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Study of Higher Education

Pathways to Success in International Education

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We would also like to acknowledge the stakeholders from various sectors and organisations who provided useful insights and advice on the project. Finally, we thank the international students who participated in the survey and focus group interviews.

List of acronyms

ATN	Australian Technology Network of Universities
DoE	Department of Education
EAL	English as an Additional Language
ELICOS	English Language Intensive Course for Overseas Students
ELP	English Language Proficiency
ELBP	English Language Bridging Program
FSP	Foundation Studies Program
Go8	The Group of Eight
GPA	Grade Point Average
HEI	Higher Education Institution
HEIMS	Higher Education Information Management System
IR	Innovative Research (Universities)
PASS	Peer Assisted Study Scheme
PELA	Post-Entry Language Assessment
TAFE	Technical and Further Education
WAM	Weighted Average Mark
VET	Vocational Education and Training

Executive summary

The purpose of this report is to present the findings from the research project, *Pathways to Success in International Education*, funded by the Department of Education under the 2018–2019 Enabling Growth and Innovation program and carried out by researchers from the Melbourne Centre for the Study of Higher Education.

The project aimed to investigate whether international Pathway entry students have comparable academic outcomes to Direct entry international students,¹ what factors affect their transition and success in the first year, and to identify examples of good practice in supporting international students to succeed.

This report is a synthesis of analyses from five strands of research activity involving:

- desktop research of existing institutional support programs and services at 39 Australian universities and follow-up consultations with staff responsible for the programs/services
- consultations with 17 key stakeholders from non-university education sectors and organisations
- statistical analyses of institutional data sets from seven institutions on first-year international students' entry pathways into university, course progression to second year, and academic performance
- an online survey administered to first-year international students at seven institutions
- focus group interviews with 201 international students at six institutions.

Key findings

First-year academic outcomes of international Direct entry and Pathway entry students

The progression rate for international students from first year to second year of a bachelors program varies across institutions, ranging from 87.4 per cent to 95.9 per cent in the universities that participated in this study. There were no significant differences in progression rates among pathway groups in most institutions.

Institutions collect and report data on student pathways and academic performance in significantly different ways, limiting the ability to conduct cross-institutional analysis and making a consolidated view impossible. Despite these limitations, several conclusions can be made about the academic outcomes of Direct entry international students and Pathway entry students:

- At some institutions, there are differences in the academic performance of Direct entry and Pathway entry students and often this seems to be related to the level of preparation of the incoming students. For example, when analysing the Weighted Average Mark (WAM) of second-year students (those commencing in 2018) at a Go8 University, those that had completed a University Foundation Program had a significantly higher mean WAM (for their first two or three semesters) than those entering via Direct entry from an overseas secondary school.
- Overall, for most of the participating institutions, the differences in performance by entry pathway are generally minor, but where significant differences were observed, the analysis showed that international undergraduate students from a post-secondary education pathway may have an advantage in terms of academic performance and progression in their early years in university. International students entering university via a secondary-school pathway, whether overseas or Australian, had significantly lower mean WAMs than those entering from post-secondary pathways.

¹ For this project, 'Direct entry' refers to international students who have entered higher education from an overseas institution without having undertaken a preparatory program or previous study in Australia. 'Pathway entry students' refers to those international students entering higher education after having done some study in Australian whether that is secondary schooling (for example, VCE or HSC), TAFE, Foundation, ELICOS or other non-award program.

Factors affecting international students' transition and success in the first year

The overall picture of first-year international students' transition to higher education is positive with the large majority of international students in this study reporting a clear sense of purpose and motivation for study and being broadly satisfied with their study experience so far. While most students reported positive early experiences of learning within their institutions, there were a number of key factors that affected their transition and success in the first year, as outlined below.

A. Orientation and having 'a good start'

There was broad agreement among students that orientation activities and events are important for international students in having a good start to their higher education studies. Where students reported positive experiences, these related to clarity of key information, a welcoming environment and opportunities to meet and interact with peers. While students were aware that their institutions provided an array of information and resources online, most indicated that it was much more helpful to talk to a person, rather than source information online.

An important issue was the timing of Orientation Week and information overload. Overall, less than a half of the students surveyed reported that they attended Orientation events and international students who arrived in the country during or after Orientation Week felt disadvantaged. This has implications for institutions in planning their Orientation programs and activities, possibly requiring them to re-run or extend core Orientation activities for international students after the start of semester.

On the whole, international students who enter higher education via pathway programs, such as a Foundation Studies Program (FSP), report fewer challenges than Direct entry students, as they are already familiar with studying in Australia and feel better equipped to transition into higher education studies. As well, many reported already having established a friendship group before commencing university meaning they had a network or networks of support from the start. In contrast, many Direct entry students reported taking months or a whole semester to settle in and adjust to their new learning environment.

The early stages of transition are particularly challenging for Direct entry students, many of whom reported having to adjust quickly to their new learning environment. This involved learning how to get to class and understanding the expectations around studying and assessment in their course. Some also mentioned difficulties in understanding the Australian accent in the early stages and therefore being unable to understand their lecturers and some other students.

While many institutions currently encourage (or require) international students to undertake a Post-Entry Language Assessment (PELA), students' perceptions about the usefulness of the test were mixed. Fewer than a half (42.9%) of the Direct entry students surveyed for this study (compared to 65% of Pathway entry students) indicated that the tests were helpful to them in having a good start to their university studies, and a quarter (26.6%) found the tests not helpful.

In terms of differences across institutional contexts, students in smaller regional universities and the TAFE institute in particular, reported feeling very well supported in their transition to a new learning environment, especially by tutors and lecturers who were helpful and concerned about their learning.

B. English language

The majority of students surveyed for this study (75%) indicated that their level of English was satisfactory for doing well in their course and for understanding what is being said in class, and only a small proportion (less than 9%) disagreed with these statements. While this suggests that English language for academic purposes does not appear to be a major concern for most international students, English Language Proficiency (ELP) in general, was raised as an issue by students during focus group interviews. For some students the challenge was not so much their ELP itself, but rather a lack of confidence in their ability to speak English. Some others, however, experienced significant difficulties in communicating in English.

For some international students from English as an Additional Language (EAL) backgrounds, particularly those new to the Australian learning environment (that is, Direct entry students), not being able to communicate effectively in English was a major concern and source of stress. Of note, most of the students' concerns related to spoken interaction and oral communication skills, rather than English for written academic purposes.

C. Social connections and sense of belonging

Over a half of the international students surveyed (59%) reported that they felt a sense of belonging to their institutions, with students from smaller regional universities and the TAFE institute more likely than those in large metropolitan universities to report a sense of belonging to their institutions. However, building social connection with peers and feeling a sense of belonging to their institutions remain problematic for a substantial proportion (over 40% in this study) of international students.

While many international students had made friends in the first few months of their studies, mostly with students from their home country or other international students, a sizeable proportion of those interviewed reported finding it very difficult to make friends and connect with peers in their course. Less than half (45.6%) of the students surveyed reported interacting regularly with students outside of study requirements, and almost a quarter reported having had very little or no opportunities to interact with domestic students (24.9%). These findings point to the need for institutions to improve these aspects of the international student experience

On the whole, Direct entry students found it more challenging to make friends compared to Pathway entry students. This was particularly the case for Direct entry students from EAL backgrounds who mostly opted to study alone rather than seek to be part of a study group. This isolation experienced by some international students is an issue of concern not only in terms of student engagement in learning, but importantly, for their psychological wellbeing, which is a critical factor affecting student success in their first year. With a growing awareness among students about the importance of mental health, the demand for counselling services is growing. This point was emphasised by numerous representatives from university student support services across Australia consulted for this project.

D. Beyond the university

It is well-known that factors beyond the university can have a strong impact on international students' transition and engagement in the first year. The analysis of findings from this study highlights two in particular – accommodation and paid work:

- Having affordable accommodation close to campus was a common theme among international students who reported a smooth early transition to higher education studies. However, finding safe and affordable accommodation in a timely manner was difficult for many students. In particular, Direct entry students who did not know anyone in Australia before arriving in the country found it very difficult to find safe and affordable accommodation as many had little understanding of the application and inspection processes.
- Some students reported not having stable accommodation before starting their course and others had to move several times in a year causing disruption to their studies. Students on the whole indicated that they did not receive assistance from their institutions in finding suitable accommodation, and they believed that institutions could do more to advise and assist them, particularly before arrival.
- There was almost universal agreement among students that gaining work experience and finding paid work during their studies were essential to their future. A substantial proportion (over a third) of international students surveyed for this project were in some kind of paid employment, with almost a quarter reporting that they work more than 15 hours a week. For most of these students, paid work did not affect or interfere with their studies, with the majority of those surveyed (65.6%) reporting that they had a good work/study balance, and that being employed did not negatively affect their performance at university (64%).

- A common theme particularly among those from regional areas, was the difficulty in finding work. Students reflected they had unrealistic expectations about finding work before arriving in Australia, and some noted that their institutions had painted an overly optimistic picture about employment opportunities. Many students also mentioned the lack of opportunities for international students to find employment within their own institution, and they believed their institutions could do more to support them to find work both within and outside their institution.

Institutional support programs and services for international students: What works and what doesn't?

Institutions offer a range of supports and services for international students, and in general, when students accessed these supports and services, they reported them as being helpful. Students in institutions that had dedicated and visible support centres for international students such as an international student office or hub, felt well supported as they knew where to go to receive assistance when needed. However, in some other institutions, mainly large metropolitan universities, students reported not always being clear about where to go, and not knowing for what kinds of issues they could seek support.

Academic skills programs and workshops, especially those relating to writing are perhaps the most common type of support for international students across institutions. While students who attended these workshops were generally positive about their usefulness, this project found that students have a strong preference for support programs and services delivered by peers:

- Students were far more likely to engage in programs led or facilitated by other students (often senior year students) rather than seek advice from staff. Of particular note were the various Peer Assisted Study Sessions (PASS) programs offered by some institutions. Numerous students mentioned the value and benefit of PASS programs not just to their academic studies, but their connection with peers.
- The most effective support programs from the students' perspective seemed to be just-in-time supports provided by peers.

Students also appear to have a strong preference for face-to-face rather than online support. While many universities rely on online resources to provide students with information and support, according to participants in the study, not many refer to the online academic support resources available on their institutions' websites. The only exception mentioned as being very helpful and used frequently was 'Studiosity', a service that provides one-to-one, personalised feedback on assignments within 24 hours.

Another service highlighted by students as being effective was counselling. Contrary to the commonly held view that international students are reluctant to seek help for mental health difficulties, the vast majority of participants in this study reported being aware of mental health issues and counselling services, and many reported having sought help from counselling services. First-year students specifically cited counselling services as an important support during their transition to living and studying in Australia; however, some expressed frustration about the limited availability and wait times, and a few mentioned that it was hard to access the service when they critically needed it.

In general, international students reported feeling frustrated and unsupported by their institutions when they were unclear about, or did not have sufficient access to, appropriate and timely institutional supports and services. The analyses of findings from the project's five strands of research activity highlight the need for a holistic approach to supporting international students' transition and success. The *Framework for the holistic support of international students' transition and success in the first year* was developed from the project findings. It identifies six core evidence-based dimensions for supporting success in the first year, as well as necessary conditions in the pre-course stages (arrival and orientation) for supporting students' transition into higher education. Section 5.5 in this report describes each dimension and offers good practice examples of institutional support programs specifically for international students.



Figure A: Framework for the holistic support of international students' transition and success in the first year

Recommendations

1. Institutions collect and report data on student pathways and academic performance in significantly different ways, and there is little consistency in approach to collecting information that would enable cross-institutional analysis of international student pathways and outcomes. This limits the capacity for data analysis to inform practices at the institutional level, and policy at the sector level. Where information about international student pathways is reported via different systems, there would be benefit in consolidating the details as part of the national reporting requirements.

Recommendation 1: National reporting requirements should be expanded to include details of international student pathways, including student performance data (such as progression rates and completion rates).

2. It is currently not possible to reliably identify the various pathways across sectors that international students use to enter higher education, and consultations with stakeholders revealed the difficulty in tracking international students' pathways across sectors.

Recommendation 2: The Department of Education should lead the development of a unique student identifier for international students across all sectors.

3. The early stages of transition are particularly challenging for Direct entry international students, many of whom find it difficult to adjust to the new learning environment, cope with the English language demands, and make social connections with peers. In addition, many spend the first few weeks securing accommodation and organising household necessities, making them unable to focus on their studies. This may explain why in some institutions, Direct entry students do not perform as well on average as international students who enter university after completing a pathway program.

Recommendation 3: Universities should develop in collaboration with the English Language Intensive Course for Overseas Students (ELICOS) sector, a short academic transition program for Direct entry EAL students that is 'built into' the structure of their undergraduate course, and delivered before their formal degree program starts.

This will allow students to adjust to the learning environment and focus on English language skills for learning and social interaction while settling into life in Australia. This program should not be seen as a 'bolt on' program, but be embedded into students' undergraduate course, delivered on campus and subsidised by the institution. A transition program may also reduce the need for institutions to administer PELAs which can be resource intensive, and which many students find unhelpful.

4. Most, if not all, institutions offer academic skills programs and workshops for students, particularly to assist students with academic writing; however, the majority of international students do not appear to participate in these workshops. Students have a clear preference for peer-led support programs and are far more likely to participate regularly in peer-facilitated activities than those facilitated by support staff. These peer programs have the added benefit of helping to create social connections among students.

Recommendation 4: *In allocating limited resources to academic support programs and activities, universities should place more emphasis on peer-led programs and peer-facilitated just-in-time supports, in addition to other programs that have an evidence base for effectiveness in terms of ongoing student engagement and influence on learning outcomes.*

5. Universities offer a range of supports and services for international students; however, it is not always clear to students where to go, and for what kinds of issues, they can seek support. Students value supports that are highly visible and clearly dedicated to meeting the range of international students' needs. While some institutions have a dedicated international student office or hub, this is not always the case.

