emotional development as potentially successful students. Academic adaptation and belonging, which has been neglected in the literature on intercultural communication and second language acquisition, has been identified as a major predictor of the sociocultural adaptation and persistence of students (Yu, 2013). In order to reach this point, universities and educators should gain the knowledge and expertise to include all students, while also being aware of the contested interface where knowledge is gained and shared (Nakata, 2006). There is therefore an urgent imperative that all university academic and professional staff gain cultural competencies.

## International students

International students have several requirements, challenges and responses distinct from those of First Nations students (Forbes-Mewett & Sawyer, 2016; Tran, 2011; Warner and Miller, 2015; Zevallos, 2012). These primarily include:

- High quality teaching and learning, including work-integrated learning placements,
- Opportunities for developing and maintaining social belonging and connectedness (this is of equal interest to both student cohorts),
- Available, accessible general health, including mental health and counselling services,
- Affordable, and safe non-academic services, including access to transport, food, and accommodation, and
- Financial safety nets (job availability, scholarships covering all duration of studies, and having sufficient funds to live, not merely survive).

The key challenges international students experience include:

- Limited ability and success in acculturation to the Australian style of learning, such as class engagement, face-to-face consultations with lecturers, responding to feedback (including emotional reactions) due to class size and online learning,
- Lack of genuine recognition of intellectual capabilities even if imperfect English language expression,
- Social connectedness—mixed outcomes of trying to befriend local, Australian-born students,
- Group work and group assessments—highly mixed accounts of experience and success,
- Not seeking counselling or health advice even when this need is identified (distressed, withdrawn students comprise 30% of total cohort), and
- Perceived unfair treatment in 2020 during the Covid-19 pandemic.

The research highlights a strong need for acculturation and socializing (Forbes-Mewett & Sawyer, 2016; Tran, 2011; Warner and Miller, 2015; Zevallos, 2012). While the adjustment to new culture and language difficulties are often cited in the literature surrounding international students, there is a need for a nuanced examination of the complexities of the international student process of adaptation, through which they endeavor to exercise personal agency and mediate between different ways of constructing knowledge in specific disciplines (Tran, 2011). Zevallos (2012) stressed that a stronger focus on the socialization of international students would likely increase their educational and career satisfaction. Such socialization would not be a one-way street. Warner and Miller (2015, pp. 430–431) concluded: “For academic staff and their international EAL [English as a Second Language] students, engagement with the increasing internationalization of our HE [Higher Education] sector requires recognition of their changing (and not always comfortable) roles”. Leask (2001, 2012, in Warner

& Miller 2015), who highlighted the need for staff to become learners as well as teachers, “with a responsibility to engage with cultural others”.

There is, thus, a need for a shift of a paradigm on both sides. If EAL students are to be seen as autonomous managers of their own intercultural learning, then there is a corresponding requirement on the part of academic staff to manage the environment in which such intercultural learning can develop. Often, however, lecturers fail to make their feedback clear, and students have trouble interpreting their comments.

(Warner & Miller, 2015, pp. 430–431)

If lecturers are aware that students have been used to different forms of feedback in their home countries yet expect honesty, clarity, and timeliness, and if students are aware that meeting lecturer expectations may occasionally require additional work to meet higher standards than they are accustomed to, an acceptable level of intercultural learning and understanding may be reached.

### **Indigenous students**

Indigenous students navigate a lot of complexity. The initially high expectations that First Nations students have of themselves become difficult to sustain in the face of persistent and repeated negative representations of Indigeneity, Indigenous intelligence and academic achievement from teachers, schools, and the media (Moodie et al., 2019). Indigenous students have a more complex understanding of what racism is than teachers, so the students tend to self-determine their responses rather than relying on teachers or schools to implement anti-racist responses (which students perceive as unlikely) (Moodie et al., 2019).

The key needs and challenges of Indigenous students included:

- negative assumptions,
- external factors,
- a sense of belonging,
- career aspirations,
- engagement and completion, and
- racism.