Recommendation 5: *All higher education institutions should have a visible, dedicated international student office or hub with staff who can provide advice and holistic support on a range of matters relevant to international students such as finding accommodation, course planning, employment and health, as well as academic support.*

6. Finding paid work opportunities is a common concern among international students, affecting their studies and overall experience at their institutions. While many universities offer their students work experience opportunities on campus, this project found that international students felt under-represented and disadvantaged in securing work experience and casual employment opportunities at their universities. Many believed their institutions could do more to support them find work both within and outside their institutions.

Recommendation 6: *Universities should increase opportunities for university-based work experience and casual employment for international students and consider placing quotas that reflect the percentage of international students enrolled in the institution.*

1. Introduction

1.1. Project overview

The *Pathways to Success in International Education* project commenced in July 2019, funded by the Department of Education (DoE) under the 2018–2019 Enabling Growth and Innovation (EGI) program. The primary aim of the study was to examine the experiences and academic outcomes of first-year international Direct entry and Pathway entry students in higher education institutions and shed light on the kinds of institutional experiences and supports that can effectively support the success of these students.

Three research questions guided this project:

1. Is there a difference between the academic performance of first-year international Direct entry students and international Pathway entry students in Australian universities?
2. What factors affect international students' transition, engagement and academic outcomes in the first year?
3. What kinds of institutional experiences, support programs and services can effectively support the success of international students?

To examine these questions, the project team conducted five streams of research activity:

- desktop research of existing programs, activities and services to support international students' transition and academic success at 39 Australian universities, and follow-up conversations with staff responsible for delivering these supports and services
- consultations with key stakeholders
- statistical analyses of institutional data on first-year international students' entry pathways into university, course progression to second year, and academic performance
- an online survey administered to first-year international students from participating institutions
- focus group interviews with international students from participating institutions.

A note about terms used

In this project '**Direct entry**' is used to refer to international students who entered higher education from an overseas institution without having undertaken a preparatory program or previous study in Australia.

'**Pathway entry students**' refers to those international students entering higher education after having completed some study in Australia, namely: secondary school, Foundation Studies, English Language Intensive Course for Overseas Students, (ELICOS), Vocational Education and Training (VET) courses, and other sub-bachelors or non-award courses.

'**First year**' means Level 1 of an undergraduate bachelors degree, rather than the first year that a student is attending an Australian Higher Education Institute (HEI).²

'**Success**' is defined and measured in the project as: progression from first year to second year, satisfactory/good academic performance in the first year, and high level of (self-reported) student engagement in their studies and their institution. Rather than measuring first-year success purely via quantitative indicators that relate to retention rates as has been the tendency, this project included qualitative perspectives from students themselves that pertain to their transition and first-year experience.

² For example, some international students commence their studies in Australia as a second-year student (Level 2) even though it may be their first year attending an Australia HEI.

1.2. Background

1.2.1. Pathways into higher education

The number of international students enrolled in undergraduate degrees in Australian HEIs has almost doubled in the last decade from 226,115 in 2009 to 430,466 in September 2019 (Department of Education, 2019). A substantial proportion of these students (over 35%) enter Australian higher education through pathway programs, which according to the DoE include ELICOS, non-award/Foundation Studies Programs, secondary schooling, and VET sectors. In general, such programs provide international students with a range of short to medium-length course options that will enable them to enrol in a higher education degree. A short description of each is provided below.

As seen in Figure 1.1, the majority of international students enter higher education directly from overseas (None category), and this is both the largest and fastest growing pathway for international students. Other pathways have been largely static or in decline over the past four years.

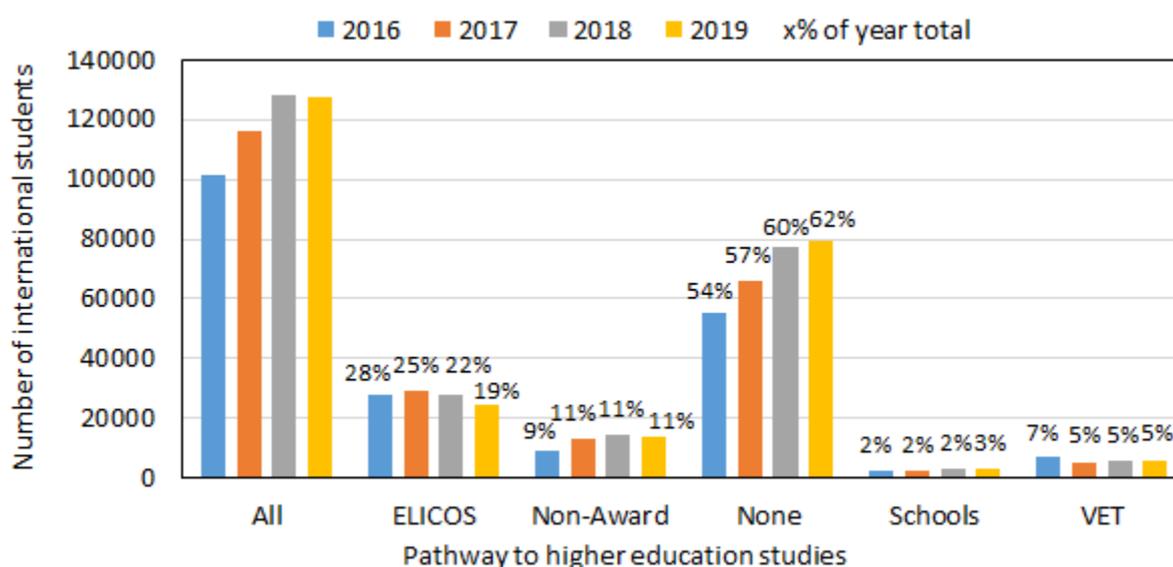


Figure 1.1 Commencing international students' pathways to higher education, 2016–2019

ELICOS programs

ELICOS programs provide international students with the opportunity to improve their English language skills over a period of weeks through to over a year. The types of ELICOS programs range from general English courses (from beginners to advanced), ELP test preparation courses, English for Academic Purposes, English for professional purposes, or English Language Bridging Programs (ELBPs) to meet the requirements for entry into a higher education course (Hayman and Robichaud, 2015).

Foundation Studies Programs

Foundation Studies Programs (FSPs) for international students are non-award courses that provide a bridge into an Australian university on the proviso that students meet subject prerequisites and required entry scores. This is distinctive from ELICOS programs as FSPs typically offer a wider range of core and elective subjects and maintain different English language entry requirements.

Secondary schools

International students can enter higher education from secondary schools similarly to Australian students, after completing the Year 12 Certificate of Education in their state (for example, The Victorian Certificate of Education, Queensland Certificate of Education or Higher School Certificate for students in NSW). Education systems globally have increasingly sought to attract international students into their secondary schools, with some schools targeting students overseas and an increasing number of transnational campuses being set up

in key regions (Rahimi, Halse and Blackmore, 2017). While the secondary school sector is growing in terms of international student numbers, it represents a small fraction of the total number of international students in Australia.

VET programs

VET programs include certificates (Advanced Certificate, Certificates I to IV, Vocational Graduate Certificate) and diplomas (Associate Diploma, Diploma, Advanced Diploma and Vocational Graduate Diploma). These programs provide students with the practical skills that prepare them for the workforce. VET programs are delivered by Technical and Further Education (TAFE) institutes, community education providers, private training providers and universities that teach VET courses. The Australian VET sector has been continually attracting large numbers of international students over the past years and accounted for almost 28 per cent of the total overseas student enrolments in 2018. The National Centre for Vocational Education Research report that almost 40 per cent of the international onshore VET graduates continued to undertake further study after training in 2018.

1.3. The current study

This study aimed to investigate whether international Pathway entry students have comparable academic outcomes to Direct entry international students, and the factors influencing the transition and success of first-year international students in HEIs. It also aimed to examine the kinds of institutional experiences and supports that effectively support the success of these students.

1.3.1. Methods

The project was carried out over a five-month period from July 2019 to November 2019 and involved five strands of research activity:

a) Desktop audit and follow-up consultations with university staff

Two project researchers conducted a desktop audit to identify the types of supports and services available for international undergraduate students studying at Australian universities. This involved key word searches for student supports and services using internet and university-specific search engines. The websites of 39 universities were reviewed and only publicly accessible information was included in the analysis. Following the desktop research, relevant staff responsible for the programs were contacted for more information about their programs/services such as take-up among international students, and information about how the effectiveness of these programs is evaluated. These staff included:

- Directors/Managers/Coordinators of International Student Support services
- Managers/Coordinators of Academic and Learning Skills units
- International Student Advisers
- Manager of Student Success and Retention units

b) Consultations with stakeholders

Consultations were conducted with 17 key stakeholders from various organisations and sectors³ including:

- Council of International Students Association
- Tertiary Education Quality and Standards Agency (TEQSA)
- Independent Schools Council of Australia
- Education Queensland International, The State of Queensland (Department of Education)

³ Given the limited timeframe of the project, the research team was not able to consult with all relevant stakeholder groups – for example, Independent Tertiary Education Council Australia.

- Independent Schools Queensland
- NSW Department of Education
- International Education Association of Australia
- TAFE Directors Australia (TDA)
- Independent Higher Education Australia (IHEA)
- International Student Advisers Network of Australia (ISANA)
- English Australia
- Navitas.

c) **Statistical analysis of institutional data on first-year international students**

Institutional data sets were received from seven of the eight participating institutions. The data received contained a range of fields in varied formats. The broadly common fields in all data sets included:

- an indication of basis of student admission into their program – ‘pathway’
- a measure of student academic performance (WAM or Grade Point Average (GPA))
- an indication of student progression from 2018 to 2019.

For each institution, statistical analysis of data included:

- an estimation of the significance of any difference in academic performance (based on GPA or WAM) between the identified admission pathway groups for each of 2018 and 2019
- an estimation of the significance of any difference in the 2018 to 2019 retention rate between the identified admission Pathway entry groups.

Details of the methods used to analyse data are provided in Section 2.3, page 15.

d) **Survey**

An online survey was administered to first-year international students in seven participating institutions over a four-week period in September–October 2019. The aim of the survey was to collect information about:

- students’ prior educational experiences before commencing their bachelors degree
- their experience in the first year so far, including their engagement in their course and the institution more broadly, as well as their participation in orientation/transition programs, English language programs, and other support/enhancement programs
- their perceptions of the usefulness of the support programs/activities and their overall satisfaction with the programs/activities
- their self-reported academic progress and outcomes from the first semester of their studies including measures such as: number of subjects/units failed and passed, average mark across all subjects, perceived level of difficulty with academic work (for example, comprehension, workload), and whether they had intentions to withdraw from their course.

Some scales from existing survey instruments (for example, *National First Year Experience Studies 1994–2014*; *Student Wellbeing and Course Experience Survey 2017*; *Student Finances Surveys 2017*) were used. Prior to releasing the survey, a small pilot was conducted to test the clarity of the instrument and time needed to complete the items.

A link to the Qualtrics survey was sent by institutional contacts to students’ emails, and promoted at some institutions by an international student association representative. Students were offered an incentive of winning one of 100 Coles Gift Cards valued at \$200 each. The survey remained open for four weeks and several reminders were sent to students to encourage participation.

A total of 1501 students participated in this survey. This represents a response rate of 22.9 per cent (of first-year international students in the six institutions that participated in the survey), with institutional response rates varying from 10.2 per cent to 57.9 per cent. Data provided by 406 respondents were excluded from the final analysis as they did not meet the threshold requirements of indicating they were international students

and completing at least 80 per cent of the survey items. The final number of responses included in the analysis was 1098 (16.7% of the initial sample).

The demographic characteristics of participants is shown in Table 3.1 on page 22. Survey data were analysed using the SPSS statistics software. The methods of analysis involved descriptive statistics, as well as using crosstabs, chi-squares, and analysis of variance to determine goodness-of-fit between key variables and group differences. The minimum alpha-level set to determine statistical significance in this investigation was 0.05.

e) Focus group interviews

Focus group interviews were conducted with students at six institutions. In the first instance, students who had completed the survey were asked to indicate their interest in participating in a focus group interview. Those students who had expressed an interest in participating were then invited to a focus group interview at their institution. After the first few focus group interviews, a snowballing technique was used to recruit additional undergraduate international students from the participating institutions. Students were given a \$40 gift card for their participation.

In total 201 students were interviewed over a period of three weeks. The size of the focus groups ranged from two to eight students and lasted between 45 to 60 minutes. These were audio-recorded and transcribed with students' prior written consent. Transcriptions were coded and thematically analysed by two researchers on the project team. The demographic characteristics of focus group participants are shown in Table 4.1 on page 33.

1.3.2. Participating institutions

Using the latest 2017 DoE institutional enrolment data based on numbers of commencing international students, 10 institutions including eight universities and two TAFE institutes were invited to participate in the project. The universities were selected purposefully to include a Group of Eight (Go8) university, Australian Technology Network (ATN) university, Innovative Research (IR) University and regional universities with a high proportion of commencing international students, and to ensure that all states were represented. In addition, two TAFE institutions that provide both pathway programs and bachelors degrees and with large numbers of international students were invited to participate. In the end, seven universities from six states and one TAFE institute agreed to participate in some or all stages of the project. Table 1.1 shows the participation of the institutions in each stages of data collection.

Table 1.1 List of participating institutions for each stage of data collection

Institution	Institutional data	Survey	Focus groups
Go8 University	✓	✓	✓
ATN University A	✓	✓	✓
ATN University B	✓	X	X
Regional University A	✓	✓	✓
Regional University B	✓	✓	✓
IR University A	✓	✓	✓
IR University B	✓	✓	X
TAFE Institute	X	✓	✓

1.3.3. Constraints and limitations

There were a number of significant constraints and limitations on the project that are important to point out.

First, the significantly different ways in which the student pathways, academic performance and progression are reported across institutions made a consolidated view impossible. What was practical was, for each participating institution:

- an estimation of the significance of any difference in academic performance (based on GPA or WAM) between the identified admission pathway groups
- an estimation of the significance of any difference in the 2018 to 2019 retention rate between the identified admission pathway entry groups.

Second, the data set generally indicated only a single type of pathway (the most recent) into higher education category for students. It is possible that a student may have completed more than one pathway prior to commencing higher education (for example, secondary education and TAFE studies) but it was not possible to consider this in the analysis performed.

Third, several of the participating institutions used the HEIMS (Higher Education Information Management System) categories for 'basis of admission' record that do not differentiate whether the basis of admission (for example, secondary education) was completed in Australia or overseas. This meant a comparison between 'Direct entry from overseas' and 'Pathway entry' was not possible. Also, none of the data sets provided an explanation of what makes up the 'Other' category, and the proportion of international students making up this category ranged from less than 1 per cent in some institutions to up to 20–25 per cent at one institution.

Fourth, data collection took place over a period from late August to October and coincided with the National Student Experience Survey as well as other institutional surveys. This affected institutions' willingness to participate in the survey stage of the study and their efforts to promote the survey. Institutional staff also indicated that 'survey fatigue' among students was a concern for them in conducting their own surveys. Despite this, the project achieved an initial survey response rate of over 20 per cent.

Finally, the project focused on the experiences and academic outcomes of first-year undergraduate international students. The project was thus limited in scope to students in the first year (Level 1) of a bachelors degree and means that some students commencing higher education at Level 2 of a bachelors degree were not included in the analysis. The project was also limited in scope to international students studying in Australia and did not include international students in offshore Australian HEI campuses.

2. Academic outcomes of Direct entry from overseas and Pathway entry students in the first year

Key points:

- Institutions collect and report data on student pathways and academic performance in significantly different ways, limiting institutional and cross-institutional analysis, and making a consolidated view impossible. This in itself is an important finding as it indicates the need for more consistency across the sector in recording these data.
- For likelihood of progression from first year into second year of a bachelors degree, there was no significant difference between pathway groups in most institutions.
- At some institutions, there are differences in the academic performance of Direct entry and Pathway entry students' outcomes and often this seems to be related to the level of preparation of the incoming students. For example, when analysing the WAM/GPAs of second-year students (those who commenced in 2018) at the Go8 university, those that completed a University Foundation Program had a significantly higher mean WAM (for their first two or three semesters) than those entering via Direct entry from an overseas secondary school.
- Overall, for most of the participating institutions, the differences in international students' performance by entry pathway were generally minor, but where significant differences were observed, those commencing undergraduate bachelors studies from a post-secondary education pathway may have an advantage in terms of academic performance and progression in their early years in university.
- For an individual institution to gain detailed insights into the experience and performance of international Direct entry and Pathway entry students, it is important to know the characteristics of their own students and collect appropriate data to track and monitor their progress.

2.1. Background and data characteristics

The institutional data phase of the project sought the following categories of international undergraduate bachelors student data for students commencing in 2018 and 2019:

- basis of admission
- entry type
- number of subjects students completed, failed, and withdrew from
- WAM or GPA – whole year 2018; Semester 1 2019
- demographic information.

Some of the institutions originally invited to participate in the study declined on the basis that providing the student data requested would require too much work to consolidate the different categories and sources of data into a coherent set. After initial and secondary invitations, we received data sets from seven participating institutions. The data received contained a range of fields in varied formats. The broadly common fields in all data sets included:

- an indication of basis of student admission into their program – 'pathway'
- a measure of student academic performance (WAM or GPA)
- an indication of student progression from 2018 to 2019.

The analysis hereafter is restricted to considering these three fields generally available for all student data records received. While the institutional data sets received all contained these three fields, the format of the data in the fields were generally different and incommensurate. Table 2.1 provides the following summary information about the pathway data sets received from each responding institution:

- number of commencing international undergraduate bachelors students in 2018
- number of commencing international undergraduate bachelors students in 2019
- number of unique entry pathway categories in the data set
- the format of the student academic performance measure.

It is important to note that the final set of student data received from seven institutions represents only a sample of all commencing international undergraduate bachelors students studying in Australia – estimated at approximately 25 per cent based on 2017 reported institutional enrolment data.

Table 2.1 Summary of institutional data sets received

Institution	2018	2019	Total	Pathway categories	Academic performance
Go8 University	3604	3023	6627	8	WAM out of 100.0
ATN University A	940	781	1721	4	GPA out of 4.0
ATN University B	1094	1212	2306	35	WAM out of 100.0
Regional University A	366	275	641	5	GPA(7) & WAM(100)
Regional University B	856	573	1429	5	GPA out of 7.0
IR University A	1473	797	2270	6	GPA out of 7.0
IR University B	791	560	1351	6	GPA out of 7.0
No. of student records	9124	7221	16,345		

As noted above, data on student pathways, academic performance and progression were reported in significantly different ways across the institutional data sets, making a consolidated view impossible. Instead, we analysed for each institution:

- an estimation of the significance of any difference in academic performance (based on GPA or WAM) between the identified admission pathways groups for each of 2018 and 2019
- an estimation of the significance of any difference in the 2018 to 2019 retention rate between the identified admission pathway entry groups.

In the statistical hypothesis testing presented, a p value of <0.01 is taken to represent a significant difference.⁴

2.2. Progression from first year to second year

Table 2.2 shows the progression of 2018 commencing students by institution. When comparing the proportions of students that progressed between pathway groups, Fisher’s exact test was used as it is the most general test, catering for cases when the expected value for number of students progressing or not progressing is less than five, which was the case for some institutional data in the study. The results of Fisher’s exact test for each institution is presented in Appendix A.

⁴ The sample sizes in this strand of the research are relatively large, so a p value of <0.01 rather than <0.05 was used to indicate a significant difference in this section.

Table 2.2 2018 commencing students' progression to 2019

University	Number of cases	Progression rate to second year
Go8 University	3595	95.9%
ATN University A	835	91.7%
ATN University B	923	85.0%
Regional University A	366	80.1%
Regional University B	767	75.7%
IR University A	1446	88.0%
IR University B	716	87.4%

Based on Fisher's exact test, there was no significant difference in likelihood of progression between pathway groups in most institutions, except Regional University B and IR University A.

Further inspection of data from Regional University B indicated that the two groups that were most divergent were 'Other basis' (55.6%) and 'Professional qualification' (100%); however, it is not possible to know what pathways are included in 'Other basis', and the Professional qualification group includes only four students. Similarly, for IR University A, by further inspection, it could be seen that the two groups that are most divergent are 'VET award course' (79%) and 'Higher education course' (89.8%).

2.3. Analysis of academic performance by institution

This section presents the findings from the analysis of the 2018 commencing students' academic performance in their first year.

For each of the seven participating institutions, we report on the identified pathways and mean WAM/GPA for the 2018 student cohort. To determine whether there were any significant between-group differences in pathways and academic scores, a one-way analysis of variance (ANOVA) was conducted. If significant differences were found, post hoc pairwise testing of mean academic performance scores was conducted to identify which of the between-group differences were significant. The appropriate post hoc test depends on whether the variances of the pathway group's mean WAMs were significantly different or not. This is determined by Levene's test of homogeneity of variances. If the variances are significantly different, the appropriate post hoc test is Tamhane's T2 post hoc test. If the variances are not significantly different, the appropriate post hoc test is Tukey's honestly significant difference (HSD) post hoc test.

2.3.1. Go8 University

In 2018 almost 40 per cent of commencing students in Go8 University were Direct entry from international students (34.8% from secondary schools and 4.9% from post-secondary school pathways). The next largest group was Foundation Program students who made up 35.0 per cent of commencing international students (see Appendix B.1 for the Go8 University's identified pathways).

The mean WAM and standard deviation for Go8 University students by pathways are shown in Table 2.3. The ANOVA result ($p = 6 \times 10^{-16}$) indicated that there were significant differences in mean WAM between at least one pair of pathway groups, and the Levene's test of homogeneity result ($p = 2 \times 10^{-9}$) indicated that the variances of the pathway groups' mean WAMs were significantly different.

Table 2.3 Go8 University 2018 pathway x WAM descriptive statistics

#	Pathway	Count	Mean WAM	Standard deviation
1	Australian secondary school	552	66.45	12.17
2	Direct entry from overseas – post-secondary school	178	70.76	10.23
3	Direct entry from overseas – secondary school	1244	65.58	12.95
4	New Zealand secondary school	27	70.82	9.82
5	Other	4	74.25	9.57
6	Overseas Australian post-secondary school equivalent	259	70.21	9.53
7	Overseas Australian secondary school equivalent	67	71.87	9.58
8	University Foundation Program	1259	68.30	10.14
Total		3590	67.43	11.58

*Note that some counts are less than in the previous table due to missing values.

The analysis reveals that in 2018, comparing the two largest groups (representing about a third of students each), those that completed a University Foundation Program (Group 8 in the table) had a significantly higher mean WAM than those entering via Direct entry from an overseas secondary school (Group 3), though the difference was relatively small. The 'Direct Entry from Overseas – Secondary School' and 'Australian Secondary School' international student pathways had significantly lower mean WAMs than many other pathways, especially post-secondary equivalent pathways (see Appendix C.1).

The same process used for identifying any significant between-group differences in mean WAMs between pairs of pathway group in the 2018 data was applied to the 2019 data. The analysis shows that the 'Other' pathway group had a significantly higher mean WAM than most other groups, but the number of students in the Other group was small, and the actual entry pathways represented by the Other group are unknown. As in 2018, those students that completed a University Foundation Program had a significantly higher mean WAM than those entering via Direct entry from an overseas secondary school (see Appendix D for 2019 Tables).

2.3.2. ATN University A

Almost a half (46.1%) of commencing students in 2018 entered ATN University A through a secondary education pathway either at school, VET or other non-university higher education provider. This institution used the HEIMS categories for 'basis of admission' record that does not differentiate whether the basis of admission (for example, VET award course) was completed in Australia or overseas. In addition, the 'other basis' category accounts for 24.9 per cent of the 2018 student cohort. This may include non-award courses such as Foundation Studies and ELBP courses (see Appendix B.2).

Table 2.4 ATN University A 2018 pathway x GPA descriptive statistics

#	Pathway	Count	Mean GPA	Standard deviation
1	A higher education course (Australian or overseas equivalent; complete or incomplete)	251	2.53	0.89
2	A VET award course other than a secondary education course (Australian or overseas equivalent; complete or incomplete)	21	2.31	0.77
3	Other basis	234	2.25	0.90
4	Secondary education undertaken at school, VET or other higher education provider (Australian or overseas equivalent)	432	2.25	0.97
Total		938	2.33	0.94

The 2018 pathway x GPA one way analysis of variance was significantly different – $p < 0.0009$ and the test of homogeneity of variances based on mean ($p > 0.1047$) indicates that the variances of the pathway groups mean GPAs were not significantly different. Tukey’s HSD post hoc test was used to identify significant between-group differences in mean GPA (see Appendix C.2).

The analysis revealed that the ‘higher education course’ pathway group had a significantly higher mean GPA than other groups – VET, secondary education or other pathway. However, because of the way data was coded, it is difficult to determine whether students entering via the higher education course pathway were Direct entry from overseas or not.

For the 2019 commencing student data, the one way analysis of variance mean GPA by pathways was not significantly different – $p > 0.326$, meaning there was no observed significant difference in mean GPA based on admission pathway (see Appendix D.2).

2.3.3. ATN University B

The analysis of the ATN University B data set was complicated by the presence of 35 unique pathway categories (see Appendix B.3). Some categories had small numbers of students, including some with no students for either 2018 or 2019. For the purpose of making the analysis practical, categories with five or fewer students in a particular year were eliminated from the analysis for that year. Over a quarter (27.6%) of commencing students in 2018 entered through ATN University B International College Diploma. The next largest group was Credit Transfer Agreement students who made up 10.2 per cent of commencing international students in 2018.

Table 2.5 shows the mean WAM and standard deviation for ATN University B international students commencing in 2018. The table includes only those pathway categories that had five or more students.

Table 2.5 ATN University B 2018 pathway x WAM descriptive statistics

# ⁵	Pathway	Count	Mean WAM	Standard deviation
1	One Year of a Bachelors Degree at Australian University	9	50.90	21.50
2	AQF Advance Diploma	7	67.02	12.81
4	AQF Diploma	58	58.36	11.98
6	Australian University Foundation Program	36	55.01	19.74
7	(X) College	14	56.74	7.94
8	ATN University B International College Diploma	298	60.62	10.43
10	Completed Tertiary Qualification	19	66.31	13.47
12	Completed (State) Secondary Education	26	68.25	15.75
13	Credit transfer agreement	109	67.72	11.93
15	ATN University B Foundation Program	13	69.14	8.20
18	GCE 'A' Levels	50	69.11	14.13
19	Incomplete higher education course	82	57.34	15.60
22	International – Certificate	5	58.99	7.72
23	International – Diploma	60	66.87	9.34
27	International – Secondary education	64	62.77	11.99
29	International – Tertiary qualification completed	78	63.13	14.06
31	International Baccalaureate	10	66.34	4.21
32	International only – Pathway provider	15	45.26	16.01
35	(X) Foundation Program	54	62.79	15.32
Total		1007	62.17	13.42

The 2018 pathway x WAM one way analysis of variance was significantly different – $p < 4 \times 10^{-17}$.