Students may feel part of a minority, be at a different life stage than other students, and consider leaving their studies before having completed their degree. ‘The overlapping, cumulative effects of health, financial, family, and other pressures over time, for example, may explain the higher levels of departure intentions notable among later-year Indigenous students’ (Asmar et al., 2015).

Acknowledging the importance of Country and location is paramount to supporting successful Indigenous student experiences.

Given the significance of the local context to Aboriginal people and communities, standardized approaches are unlikely to be successful across the board ... It is therefore of concern that the fastest growing

population of Aboriginal students, those in urban centers, rarely appear in the literature. Perhaps this inattention reflects broader Australian narratives of silence, ignorance and apathy including physiological and cultural stereotypes of the “real Aborigines” in the “north”.

(Burgess & Evans, 2017)

Similarly harmful is the desire of the Australian universities for an assimilated, compliant Indigenous population (Burgess et al., 2019; Buxton, 2017; Keddie & Niesche, 2012).

For all students, the journey of navigating higher education is long and may be difficult. It is important to keep the long-term perspective in order to maintain motivation and overcome short-term but very real obstacles, and allow for significant learning opportunities, time and space for transition, and shifts in mindset to take place. This long-term perspective will allow the problem resolution and development of “tailored support services for Indigenous students as they negotiate the tensions that inevitably arise in their studies can contribute to higher student retention rates” (Day et al., 2015).

## DISCUSSION

Based on the three preceding sections, we now present ideas that the academic and professional staff supporting Indigenous and international students may consider in their respective practices, potentially enhancing their quality, effectiveness, and efficiency of what they do.

We argue that what unites both student cohorts is the necessity to identify and learn the assumptions of Western higher education. Some domestic, non-Indigenous students will have been exposed to these assumptions since early childhood, through school and high school. When they enroll in a higher education degree, they may be well prepared to participate in tutorials, they understand an essay structure, referencing requirements, and are ready to use online learning management systems. International students and Indigenous students often do not start off on the same footing.

Recognizing and understanding the commonalities of non-Western student cohorts could help university staff develop more effective support strategies and programs based on learning from the Indigenous and international contexts, and vice versa.

We observed that both cohorts were discussed in the literature in terms of cultural fit, adaptation to the education system, discrimination, rights and access to education. Both cohorts experience forms of linguistic racism, ethnic accent bullying, and other forms of discrimination that lead to stereotyping, which, in turn, might lead to psychological damage, mental health issues, decreased levels of academic performance and, in extreme cases, suicide. In addition, if international students are introduced early to local cultural aspects that include both positive and negative experiences of First Nations students, Australia would be better able to move towards reconciliation, as a community and country, further

pointing to the cultural interface being an appropriate theoretical lens for this research (Nakata, 2006).

The following themes emerged from the literature and the common experiences of the authors:

1. The importance of considering the interface of Western and non-Western cultural concepts. Both cohorts are usually unfamiliar with the set of assumptions about higher education as they might be the first in the family in university, or first in the family in the Australian university.

2. Being an international or Indigenous student does not mean belonging to a homogenous group of students. The stereotypes and deficit narratives of being 'cash cows' or the 'go home message' during the Covid-19 pandemic from the Australian Government were harmful.

3. Flexibility of study options and career advice are particularly important. First Nations students manage work, family, and wider social commitments. International students can be employed in unqualified labor positions (or even through cash-based employment) and need advice on how to transition from unqualified and casual positions to professional roles in alignment with their degree.

There are four main lessons that apply to the university and the lecturers:

1. Although lecturers are under increased workloads and workforce casualization pressures, the best approach to lecturing for both cohorts is through engagement and a teacher-as-learner approach. Reciprocal adaptation means expecting learning from both the students and the university systems. In practice, this may mean that a lecturer calls upon the knowledges and experiences of international and First Nations students in the classroom as sources of information that are academically valid. In the context of working with Indigenous students, Martin (2007) explained an important aspect of when non-Indigenous people work with Indigenous people:

The goal is to prepare for change so that it expands one's autonomy, agency and relatedness and does not diminish or limit this autonomy, agency and relatedness. This must occur as coming amongst others in relatedness, so as not to silence, displace or make them invisible.