The test of homogeneity of variances based on mean was significantly different – $p < 0.0003$. The analysis for the 2018 cohort shows that four pathway groups had lower WAMs than some other pathway groups. These pathway groups were:

- AQF Diploma
- ATN University B International College Diploma
- Incomplete Higher Education Course
- International Only – Pathway Provider (the exact nature of this pathway is unknown).

For the 2019 commencing students two pathways groups had lower WAMs than some other pathway groups. These pathway groups were: Australian University Foundation Program and ATN University B International College Diploma (see Appendix C.3).

⁵ Numbers are based on a list of all identified pathways. See Appendix B.3.

2.3.4. Regional University A

The largest group of international students commencing in Regional University A in 2018 entered through a VET Award Course pathway (40.3%). The next largest pathway category was higher education that accounted for 26 per cent of commencing international students. This institution did not differentiate whether the basis of admission was completed in Australia or overseas, which made it impossible to make a comparison of the outcomes of Direct entry from overseas and Pathway entry international students (see Appendix B.4).

The mean WAM and standard deviation for the Regional University A students by pathways are shown in Table 2.6. The 2018 pathway x WAM one way analysis of variance was significantly different – $p < 0.0002$. The 2018 test of homogeneity of variances based on mean was not significantly different – $p > 0.278$. (see Appendix C.4).

Table 2.6 Regional University A 2018 pathway x WAM descriptive statistics

#	Pathway	Count	Mean WAM	Standard deviation
1	Higher education	93	64.69	11.77
2	Mature age special entry	11	54.83	7.65
3	Other	3	67.88	15.56
4	Secondary education	85	68.14	12.66
5	VET award course	148	61.79	11.63
Total		340	64.00	12.19

The analysis revealed that for the 2018 cohort data, the ‘Secondary Education’ pathway group had a significantly higher mean WAM than the ‘Mature Age Special Entry’ and ‘VET Award Course’ groups (see Appendix C).⁶

The 2019 pathway x WAM one way analysis of variance was not significantly different – $p > 0.921$. There was no observed significant difference in mean WAM based on admission pathway (see Appendix D.4).

2.3.5. Regional University B

Across five different pathways identified for Regional University B over half (50.5%) of commencing students in 2018 entered through a higher education course, and almost a third (32.3%) entered via a secondary education pathway. This institution did not differentiate whether the basis of admission was completed in Australia or overseas, meaning it was not possible to compare the outcomes of Direct entry from overseas students with Pathway entry students.

Table 2.7 shows the Mean GPA and standard deviation for 2018 commencing students. The analysis did not indicate any significant difference in mean GPA based on admission pathway. The 2018 pathway x GPA one way analysis of variance was not significantly different – $p > 0.0155$.

⁶ Note that the data from Regional University A also provided a measure of student academic performance in the form of a GPA (out of 7.0). An analysis using GPA produced the same results relating to between-group differences in academic performance between pathways groups as the one based on WAM presented above.

Table 2.7 Regional University B 2018 pathway x GPA descriptive statistics

#	Pathway	Count	Mean GPA	Standard deviation
1	Higher education course	424	4.23	1.93
2	Other basis	81	4.94	1.81
3	Professional qualification	4	5.28	1.38
4	Secondary education	271	4.11	2.15
5	VET award course	61	4.10	2.08
Total		841	4.25	2.01

For the 2019 commencing student data, the pathway x GPA one way analysis of variance was not significantly different – $p > 0.215$ (see Appendix D.5).

2.3.6. IR University A

Almost 70 per cent of commencing international students in 2018 entered IR University A through a higher education course. Secondary education was the second largest pathway that accounted for almost a quarter of students (24.7%) (see Appendix B.6). The 2018 Mean GPA and standard deviation for the IR University A students by pathways are shown in Table 2.8. The numbers of mature age special entry students, other basis students, and unknown pathways students are too small to permit between-group analysis, and/or represent groups whose composition is not known, so these groups are omitted from the analyses. The one way analysis of variance was not significantly different – $p > 0.937$ in 2018 and $p > 0.557$ in 2019, indicating that there was no observed significant difference in mean GPA based on admission pathway among pathway groups in 2018 and 2019. See Appendix D.6 for a table showing the 2019 pathway x GPA descriptive statistics.

Table 2.8 IR University A 2018 pathway x GPA descriptive statistics

# ⁷	Pathway	Count	Mean GPA	Standard deviation
1	Higher education course	1004	4.50	1.19
4	Secondary education	361	4.52	1.42
6	VET award course	81	4.54	1.45
Total		1446	4.51	1.27

2.3.7. IR University B

Across the identified pathways for the IR University B the largest group of commencing students in 2018 entered through a higher education course (40.1%). TAFE Award and Secondary Education students made up 21.9 per cent and 19.1 per cent of commencing international students in 2018 (see Appendix B.7). As noted previously, the lack of data on whether the basis of admission was completed in Australia or overseas makes it impossible to compare the outcomes of Direct entry from overseas students with Pathway entry students.

Table 2.9 shows the Mean GPA and standard deviation for 2018 commencing students. The 2018 pathway x GPA one way analysis of variance was significantly different – $p < 0.0001$ and the 2018 test of homogeneity of variances based on mean was significantly different – $p < 8 \times 10^{-8}$. Tamhane's T2 post hoc test was used to identify significant between-group differences in mean GPA (see Appendix C.5).

⁷ Numbers are based on a list of all identified pathways. See Appendix B.6.

Table 2.9 IR University B 2018 pathway x GPA descriptive statistics

#	Pathway	Count	Mean GPA	Standard deviation
1	Higher education course	317	4.74	1.32
3	Mature age	141	4.64	1.54
4	Other	8	5.20	0.31
5	Professional qualification	151	4.71	1.59
6	Secondary education	173	4.10	1.78
Total		790	4.58	1.54

The analysis for the 2018 cohort shows the significant differences in mean GPA between groups were few. TAFE Award students had a lower mean GPA than those from a Higher Education Course pathway. The mean GPA for the TAFE award pathway was also lower than the Professional Qualification pathway, but the latter group included a very small number of students.

However, the 2019 pathway x GPA one way analysis of variance did not indicate any significant difference between the pathway groups – $p > 0.871$, meaning that there was no observed significant difference in mean GPA in 2019 students' first semester based on admission pathway (see Appendix D.7 for 2019 pathway x GPA descriptive statistics).

3. International students' transition and first-year experience

The findings presented in this section of the report are based on the analysis of data from the survey of international students. Details of the survey design and procedures were outlined earlier in Section 1.3. In total, 1098 student responses out of 1501 responses received met the inclusion criteria and were included in the final analysis. This represents a final response rate of 16.7 per cent.

Key points:

- The overall picture of first-year international students' transition to higher education is positive with the large majority of international students in the study (83.9%) reporting a clear sense of purpose and motivation for study, and indicating that they frequently completed assignments on time (90.1%).
- English language ability for academic purposes does not appear to be a major concern for most students with the majority agreeing that their level of English was satisfactory for doing well in their course (75%) and for understanding what is being said in class (75.8%), and only a small proportion (less than 9%) disagreeing with these statements.
- Orientation events and activities are considered to be helpful in facilitating a 'good start' and helping them feel welcomed at their new institution; however, less than half of the students reported that they attended these events. Pathway entry students were significantly less likely than Direct entry students to attend Orientation events.
- Over a half of the international students surveyed (59%) reported that they felt a sense of belonging to their institution, with students from smaller regional universities and the TAFE institute more likely than those in large metropolitan universities to report a sense of belonging to their institution. However, building social connection with peers and feeling a sense of belonging to their institutions remain problematic for a substantial proportion (40%) of international students.
- Over a third of the international students in this study were in some kind of paid work and most participants also indicated that they rarely missed their classes because of their work commitments (74.7%) and that being employed did not negatively affect their performance at university (64%). The majority (65.6%) agreed that they have a good work/study balance; however, paid work had an effect on some students' studies and course experience.

3.1. Survey participants

Table 3.1 below shows the demographic characteristics of survey participants (see Appendix E for the number of respondents and response rates by institution). Most respondents were aged 18–24 (74.5%), with females representing 56.3 per cent and males representing 37.6 per cent of participants. From the total number of respondents, 45.3 per cent indicated that they were Direct entry from overseas students, while 54.6 per cent stated that they were Pathway entry students. Of the pathways, secondary schools and FSPs were the most common.

The majority of Direct entry (89%) and Pathway entry (88.5%) students commenced their university studies during Semesters 1 or 2 in 2019. Most Direct entry students had been in Australia for less than a year (85.6%), while the majority of Pathway entry students (87.2%) had been in Australian for over a year, including over a third (34.1%) who had been here for over two years.

Table 3.1 Demographic characteristics of respondents (N = 1098)

Demographic subgroups		<i>n</i>	%
Age	18–19 years	484	44.1
	20–24 years	333	30.3
	25 years and older	221	18.1
	<i>Did not specify</i>	60	5.5
Gender	Female	618	56.3
	Male	413	37.6
	Non-binary/fluid/queer	14	1.3
	Prefer not to answer / <i>Did not specify</i>	53	4.8
Entry pathways	Direct entry from overseas	497	45.3
	Australian Pathways:		
	Secondary school	186	16.9
	Foundation Studies Program	134	12.2
	Certificate or Diploma	86	7.8
	ELICOS (bridging program)	54	4.9
	ELICOS (not bridging program)	49	4.5
	VET/TAFE	28	2.6
	Other	56	5.1
	<i>Did not specify</i>	8	0.7
English first language	No	842	76.7
Nationality	China	342	31.1
	Malaysia	105	9.6
	India	89	8.1
	Nepal	53	4.8
	Indonesia	48	4.4
	Sri Lanka	39	3.6
	Vietnam	38	3.5
	Singapore	37	3.4
	Hong Kong	27	2.5
	Pakistan	21	1.9
	Bangladesh	14	1.3
	Philippines	12	1.1
	United States of America	10	0.9
	South Korea	10	0.9
	Other*	192	14.0
	<i>Did not specify</i>	99	9.0

* Other, not listed (1.3%); Canada, Japan (0.8%); Denmark, Colombia, Iran (0.5%); Argentina, France, Germany, Kenya, Thailand, United Kingdom, Zimbabwe (0.4%); Algeria, Antigua and Barbuda, Australia, Cambodia, Fiji, Guatemala, Italy, Mauritius, Portugal, Saudi Arabia, Sweden (0.3%); Albania, Angola, Botswana, Brazil, Brunei Darussalam, Egypt, Ghana, Maldives, Mexico, Netherlands, Norway, Russian Federation (0.2%); Afghanistan, Andorra, Armenia, Austria, Bahamas, Barbados, Bhutan, Czech Republic, Democratic People's Republic of Korea, Estonia, Hungary, Lithuania, Papua New Guinea, Saint Lucia, South Africa, Spain, Switzerland, Uganda, United Republic of Tanzania, Uzbekistan, Venezuela (0.1%).

3.2. Study motivations and early transition experiences

3.2.1. Sense of purpose and study motivations

Table 3.2 provides a summary of participants' responses to questions regarding their sense of purpose and motivation to study. Responding to a Likert scale ranging from Strongly agree (5) to Strongly disagree (1), the majority of students (83.9%) reported being clear about why they were studying in their current course and were mostly motivated to study. Additionally, an analysis of participating institutions showed that a high percentage of students (minimum of 78.4%) in all these HEIs were clear about why they were studying their current course.

Most students across both groups (Direct entry and Pathway entry) indicated that they had clear goals about what they wanted to achieve in their current course and believed that their course would be useful for achieving future goals. Of note, for both groups, international students in TAFE Institutes were significantly more likely to report having clear goals (89.9%) compared to Go8 University students (68.9%).

Table 3.2 Sense of purpose and study motivations (% of students)

		Disagree	Neutral	Agree
I am clear about why I am studying my current course	Direct entry	5.6	6.1	88.3
	Pathway entry	8.8	11	80.2
	All	7.4	8.7	83.9
I think my course will be useful for my future goals	Direct entry	3.8	10.2	86.0
	Pathway entry	3.6	12.6	83.8
	All	3.7	11.5	84.8
I have clear goals of what I want to achieve in my current course	Direct entry	6.1	13.7	80.2
	Pathway entry	8.3	16.7	75.0
	All	7.3	15.3	77.4
I am NOT really interested in the course I am studying	Direct entry	82.9	11.8	5.3
	Pathway entry	68.8	17.2	14.0
	All	75.2	14.8	10.0
I am not really motivated to study	Direct entry	70.3	14.7	15.0
	Pathway entry	58.3	20.9	20.8
	All	63.9	17.9	18.2

Likert scale: 1 (Strongly disagree) – 5 (Strongly agree)

3.2.2. Participation in orientation events and activities

Participation in orientation events and activities can improve international students' learning outcomes and engagement with the university (Mason, 2010; Wu, Garza and Guzman, 2015). Accordingly, a number of survey items asked students to indicate all the events and activities they had participated in during their orientation (see Table 3.3). The results showed that more students were likely to attend the *General orientation events/activities organised for all students* rather than events organised specifically for international students or those run by their faculties/departments or clubs/societies. This may in part be due to the timing of these events. Of note, a smaller proportion of Pathway entry students attended Orientation events and activities across all surveyed institutional contexts than their Direct entry peers. This is perhaps understandable given that Pathway entry students have had

more time to become familiar with their HEI and to settle in Australia. As mentioned earlier, over 65 per cent of Pathway entry students indicated that they had been in Australia for over a year at the time of the survey (and half of these had been here for over two years).

Table 3.3 Participation in Orientation activities (% of students)

	Direct entry from overseas	Pathway entry	All
General Orientation events/activities for all students	70.8	62.4	66.2
General Orientation events/activities specifically for international students	54.3	45.4	49.5
Faculty/Department Orientation programs/activities	43.6	33.3	37.8
Welcome events/activities organised by student clubs or societies	51.7	39.3	44.9

Having a 'good start' and feeling welcomed at Orientation

While less than a half of the respondents reported attending Orientation events for international students, or those run by faculty/department activities or student clubs/societies, of those who did attend, the vast majority reported finding them helpful in facilitating a 'good start' to their studies and helping them feel welcomed at their new institution (see Table 3.3a). Direct entry students were significantly more likely to regard these events/activities to have been helpful for securing a good start to their studies than Pathway entry students (73.4% compared to 64.4%; $p < 0.05$).

Table 3.3a Perceived usefulness of Orientation activities in helping students have a 'good start' and feel welcome (% of students)

	Not helpful		Neutral		Helpful	
	To have a good start	To feel welcome	To have a good start	To feel welcome	To have a good start	To feel welcome
General Orientation events/activities for all students (N = 719)						
Direct entry from overseas	9.5	9.4	17.1	18.3	73.4	72.3
Pathway entry	11.3	7.4	24.3	20.3	64.4	72.3
All	10.4	8.4	20.9	19.3	68.7	72.3
Orientation events/activities specifically for international students (N = 535)						
Direct entry from overseas	5.7	5.3	15.1	15.1	79.2	79.6
Pathway entry	8.8	3.6	23.8	22.2	67.4	74.2
All	7.3	4.4	19.4	18.7	73.3	76.9
Faculty/school/department Orientation programs/activities (N = 414)						
Direct entry from overseas	5.6	7.0	17.2	20.5	77.2	72.5
Pathway entry	7.6	6.5	18.7	18.6	73.7	74.9
All	6.5	6.8	17.9	19.5	75.6	73.7
Welcome events/activities organised by student clubs or societies (N = 488)						
Direct entry from overseas	4.7	3.5	20.7	14.1	74.6	82.4
Pathway entry	9.5	3.9	26.1	18.2	64.4	77.9
All	6.9	3.7	23.3	16.0	69.8	80.3

Likert scale: 1 (Never) – 3 (Frequently)

Post-Entry Language Assessment

While PELAs are increasingly offered (and sometimes required) at the start (or before) a course in many institutions, only 11.7 per cent of survey respondent reported having done a test. Of these just over a half (56.6%) found the test to be helpful to them. Pathway entry students were more likely than their Direct entry peers to indicate that taking tests was helpful (65% compared to 42.9%; $p < 0.01$), and a quarter of the Direct entry students (26.6%) indicated that the tests were not helpful. This has implications for institutions in considering how the tests are used, for what purpose, and the extent to which they are effective in achieving their objectives.

Table 3.4 Perceived usefulness of post-entry tests to assess English language skills (% of students) (N = 129)

		Not helpful	Neutral	Helpful
Tests to assess English language skills	Direct entry from overseas	26.6	30.5	42.9
	Pathway entry	6.3	28.7	65.0
	All	13.9	29.5	56.6

Likert scale: 1 (Not helpful at all) – 5 (Very helpful)

3.3. Course participation and progress

3.3.1. Participation and preparation

Students were asked about their participation and preparation for classes during the first semester of their current course. As seen in Table 3.5, the large majority of students (90.1%) reported frequently completing assignments on time although fewer than a half (43.3%) reported frequently preparing for classes. Further analysis revealed group differences between Direct and Pathway entry students. Direct entry students were more likely to complete their assignments on time (94.5% compared to 86.5% of the Pathway entry students; $p < .001$), come to class prepared (47.4% compared to 39.9% of the Pathway entry students; $p < 0.01$) and less likely to skip classes (5.9% compared to 7.6% of the Pathway entry students; $p < 0.01$).

Table 3.5 Participation and preparation at a higher education institution

	Never	Sometimes	Frequently
Completed assignments on time			
Direct entry from overseas	0.8	4.7	94.5
Pathway entry	2.0	11.5	86.5
All	1.5	8.4	90.1
Skipped class			
Direct entry from overseas	49.3	44.8	5.9
Pathway entry	40.0	52.4	7.6
All	44.2	49.0	6.8
Prepared for class (for example, by doing readings, or completing required tasks)			
Direct entry from overseas	4.5	48.1	47.4
Pathway entry	6.4	53.7	39.9
All	5.5	51.2	43.3

Likert scale: 1 (Never) – 3 (Frequently)

3.3.2. English language proficiency and understanding of academic work

As shown in Table 3.1 above, English was not the first language for the majority of survey respondents. Overall, 73.1 per cent of Direct entry, and 80.1 per cent of Pathway entry students, indicated that English was not their first language. When asked whether they thought their level of English was satisfactory for doing well in their course, three-quarters of the students reported that their level of English was satisfactory for doing well in their course (75%) and understanding what is being said in class (75.8%). Less than 9 per cent of respondents disagreed with these statements.

Table 3.6 Perceived English language ability

		Disagree	Neutral	Agree
My level of English is satisfactory to do well in my course	Direct entry from overseas	9.8	13.6	76.6
	Pathway entry	7.0	19.2	73.8
	All	8.3	16.7	75.0
My level of English is satisfactory for understanding what is being said in class	Direct entry from overseas	8.3	13.1	78.6
	Pathway entry	9.1	17.5	73.4
	All	8.7	15.5	75.8

Likert scale: 1 (Not at all) – 5 (Very much)

When asked how well they had understood their academic work so far, 75.5 per cent of Direct entry students, and 68.4 per cent of Pathway entry students, indicated that they understood their academic work either *Very well* or *Quite well* (see Figure 3.1).

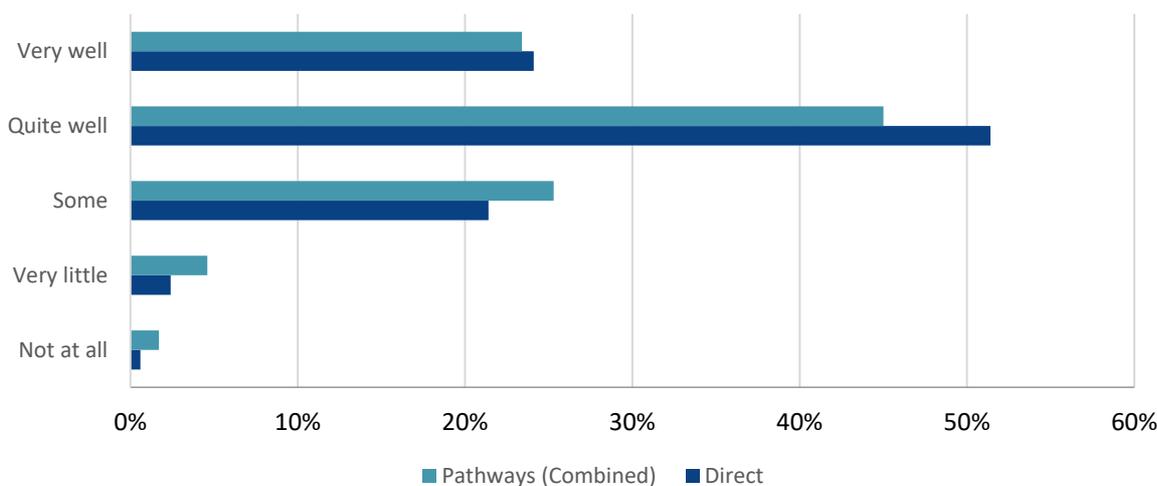


Figure 3.1 Students' perceptions of how well they have understood their academic work

3.3.3. Considering discontinuation of studies

An important indication that students' academic progress is at risk is whether they are seriously considering dropping out or discontinuing their studies. Overall, almost 20 per cent of all survey respondents had considered discontinuing their studies (see Table 3.7). A chi-square analysis revealed that Pathway entry students were slightly more likely to have seriously considered withdrawing from studies than Direct entry students ($p < 0.05$). Students were asked to

indicate their reasons for considering deferment. The most common response reported by over a third of the respondents (37.9%) was Stress, followed by Boredom/Lack of interest and Study/Life balance (28.6%).⁸

Table 3.7 Intentions to discontinue studies (% of students)

	Direct entry from overseas	Pathway entry	All
Yes	13.9	19.7	18.4
No	86.1	80.3	81.6

Table 3.7a. Reasons for seriously considering discontinuing studies (% of students considering discontinuing their studies) (N = 182)

	Direct entry from overseas	Pathway entry	All
Stress	44.1	34.2	37.9
Boredom/Lack of interest	26.5	29.8	28.6
Study/Life balance	32.4	26.3	28.6
Expectations not met	27.7	28.1	28.0
Lack of academic support	36.8	23.7	27.5
Difficulty with workload	33.8	23.7	27.5
Unclear career prospects	30.9	14.8	26.4
Difficulty paying fees	23.5	22.8	23.1
Academic exchange	11.7	25.4	20.3
Need a break	20.6	17.5	18.7
Personal reasons	17.6	19.3	18.7
Health and wellbeing	22.1	14.9	17.6
Standards too high	17.6	14.9	15.9
Change of direction	22.1	11.4	15.4
Need to do paid work	14.7	15.8	15.4
Lack of administrative support	13.2	13.2	13.2
Quality concerns	16.2	11.4	13.2
Difficulty travelling to study	11.8	11.4	11.5
Social reasons	8.8	11.4	10.4
Lack of government assistance	5.8	10.5	8.8
Family responsibilities	4.4	9.6	7.7
Travel or tourism	3.9	9.6	7.1
Institutional reputation	4.4	7.0	6.0
Received other offer	5.9	5.3	5.5
Gap year/Deferral	4.4	5.3	4.9
Moving residence	4.4	4.4	4.4

⁸ Note that students were able to select more than one response to this question to reflect that there may be multiple reasons for seriously considering dropping out.

3.4. Peer engagement and sense of belonging

Positive relationships with peers and a sense of belonging are important for student engagement, wellbeing and success (Baik et. al., 2017). Table 3.8 shows students' responses to questions about their sense of belonging and interactions with peers, on a 5-point scale (Not at all, Very little, Some, Quite a lot, Very much). More than half the respondents indicated that they had a sense of belonging to the institution (58.1% responded *Very much* or *Quite a lot*) with students from smaller regional universities (62.4%) and the TAFE institute (71.4%) more likely than those in large metropolitan universities (52.9% at Go8) to report a sense of belonging to their institution.

While a sizeable proportion of students reported that they worked with other students as part of their studies (66.7% responded *Very much* or *Quite a lot*), less than a half reported interacting regularly with students outside of study requirements (45.6%). Almost a quarter of the students reported having had very little or no opportunities to interact with domestic students (24.9%) or interact with students outside of study requirements (24.2%). These findings point to the need for institutions to improve these aspects of the international student experience.

Further analysis revealed no statistically significant difference between Direct entry and Pathway entry groups, with both cohorts' responses mirroring the *Total* sample for this survey. In addition, while there were some nuanced differences in the analysis by institutions, there were no significantly different patterns in student responses to the peer engagement items.

Table 3.8 Sense of belonging to the institution and extent of peer engagement

		Not at all / Very little	Some	Quite a lot / Very much
Had a sense of belonging to your institution	Direct entry from overseas	11.8	29.1	59.1
	Pathway entry	10.4	32.3	57.3
	All	11.0	30.9	58.1
Been given opportunities to interact with domestic students	Direct entry from overseas	27.5	27.8	44.7
	Pathway entry	22.7	30.6	46.7
	All	24.9	29.4	45.7
Worked with other students as part of your study	Direct entry from overseas	8.5	24.6	66.9
	Pathway entry	9.0	24.6	66.4
	All	8.8	24.5	66.7
Interacted with students outside study requirements	Direct entry from overseas	26.3	31.4	42.3
	Pathway entry	22.6	29.1	48.3
	All	24.2	30.2	45.6

Likert scale: 1 (Not at all) – 5 (Very much)

3.5. Impact of paid work on studies

The survey aimed to gain insights into participants' experiences with paid employment and how it might affect their work-study habits. The data showed that over a third of international students in this study were in some kind of paid work (see Table 3.9), with 31.2 per cent reporting that they worked more than 15 hours a week (see Table 3.9a). The analysis also revealed that Pathway entry students were more likely to have a part-time or casual paid job than their Direct entry peers (chi-square analysis, $p < 0.001$, 2-sided), with the spread of hours spent in paid employment also being different across both groups (chi-square analysis, $p < 0.05$; 2-sided).

Table 3.9 International students in part-time or casual paid work (% of students)

	Direct entry from overseas	Pathway entry	All
Yes	32.3	41.7	37.5
No	67.7	58.3	62.5

Table 3.9a Hours spent in paid work per week (% of international students in paid employment)

	Direct entry from overseas	Pathway entry	All
Less than 5 hours	18.4	16.1	17.0
5–9 hours	16.5	22.9	20.4
10–14 hours	35.4	28.9	31.4
15–19 hours	17.7	25.7	22.6
20 hours or more	12.0	6.4	8.6

Students were asked about the impact of paid work on their studies. As Table 3.11 shows, the majority of all participants (65.6%) agreed that they have a good work/study balance, with 12.7% disagreeing with this statement. Most participants across both groups also indicated that they rarely missed their classes because of their work commitments (74.7%) and that being employed did not negatively affect their performance at university (64%).