(p. 18)

2. Additional effort is required to provide a clear explanation of the Western cultural and academic expectations for all students to minimize culture shock and enable them to develop good adaptation techniques. Managing culture shock might require learning about the history and values of Australia; however, this learning cannot overlook First Nations' heritage and role in the current Australian society. None of the 88 papers reviewed addressed 'culture shock'. This suggests that this absorption of culture shock falls either on the shoulders of the student coping with the system, or their peers and friends. In this context, Indigenous students' success centers are important, but peer support comes first (Barney, 2013); the same can be extrapolated for international students.

3. There is an urgent need for universities to establish spaces and opportunities for students to create communities where they will feel safe sharing cultural knowledge. Peer support may address academic, social, financial, personal safety, and emotional needs, and contribute to improved wellbeing. Peer-Assisted Study Sessions (PASS) group study sessions conducted by current students who have successfully completed the targeted unit have proven to be extremely important in assisting with transitional experiences, first within the university, and then on to a profession or occupation.

4. Though it is likely problems will arise, this is not unexpected in during a three- or four-year degree. Students' vulnerability should be seen as common, as every student might be vulnerable at one stage or another. The conflicts and problems of navigating the system arise on a regular basis (Castagno et al., 2022). Similarly, for international students, visa requirements are difficult and can change, as was observed during the Covid-19 pandemic (Berg & Farbenblum, 2020; Clibborn & Wright, 2020; Olmos, 2020). One way of measuring how effective support for Indigenous and international students is across Australia might be through the University Key Performance Indicators, which would include access to study help, library assistance, counselling by which to measure whether the services provided are effective.

## **CONCLUSIONS**

Though this review was limited by its focus on Australian-related literature, this limitation was countered by the novelty of combining the perspectives on two student cohorts. Future research might focus on similar studies comparing Indigenous and international students in higher education in other countries. Another limitation of this study was its focus on the years 2012 to 2022. However, the upper end of the period under review partially overlaps with the rapid changes that higher education in Australia commenced to experience and which were brought about by Covid-19 and AI. Both developments introduced challenges for the universities and their teaching and professional staff that are on-going and will likely evolve in the coming years.

These challenges will require smarter engagement for the benefit of students. To date, the literature has treated international and Indigenous students as separate and isolated cohorts. This research identifies their similarities in challenges, experiences and needs about clarifying the assumptions of Western higher education practices.

Research articles on Indigenous and international student experiences at higher education institutions in Australia reveal, despite intentions to the contrary and inconclusive research results, the tendency of a deficit-based approach adopted by institutions towards these two cohorts. We conclude that the focus should instead be on making overt the assumptions that can be taken for granted by those who are embedded into Western education tradition from early childhood. We also agree with Leask's observation (in Warner & Miller 2015) that academic staff should become learners and create environments conducive to intercultural learning. This would recognize and utilize in classroom the

knowledges and experiences of international and First Nations students and likely enhance their learning experiences. The articles we reviewed also show that international and First Nations students alike emphasize that campuses free of racism or prejudice are important to their experiences, as are sufficient time to understand the assumptions of library use and all other services such as the academic support, equity services, emergency support and scholarships.

We do not propose that the support services and programs specific to Indigenous and international students be combined; however, we do argue for the introduction of resources that would make Western assumptions about education explicit. We also argue for creating spaces where culture could be shared among peers and between various groups of students. Peer support is particularly important, and in post-Covid-19 universities, opportunities for peer exchange, learning and support should be prioritized. When the university well articulates the ways of navigating the complexities of higher education, everyone will benefit including domestic as well as Indigenous and international students.

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