Table 3.10 Perceived impact of paid work on studies (% of international students in paid employment (N = 407))

		Disagree	Neutral	Agree
I have a good work/study balance	Direct entry from overseas	10.8	16.6	72.6
	Pathway entry	14.0	24.8	61.2
	All	12.7	21.7	65.6
I regularly miss classes because I need to attend paid work	Direct entry from overseas	84.0	9.6	6.4
	Pathway entry	68.8	16.7	14.5
	All	74.7	13.9	11.4
My work commitments negatively affect my performance at university	Direct entry from overseas	73.7	14.7	11.6
	Pathway entry	57.9	20.3	21.8
	All	64.0	18.2	17.8
The work I do is of little value to me except for money	Direct entry from overseas	42.9	26.0	31.1
	Pathway entry	37.9	27.9	34.2
	All	39.8	27.1	33.1

Likert scale: 1 (Strongly disagree) – 5 (Strongly agree)

Further analysis revealed Pathway entry students were more likely than their Direct entry counterparts to miss classes because of their work commitments (14.1% compared to 6.4%; $p < 0.01$), and report that their work commitments negatively affected their performance at university (21.8% compared to 11.6%; $p < 0.001$). It seems clear that paid work has an effect on some students' studies and course experience. It is not clear, however, whether those students who were not in paid employment, were seeking work and perhaps had been unsuccessful. The topic of employment is discussed further in the next section on students' perception about the factors affecting their transition and success.

4. International student perspectives on factors affecting their transition and success

This section of the report is based on the analysis of focus group interviews conducted with 201 international students across six institutions. Details of the focus group procedures were outlined earlier in Section 1.3.

Key points:

- Overall, the students who participated in the focus group interviews had positive early experiences of learning within their institutions. About two-thirds of students indicated that their tutors and lecturers were helpful and showed concern for their learning.
- Social engagement with peers in the classroom is an important factor affecting students' first-year transition. Many students reported an overall lack of cohort experience and opportunities to connect to peers in their courses.
- There are several important differences between the experiences of Direct entry and Pathway entry students. Pathway entry students on the whole reported fewer challenges than Direct entry students in the early stages of transition. While it can take months for some Direct entry students to settle in and adjust to their new learning environment, Pathway entry students reported they were already familiar with studying in Australia and felt well equipped to transition into higher education studies. Direct entry students (over two-thirds) also found it more challenging to make friends compared to Pathway entry students, who had established friendship groupings through their pathway program.
- A major factor affecting the transition and early engagement of some international students from EAL background is English language skills, particularly adjusting to the use and pace of English in their studies. Most of the concerns raised by students related to spoken interaction and oral communication skills in the learning context.
- Several important factors beyond the university such as finding safe and affordable accommodation, and securing paid work can have a strong impact on students' transition and engagement with their studies. Overall, students looked to their institutions for assistance in these areas, and generally believed their institutions could do more to support them in non-study related matters, particularly in gaining work experience.

Table 4.1 provides demographic details of the interviewed international students, as well as their current year level and entry pathway. The majority of the participants were Direct entry students, and 52 participants were Pathway entry students. Of the Pathway entry students, 24 had completed Foundation Studies. The interview participants included 42 regional university students and 24 TAFE students.

Table 4.1 Demographic characteristics of focus group participants (N = 201)

Demographic subgroups		<i>n</i>	%
Gender	Female	107	53.2
	Male	94	46.8
Entry Pathways	Direct entry from overseas	148	73.6
	Australian pathway entry programs:		
	Foundation Studies Program	25	12.4
	ELICOS	12	6.0
	Secondary school	11	5.5
	VET/TAFE	5	2.5
Year level	First year	166	82.6
	Second year	18	9.0
	Third/final year	17	8.4
Institution	Go8 University	65	32.3
	ATN University A	38	18.9
	Regional University A	22	11.0
	Regional University B	30	14.9
	IR University A	21	10.5
	TAFE institute	25	12.4
Nationality	China	49	24.4
	India	22	10.9
	Malaysia	19	9.4
	Indonesia	16	7.9
	Sri Lanka	13	6.5
	Vietnam	11	5.5
	Singapore	9	4.5
	Nepal	8	4.0
	Japan	5	2.5
	Philippines	5	2.5
	Other*	44	21.9

*Bangladesh (4); Brunei, Hong Kong, Kenya, Norway, Pakistan, Zimbabwe (3); Canada, Colombia, South Korea, Taiwan (2); Austria, Brazil, Cambodia, Fiji, Guatemala, Macau, Mexico, New Zealand, Saudi Arabia, Sweden, Tonga, Uganda, UK, USA (1).

4.1. Orientation and settling in

The majority of international students who participated in the focus group interviews reported having attended their institutions' orientation program and nearly all students who attended the orientation found it useful in terms of getting to know the university and meeting new people:

The orientation was good. It helped, because coming from a different country, making friends here would be hard. But if you do make friends in uni, it gives you motivation to go to uni, anyway, apart from studies,

just want to see your friends and when you're around study helps. (First-year Direct entry student from Bangladesh, TAFE Institute)

I think the Orientation programme in the uni is really, really helpful, because I think, just that I see, there are so many things that could be going on in the uni we can actively get involved in it. (First-year Pathway student from China, Go8 University)

In contrast to these views, about a quarter of students mentioned that the sheer volume of information presented during Orientation Week was overwhelming at times and made it difficult to understand what was important or relevant to them. Given that Orientation activities are typically held over one week and that it takes longer for students to settle in Australia and focus on their studies, some students felt that they needed further guidance and support during the early transition period.

Some international students reported that they did not attend Orientation Week, as they arrived in the country once their course had started. Students reported this kind of 'late arrival' – that is, arriving to study in Australia after Orientation Week – was a fairly common occurrence. This was often due to students receiving late notification of acceptance into their course or due to a delay in obtaining a study visa.

The tight timeframe between acceptance of offer and arrival can create difficulties for international students in settling into their new environment if they do not have established networks in Australia. This was especially the case for Direct entry students, even those who came from English-speaking countries. For example:

Upon receiving my acceptance to University X, I had three days to move to the country. So, I showed up here, and if it wasn't for my cousin I probably wouldn't have been able to show up. Because I didn't have an Australian bank account or phone number or place to live, so that was all to do everything in a day. (First-year Direct entry student from Canada, IR University A)

There was broad agreement among interview participants that while their institutions provided information and resources for international students online, it was much more useful to talk to a person. This has implications for institutions in planning their Orientation Week activities, possibly by re-running or extending core Orientation activities for international students soon after the start of semester.

4.2. Adapting to a new course and learning environment

Overall, the students who participated in the focus group interviews had positive early experiences of learning within their institutions. About two-thirds of students indicated that the tutors and lecturers were helpful and concerned about their learning. This appeared to be more so where there were smaller class sizes, such as tutorials or in the TAFE environment. For example, a student expressed what she found valuable in the TAFE compared with her study the previous year at a nearby university:

I feel learning here is much more personalised, because you are a smaller group, and lecturers will tend to get to know you, and know your strengths and your weaknesses and try to assist you, even when it comes to assessments. At [Y university], it was different. The only way you stood out is because you're a good student, or you just asked a lot of questions. But I just find here it's more focused. (First-year Direct entry student from Zimbabwe, who transferred to TAFE Institute from an Australian university)

The large majority of international students from regional universities (about four out of five) also reported feeling very supported in their learning environment. For example, a student who had previous experience studying at a metropolitan university, made the following observation about her transition experience in a regional university:

I feel like they [Regional University B] do a really good job in making students feel welcome and at home. For all my units, when I get an assignment, I make a consultation appointment with my lecturers, and they have been super helpful. So I really enjoyed all the lecturers and tutors I had this semester, so that made adjusting a whole lot easier for me. (First-year Pathway entry student from Sri Lanka, Regional University B)

4.2.1. Direct entry and Pathway entry students

The analysis of focus group data revealed that the first couple of weeks at university are challenging for most international students, but there are some differences in the early experiences of Direct entry and Pathway entry students.

The majority of Direct entry students reported they had to adjust quickly to their new learning environment. This involved knowing how to get to class, understanding the expectations around studying and assessment in their course. In addition, they also mentioned difficulties in understanding the Australian accent, and therefore unable to understand their lecturers, students and in some case, they were unable to follow what was being discussed in class. Early assessment within the first couple of weeks of commencing their studies meant that some students had very little time to adjust to their new learning environment, as illustrated by the following quote from a first-year student:

Because when I first came, I started uni on the 26th Feb, and I had my first assignment due on the 2nd March. So that was a bit stressful. I mean, even though I was an international student, I had just moved in here, and I was doing an assignment, my very first week. So I think it would've been better if our assignments were pushed back until maybe the third or fourth week. (First-year Direct entry student from Bangladesh, IR University A).

In contrast, students who entered via a pathway program tended to report fewer challenges in adapting to their higher education studies. Many of these students indicated that they were already familiar with studying in Australia and felt better equipped to transition into university. The following comment typifies the views expressed in the interviews:

The teacher-to-student ratio was better at [pathway] college, and like you had that personal interaction with your lecturer. Because at uni, a lecturer, obviously they would be helpful and all that, but they're not going to remember your name from like a cohort of 600 students, whereas in college it was smaller. So I like the fact that I started out there, so it was a little easier for me to get used to life at uni. (First-year Pathway entry student from Sri Lanka, IR University A)

I think like what they did well in foundations is because the transition from high school to uni it's a lot different because in high school you go to classes and the class is just like classes. But, in [pathway] College, they're probably just more like uni because you have lectures and you have tutorials. It's like you sort of get used to that lecture environment and tutorial environment and they get you used to asking questions to the tutors. And, because everyone there is super friendly and they're always happy to help you and that gives you a sort of active... Like, I could be asking questions to the lecturers maybe like in uni. It gets you used to doing that. (First-year Pathway entry student from Indonesia, Go8 University)

About three-quarters of the FSP students commented that certain aspects of their Foundation Program were particularly helpful for them in their higher education studies. Their comments focused mainly on developing the academic and study skills in their Foundation Program that assisted them in their university courses. For example:

It's very helpful because in college they taught us to do the essay because I've never done it in my country. Also, because I came straight from high school, and then they taught me how to do essay. (First-year Pathway entry student from Indonesia, IR University A)

In addition to feeling better prepared to study in their university courses, it seems that pathway programs are also helpful for peer engagement. For example, some Pathway entry students commented that due to their previous study experiences in Australia, they had an established friend circle:

But if you say in the social aspect, it's you have friends you've known for three or four years and I think you can form study groups. It's a lot easier than people who just came. (First-year Pathway entry student from China, Go8 University)

Importantly, while about three-quarters of students found their Foundation Programs to be helpful for their higher education studies, there were also those who mentioned that they did not find it relevant, and that it was either too easy or too different from studying at their university. These observations seem to indicate that students have different expectations of their Foundation Programs in terms of preparing them for their university studies. For example:

But in uni it's totally different. The way you're writing lab report is totally different stuff with what I learned in [Foundation Program]. And it's just not matched. And somehow I don't know how to fill the gap. It's just I don't know, it's not working. (First-year Pathway entry student from China, Go8 University)

4.2.2. English language proficiency

According to the focus group participants, a major factor affecting the transition and early engagement of international students was their ELP. In contrast to the survey results, which showed that the majority (over 75%) felt their ELP was satisfactory to do well in their courses, the issue of English language emerged as a concern for about three-quarters of the students who had EAL. Most of the concerns were about the limited opportunities for oral communication within the learning context, rather than written English for academic purposes. Some students indicated that they lacked confidence in their ability to speak English rather than the issue being their level of English proficiency itself.

The interviews were peppered with stories about the difficulties students encountered due to their English language ability. It seems that some international students often took it upon themselves to help their peers who appeared to be struggling with English, as illustrated in the following two quotes:

I have to say that I've noticed that a lot [of] my peers have struggled with the English language. I was in an interview session with the students and the teacher for a project that we're doing. At the end of it, I had a friend who came up and she told us in Mandarin, "Do you have any idea what he spent the last five minutes going on about, because I have no idea?" But he [the tutor] was giving us feedback on our work. So it was actually pretty important that she knew what he was talking about. So we translated everything for her to Mandarin. I think that happens pretty frequently. (First-year Direct entry student from Indonesia, Go8 University).

I have a friend who also experienced that kind of language barrier and it was pretty severe for her. She would be really quiet in class just because she can't really interact. And after a class I would have to really talk about what we discussed to her, because she was really shy about not being able to speak English fluently. And she also had difficulties understanding discussions. (Second-year Direct entry student from Singapore, Go8 University)

Despite students' concerns about their ELP, importantly, where institutions offered programs to support the development of students' oral communication skills such as 'conversation cafes', peer study groups, or programs facilitating social interactions with local communities, those who participated found them to be very useful. Good practice examples of such programs are presented in Section 5.6 of this report.

4.2.3. Connecting with other students in learning

An important factor affecting first-year students' transition and engagement in their course is peer interaction and connections. About two-thirds of the interviewed students commented on the difficulties associated in connecting and with working with their peers in their learning environment. The main comments from the students focused on study groups. Some international students were proactive in seeking to join study groups in their tutorials, and while some were successful, others found it difficult to be accepted as a study partner by other students. A third of the EAL students indicated that they chose to study alone rather than seek to be part of a study group. The following comment typifies the challenges students face:

Everyone I know who is an international student in that class always feels like that they shouldn't join into the study group. They always have to study independently. I think that's just sad. You don't feel

comfortable, because no one else is joining the study groups. So they just feel like they shouldn't. (Direct entry student from Brunei, Go8 University)

Many students indicated the curriculum structure, where subjects change from semester to semester, made it difficult to establish friendships in class. For example:

But here, you've got to build your own friend zone. They say you can only meet people in the tutorial or lecture. But you can only meet them maybe once a week. (Second-year Direct entry student from China, Go8 University)

The findings support other research which has highlighted the difficulties international students face in connecting with other students in their learning environment.

4.3. Living in Australia

The focus group interviews revealed that several important factors outside of the university can have a strong impact on students' transition and engagement with their studies. Many of the difficulties that Direct entry students encountered related to their living situations that took attention away from their studies.

The students commented on a number of challenges related to living in Australia. These included some difficulties in finding accommodation and part-time work, as well as establishing friendships. Direct entry students who did not have any friends or family in Australia reported that it was difficult for them to settle into their studies without first finding suitable accommodation in Australia. This was the case for students in both regional and metropolitan universities.

4.3.1. Accommodation

Having affordable, comfortable and safe accommodation is one of the most important aspects of their experience in Australia for nearly all the students who participated in the study. For Direct entry students, accommodation seemed to be an important first step towards their successful transition into their studies, as highlighted in the following quote:

So, for example, I mentioned housing is the key thing, because without having a kind of decent place to stay, you cannot really focus at all. I wanted to buy a table, a chair in order to start studying, but I know that particular room is not my room for the next two years. I just cannot decide on what kind of size or facilities I should buy to furnish that thing. And without that happening, I just cannot start studying. So, housing is very important. (First-year Direct entry student from Vietnam, Regional University B)

About three-quarters of the Direct entry students who did not know anyone in Australia prior to their arrival reported that one of the main factors influencing their transition involved finding suitable accommodation. For some of these students, financial concerns meant that they found cheaper accommodation that was not close to their institution and required at least one hour of travel each way. This was the case when the institution was based in a large metropolitan city. Their financial concerns were further compounded if student travel concessions were not available to international students.

Over half of the interviewed students commented that they experienced difficulty in finding suitable accommodation as they did not understand the application and inspection processes. In addition, international students often do not have a proof of lease history and finances that are important to secure accommodation, particularly in large metropolitan cities. While universities provide information on where and how to find accommodation, many students indicated that this information is quite generic, and leaves it up to individual students to find a place to stay.

I think it would've been really helpful if we had more help through university about accommodation and stuff, because it was a bit tough looking for accommodation at first, because all they have provided was just a few details about university accommodation and Flatmates.com. So it wasn't as easy, because it's not like we can go inspect the place beforehand; you're flying straight in. So I think it'll be good if we could get more help on accommodation and stuff. (Second-year Direct entry student from Sri Lanka, IR University A)

About one in five international students in the study found their accommodation through connecting with other students from their home country who were already studying in Australia. This was usually done through various social media sites like Facebook or WhatsApp groups.

4.3.2. Work

Having opportunities to gain work experience and finding paid work were considered to be very important by the majority of students interviewed. Over three-quarters of the students commented on the importance of employment for their future and were aware that they needed to seek employment.

Some students (about one in four) indicated that it was critical for them to find employment to support themselves. Students reported that it was particularly hard to find the first job and found it difficult to know what they could do to secure a part-time position. Of those students who were able to find a job about a quarter gained employment through family or friends. Students mentioned that it was especially difficult to find 'the first job' because they lacked work experience:

I'm looking for a lot of jobs. And the thing is, back home, we're not required, or it's like, not culture, I don't know what they call it, but we don't really work when we are in school, but the norm here is that they start working when they're 14. So your competition is people that have years of retail experience or experience in something. And then you come here with no experience at all, and it is so much harder to find part-time jobs. But I'm still trying. I've been here for more than a year; I'm still trying to get a part-time job. I would like one, yes. (First-year Pathway entry student from Sri Lanka, IR University A)

It's really hard to find a job here as an international student. Last semester it took me a good three months before anyone got back to me. (First-year Direct entry student from Singapore, Go8 University)

Some international students who were actively searching for a job expressed disappointment with the opportunities to find employment within their own institution.

Even university, I was hoping jobs in this university would be easier, but you know, I mean I don't want to sound negative, but it seems like even they don't hire international students sometimes. And I thought this [University] would be the one place that actually did. (First-year Direct entry student from Singapore, Go8 University)

I hope it's possible that they [university] could provide more job opportunities for international students. (Second-year Direct entry student from China, Go8 University)

4.3.3. Social connections

Social engagement outside of classroom was perceived by the international students as one of the factors affecting their transition to university life in Australia. All international students involved in the study indicated that they had established a group of friends at the time of the interview. Over 80 per cent of the students interviewed had formed friendships with students from the same cultural and linguistic background, and over three-quarters indicated that they had made friends with international students from other backgrounds. Many students reported finding comfort in befriending international students from a similar background to them. This was particularly so for Direct entry students, with over three-quarters reporting making friends from similar cultural and linguistic backgrounds. This was the case both for students who had English as a first language and EAL students.

Most of the friendships were formed through clubs, associations or engaging in volunteering on campus. In the institutions that did not have organised activities, students commented that they found it difficult to connect with other students.

We are not connected with the other people. They should do some games or socialising things so we can have some good friends and stuff and we can understand their culture and learn new things as well.
(First-year Pathway entry student from Taiwan, TAFE Institute)

About a third of interviewed students mentioned that it took some time to make friends and required them to get out of their comfort zone. Students for whom making friends was not an issue mentioned that they knew other international students who struggled to socially engage with their peers. Some students found it challenging to make friends based on their English language skills, combined with low self confidence in communicating with domestic students and study loads that seemed to affect their ability to participate in social activities. This combination of factors may contribute to students feeling isolated.

Because humans are social beings, and they need to be socialised. ... The harm of being isolated: The brain will feel hurt. You see, it's actual pain, so like very important to make friends and support each other. (First-year Direct entry student from China, Go8 University)

As with previous studies, this study found that social interaction between domestic and international students continues to be challenging for international students, and this is not simply an 'international student issue', as expressed by some students in the study. For example:

So, I found that when I'm interacting with local students, once they hear that I'm an international student, they tend to think that I'm really privileged. And sort of, yes, it doesn't give a very positive connotation in a way. (First-year Direct entry student from Fiji, Regional University A)

These findings suggest that more needs to be done to break down some of the barriers between domestic and international students, as pointed out in other recent studies (for example, Arkoudis et. al., 2018; Marangell et. al., 2018).

Perhaps the school can provide international students with more opportunity to communicate or connect with the domestic ones. And also build more workshops like teaching us how to speak Aussie more often. Because I only know there's only one workshop, probably one time in this semester and that's all. And I really want to learn Aussie English so I can speak with my domestic friends, more fluently and more friendly. (First-year Pathway entry student from Taiwan, Go8 University)

4.4. Differences across institutions

Most of the identified factors affecting students' transition and success are common across institutional contexts; however, there were differences in the accounts of students broadly based on whether they were studying in large metropolitan universities, smaller regional universities or a TAFE institute.

TAFE

Many of the TAFE students in the study reported that while they initially chose to study at a TAFE institute because the tuition fees were lower compared to university fees, and the small class sizes and the support received from lecturers resulted in personalised learning experiences that allowed them to successfully transition into their studies. Students who had moved from metropolitan universities to TAFE emphasised the differences in their learning experience in terms of the individual support by academics in the TAFE institution when compared to their previous learning experiences, as illustrated by the following quotes:

I love the experience here. I've been in one university...at [TAFE institution] I feel like they're tutoring me personally, instead of being a lecturer, which is really nice. And they care about deadlines, remind me about deadlines. I mean, they won't let me forget if I have a deadline... which is really nice, given how busy life is and everything. And yes, the experience is good. (First-year Direct entry student from Bangladesh, who transferred to TAFE Institute from an Australian university)

I feel that the teacher is very kind. We have a small class, so it's easy to communicate. When I was in England, it was a huge class. So, if we had a question, I can't ask the teacher. But here, the teacher always asks me, do you really understand? And they ask the international students, does this make sense for you? They try to communicate to us. So, if I have some difficulty, I can ask them and they solve it. So, it's very helpful for me. (Direct entry from studying in England; first-year student from Japan)

Regional universities

Similar to many of those who studied in the TAFE institute, over half of the students in the regional universities reported that they chose to study at a regional university due to the lower fee structure (compared to many metropolitan universities). Some also mentioned better possibilities to gain permanent residency. Other students (just under half) chose to study in a regional university due to the course options and their preference to live in a quiet location.

The majority of the students indicated that they felt supported within their university as it was clear to them where they could go to seek advice, if they had any questions. The regional universities involved in the study made attendance at orientation sessions compulsory to ensure that students gained the necessary information as they transitioned into their studies, and they had a one-stop information centre that provided course advice, academic skills development, counselling, legal advice, accommodation advice and employment support. Student interviewees on the whole felt well supported by their institutions:

So when I came here [regional university], I was really homesick, like the minute I stepped out of the airport, for me I wanted to go back home. But I think for me what helped a lot was because the university had so much support and they made me feel a part of home. (First-year Pathway entry student from Sri Lanka, Regional University B)

Most (two-thirds) of the international students in regional universities commented that they their lecturers and tutors were supportive and interested in their learning:

I think the most helpful things I received here is the teachers here and lecturers are very friendly. I talked before that the information systems is quite hard for me because I haven't learned it before in China. But the lecturer is really warm and friendly. Once he finishes in the class, he will always come to me and talk to me, like do you understand? I say, not and he will always do it for me again. (Second-year Direct entry student from China, Regional University A)

I think with the University, you don't really have to be worried because they're (teachers) with you

every step of the way here. I was terrified initially but they've been so helpful with everything. I don't think our students coming here should be worried at all. (First-year Pathway entry students from Sri Lanka, Regional University B)

Metropolitan universities

The majority of students in metropolitan universities indicated that they chose to study at their university due to the status/ranking of the institution and to live in a major metropolitan city. Many of the students highlighted the importance of clubs and societies in facilitating friendships and increasing their sense of belonging to their institutions.

In contrast to students in smaller institutes (regional universities, TAFE) some students commented on the difficulties of navigating the support services in large metropolitan universities. Many were not aware of the services available or how to access them if there was no visible central point where international students could go for advice and support. Students in one university that had a highly visible support centre mentioned how valuable these services had been to their transition and study experiences:

Go one place, hub, for absolutely anything and everything that you have with regards to the university... And the Medical Hub at [university], they opened very recently, so that's a support service that they have. And I think that's the nicest thing that they have done so far, because there wasn't any medical services... on campus, or where I just walk in and not have to bother with any fee payments because doctors are quite expensive when you kind of think about it. And from an international student's perspective, this is good for us. (First-year Direct entry student from India, ATN University A)

5. University support programs and services for international students

This section of the report discusses international students' use and perceptions of university support programs and services. To do this, it synthesises the findings from three strands of research activity: a desktop audit and follow-up consultations with institutional staff; the survey of first-year international students; and focus group interviews with over 200 international students.⁹

Key points:

- Universities offer a range of programs and activities to support international students with the most common programs being those related to academic skills or English language support, particularly for written assessment tasks.
- While the majority of international students do not appear to use the range of university services offered, overall those who accessed the services are generally very positive about the usefulness of the university services and resources.
- In general, students expect support that is related to their study area, and 'just-in-time' personalised support, preferably facilitated by senior peers from their course.
- Many universities use an array of online resources and support; however, many students do not refer to the online resources available on their institutions' website and some struggle to navigate the online information.
- There is a strong preference for face-to-face support rather than online, with the only exception mentioned by students being 'Studiosity'; a service that provides one-to-one, personalised help feedback on assignments within 24 hours.
- Students cited counselling services as an important support during their transition to living and studying in Australia; however, some perceived counselling as being hard to access when they critically needed it.
- There is a need for a holistic approach to supporting international students' transition and success in the first year, and there are 'good practice' examples of institution-wide support programs and services that could be adopted in other institutions to better support international students' transition and success.

5.1. Types of institutional support programs and activities for international students

The project team conducted desktop research to review university-wide programs and activities to support international students. The websites of 39 universities were reviewed and relevant staff responsible for the institutional programs were contacted for more information about their programs/supports. They were asked about the international students' participation in these programs, or use of services, and information about how the effectiveness of these programs/services are evaluated.

⁹ International students' use and perceptions of services and supports and their role in enhancing the student experience in Australia was previously investigated by Australian Education International through a series of student focus groups (see Lawson., 2012). Many of the results from that study conducted in 2011 are supported by findings from the current study reported here.

The supports and services offered by universities can be grouped into three broad, and at times overlapping categories:

- Academic/Study Skills
- English Language Support
- University Transition.

These were typically delivered by specialised bodies/centres within or associated with universities such as Student Services Units, Academic Skills Units, Language and Learning Skills Units, university libraries, and English Language Centres.

A typology of these supports and services is presented below in Table 5.1. The first column (coloured blue) identifies the broad support and service category; the second column lists the specific support and service; the third column provides a description of the support and service; and the last two columns detail the number of universities offering that type of support/service and the delivery method. The delivery methods used by universities took the form of:

- *Online* links and platforms that provided students with access to relevant policies, information, examples, tutorials, blogs, and/or videos.
- *Staffed sessions* that enabled students to acquire information in-person, participate in tutorials/group workshops/lectures/seminars, or seek one-on-one assistance.
- *Peer sessions* that offered first-year students peer-facilitated or peer-led sessions that addressed various study-related issues or initiatives.
- Any combination of these delivery methods.

Table 5.1 Types of university-wide support programs and activities for international students

Support and Service	Description	Number of universities	Delivery methods
Referencing	Provides standards (e.g. APA, Harvard, etc), best practices, errors and other issues relating to referencing.	All	All offer online programs/resources with most (28) also offering staff-facilitated programs, and 1 peer-facilitated program.
Plagiarism	Outlines academic misconduct, academic standards, best practices, errors and other issues relating to plagiarism.	All	All offer online programs/resources with many (17) also offering staff-facilitated programs, and 1 peer-facilitated program.
Preparing for assignments/tests/exams	Assists students with a range of university assessment tasks.	All	All offer online programs/resources with many (16) also offering staff-facilitated sessions, and 1 peer-facilitated program.
Time management	Provides students with practical methods to manage study commitments, personal and social activities, increase motivation and resilience, and address personal challenges.	33	All 33 are online with many (22) also offering staff-facilitated programs, and 2 peer-facilitated programs.
Reading and note-taking	Educates students on how to information gather.	31	These are predominately online (29) with most (23) also offering staff-facilitated sessions.
Critical thinking	Provides students with the ability to negotiate and present the value of their study-related materials.	23	Most are online (22) with many (12) also offering staff-facilitated sessions.
Academic culture and expectations	Assists students with adapting to new academic settings, contexts and standards.	19	Most are online (17) with many (11) also offering staff-facilitated sessions.
Group work	Highlights expectations regarding group work, problem-solving, and successful team engagement.	19	All offer online programs/resources with 2 also offering staff-facilitated sessions, and 1 staff and peer-facilitated program.
Class participation	Enables students to understand university expectations regarding their engagement in the classroom.	10	All offer online programs/resources with 3 offering staff-facilitated sessions, and 1 staff and peer-facilitated program.

Academic/Study Skills

	Support and Service	Description	Number of universities	Delivery methods
English Language Support	Writing	Assists students with the various styles, components and processes associated with academic writing.	33	Most are staff-facilitated programs supported by online resources (26) with some also offering peer-facilitated sessions (6). Some offer online resources (5) or staffed sessions (2) only.
	Grammar	Provides assistance with written expression.	33	Predominantly staff facilitated sessions supported by online resources (21) with some also offering peer-facilitated sessions (6). Some offer only staff-facilitated sessions (3) or online resources (9).
	Oral presentations	Assists students with public speaking.	24	All are online with many also offering staff-facilitated (18) and some peer-facilitated (4) programs.
	Conversational English	Courses that enable students to improve their ability to communicate in English informally and interpersonally.	19	Mostly peer or staff-facilitated programs supported by online resources (13). Some offer online resources (2), peer- (2) or staff- (4) facilitated sessions only.
	Professional language	Courses that enable students to improve their ability to communicate in English professionally and interpersonally.	8	Staff-facilitated (8) and peer-facilitated (2) sessions supported by online resources (6).
	Formal unit/subject	A prerequisite unit/subject that develops students' English language skills.	4	Staff-facilitated units/subjects (4).
Social-Cultural Transition	Pre-arrival support	Access to a range of pre-arrival issues; e.g. student visas, education agent contacts, CoE, accommodation, banking, airport arrival and pick-up, enrolment processes, subject selection and points-of-contact.	All	Mostly offer both online resources and staff-facilitated sessions (21) and many offer resources only (18).
	Australia – Living in/Culture	Outlines the attributes of living and studying in Australia, and/or the region, city and campus where the student will be located.	26	Predominately online (24) with most (13) also offering staff-facilitated sessions. Some also offer peer-facilitated sessions (2).
	Mentoring programs	Links newly arrived international students with university vetted mentors in the form of senior domestic students, senior international students and/or university alumni.	26	All are peer-facilitated (26) with some also providing online resources and staff support (6).
	Social programs/activities	Offers a range of social groups and activities that can be accessed during Orientation or over the course of the academic year; e.g. sporting, cultural, LGBTIQ+, and other special interest groups.	25	Mostly peer-facilitated (20) with some also offering staff-facilitated sessions (5).

5.2. Students' use of services and supports

In the survey of first-year international students conducted for this study, students were asked to select as many relevant student supports and services that they had accessed over the course of their current studies (see Table 5.2). The five most commonly used supports and services were Course planning, International student services, Academic skills unit, Employment and careers assistance and English language workshops/tutorials. Notably, all the supports and services commonly offered by universities, such as Academic skills or English language support, had been accessed by a small proportion of survey respondents.

A further inspection of how frequently Direct entry and Pathway entry students used these supports and services reveals that the following were similarly accessed: Academic skills units, English language workshops/tutorials, Counselling, and Housing services. While Course planning was sought after more by Pathway entry students, International student services and Employment and careers assistance were accessed more by Direct entry students.

Table 5.2 Students' use of university supports and services (% of students)

	All (N = 1098)	Direct entry (N = 497)	Pathway entry (N = 601)
Course planning	38.9	36.0	41.3
International student services	37.4	43.7	32.3
Academic skills unit	35.1	36.2	34.1
Employment and careers	21.4	25.2	18.3
English language workshops/tutorials	19.7	18.9	20.3
Counselling	16.9	17.3	16.6
Housing services	6.7	8.5	5.3

Students were asked to evaluate the usefulness of specific university services and resources. The analysis revealed no significant differences between Direct entry students and Pathway entry students in terms of their evaluations and typically responded that all surveyed services and resources were (on average) 'Moderately useful' or 'Very useful' (see Appendix F).

Students were also asked about their information needs and help-seeking preferences (see Appendix G). Over half the students (59.6%) indicated that they have as much information as they might need about the resources/services available for international students at their university/institution, and 11.2 per cent disagreed that they had sufficient information (29.2% of the responses were 'neutral'). Almost three-quarters of the students reported that they felt comfortable asking for help/advice from peers (74.3%) and staff (70.1%) at their university/institution. There were no significant differences between the responses of Direct entry and Pathway entry groups for survey items in this category; however, there were some noticeable differences across institutional contexts.

A significantly smaller proportion of students from a small regional university (30.1%) and a TAFE institute (35%) reported lacking information compared to students in large metropolitan universities (for example, 53.8% of respondents from a Go8 university and 42% from a large ATN University). When asked if they knew where to go to find academic support and course advice, however, the majority of students (75.9% and 79.4% respectively) indicated that they did and less than 10 per cent disagreed with these statements.

5.3. Expectations of support

When asked about the usefulness of the support services and programs in focus group interviews, students overall echoed the results from the survey. While most international students involved in the study expressed satisfaction regarding the support services provided by their institutions, about a third of students indicated that the support services were too general and lacked the specific information that the students are after. Typical responses are

captured in the two quotes below. These emphasise the tensions between generic support and disciplinary-specific programs:

So what they [Academic Skills Unit] usually do is not really academic focused. I would rather just prefer to go to the faculty, maybe the tutor or the lecturer's consultations. To have my questions maybe more focused to be solved, rather than just getting some general advice. (First-year Pathway entry student from China, Go8 University)

What I think would be helpful from the university but I don't really know if it would be possible... but just someone you can talk to for advice or something for our specific schools. For example, law and then health and then social, I don't know what. And I don't know psychology, just someone for each specific school, each area from [IR University]. ... I think that would be really helpful, because most of the time international advisers are helpful but they don't really know specifically into your course. (First-year Direct entry student from Brazil, IR University A)

Face-to-face versus online support

The typology of the supports and services presented in Table 5.1. shows that many universities rely on online resources to assist students. However, only a small number of international students interviewed (about 15) mentioned that they referred to the online resources that were available on the website of their institution. Most students indicated that they struggled to navigate the online resources and in many cases the information and the process to access relevant information were not clear. Almost all interviewed students emphasised the importance of having a place to go to or people to approach for help, rather than using online resources available on their institutions' websites. This was the case for both English speaking and EAL international students:

It's a maze to try and figure out these services. Things are available whether to domestic or international students. I don't know them, don't know where to find them. It's hard to navigate a lot of the things, so even coming from a different country that also speaks English. It's a big hurdle. (First-year Direct entry student from Canada, IR university A)

I would say it's helpful for me [talking to librarians or learning specialists] as the beginning in term I'm very new to the whole academic system and kind of how to navigate online. Because the university website is big myriad... So, it saves a lot of time for me, rather than figuring myself. And because I'm so new I don't have lots of friends to ask. (First-year Direct entry student from Vietnam, Regional University B)

The only exception to students' preference for face-to-face rather online support was 'Studiosity', an online service that offers one-to-one, personal help in real time and feedback on assignments within 24 hours.

Well, the teachers are really helpful, but there's also services, like Studiosity, that just like, if we have any problem with an assignment, we can just send it to them. They'll just review it, give us like pointers, so that's good. (First-year student Direct entry from Nepal, TAFE Institute)

Studiosity and they're offering it and you can talk to somebody 24 hours about each subject or something. (First-year Direct entry student from Saudi Arabia, Regional University A)

Visible and just-in-time support

The analysis of focus group interviews showed that students in institutions that had a designated international student office or a student hub that housed all the services in one area, reported feeling well supported and clear about where to go to receive the assistance they needed, as illustrated in the following quote:

The International Office is more for organisational, enrolment, payments and all of that. And you can ask about everything if you don't feel comfortable to share in the class ... They support you with everything. (First-year Direct entry student from China, TAFE Institute)

The analysis also highlighted students' preference for just-in-time support. Students largely agreed that what they found useful in their first year was 'just-in-time' support. While students mentioned that scheduled workshops were generally useful, they tended to prefer to drop in at the library where there could receive support specific to their assignment or a problem. For example:

Yes, in the library you can just drop in. I'm not sure what it's called but there are students who help you out, plan your assignments and plan your studies and all of that. And you don't have to make an appointment beforehand. You can just go as soon as you get your assignments which is really helpful. (First-year Direct entry student from Sri Lanka, Regional University B)

Students indicated that they wanted to have someone to go to when they require particular support, but were frustrated or gave up when they felt they had to wait a long time, as illustrated in the following quote by a first-year student:

Look, I had a friend who tried to get help with her English and it took three or four weeks for anyone to get back to her. She messaged me and she's like just get it back to her right then. So what's the point of asking the academic skills unit if they're not going to be able to help you in time? Yes, it's like, the support, they say it's there. They tell you all the time it's there, but you go and try and get it and it's just not there. (First-year Direct entry student from Singapore, Go8 University)

Peer-assisted learning

A particularly helpful program mentioned by numerous students was the PASS program, which appears to be very important in supporting international students in their first year of study. Those interviewed mentioned that their involvement in the PASS programs had assisted them in their learning, making friends and feeling connected to their institution:

What PASS sessions are, they just reinforce actually learning so you motivate yourself to learn, but it also is in a team environment. So as international students, we don't have any high school friends, or any friends truly, so when we do come in those sessions, it was really nice to see and get to speak with other members. Because during lectures you can't really do that. (First-year Direct entry student from Canada, IR University A)

Actually, I go to, seems like every kind of PASS event or tutorials, like that. Because I think that it's very helpful for me as a first-year student. So, the peer students who teach the unit are very friendly and they help us whenever they can. So, I think my final result, like, my result from the last semester was really good, that I think the reason is from the PASS session. Because for some subjects, lecturer cannot clear, explain or we cannot really understand the way that the lecturer is teaching. So, another person can help us in that. It's a very good thing. (First-year Direct entry student from Malaysia, Regional University B)

Many students emphasised that peer learning programs provided them an opportunity to study in a more relaxed environment where they felt comfortable to ask questions and raise concerns. Given that in some cultures it is not common to approach teachers with questions, having students as mentors takes this pressure off international students. Students also commented that senior students could understand them better:

They are elders. They have done what course you have done already here. They may have the same doubts. They may have the same questions what we are actually undergoing. I just can... You'll have that comfortness to pop the questions out, rather than as raising your hand in the whole crowd in the lecture hall, and it's been recorded. My question would be silly, but it's still heard by everyone. So, I find you have that kind of comfortness to ask them and get clarified. (First-year Direct entry student from India, IR University A)

The importance of the peer learning was equally emphasised by more senior international students which demonstrates the value of peer learning beyond the first year. This is summarised in the following quote from a second-year student:

For me, the main thing is probably X-program, which is the student mentor thing. That's the main thing that's part of my university and the students, where you know when we have questions right before

exams or just throughout the semester. Rather than going to a teacher where they might not really relate to our questions, the student one really helps a lot. (Second-year Direct entry student from Malaysia, ATN University A)

Unrelated to formal PASS programs, it appears that some international students rely on their peers in class for the learning support that may not be readily available elsewhere when they require it. The following quote is from an international student from Singapore who had completed most of his secondary education in the USA:

I think the only thing I can really say is that when native Chinese speakers don't speak English in my classes, they don't speak English as well as perhaps a native speaker, they come to people like me, not the support services, and ask for help. And that's a problem. Like, as much as I'm willing to help, people who speak English and Chinese like me are willing to help, we can't do that, you know, we have our own reading to do. We want to help all of them, but there needs to be a support service specifically for this. We can't just bunch them in with ESL writing skills or academic skills unit, it's not the same thing. It's the basic comprehension of the context that's going on, not just a writing skill issue I think. And I mean, it's telling that they would turn to friends of bilingual ability, rather than the school. (First-year Direct entry student from Singapore, Go8 University)

The informal networks developed by international students to support their learning highlight the importance that they place on just-in-time support. It also raises questions about the demands that may be placed on other students whose advice is being sought, as indicated in the comment above.

5.4. Student wellbeing

Contrary to the assumption often made that international students are reluctant to seek help from counselling services, findings from the focus groups revealed that students were aware of the counselling services and saw this as a place to seek help. More than a third of interviewed students mentioned that they either used, considered using, or were aware of counselling services in their institution. Students found counselling services particularly helpful in their transition in the first year of their studies, as illustrated in the following quotes:

I have used counselling here before, because I think coming here at a very young age takes a lot of mental strength and resilience. So, I went to counselling and it's free so it's good. (Second-year Direct entry student from Brunei, Regional University A)

In general, I've done counselling but just once ...I came from another country and then transferring here to study was a rough start. I have to transition myself... also how I communicate with other people, how I present myself. That counselling helped me to build up myself in this place or situation. (First-year Direct entry student from Philippines, TAFE Institute)

Counselling was one of the great things... Previously I did have a bit of a struggle with my mental health a bit, so some recommendations from my accommodation who actually recommended me to go to counselling and try, see how it goes. And yes, in the end it was really, really good. I have a really great time talking about my struggles and also to really move past that forward where I could just be a sense of yes, it's going okay. (Second-year Direct entry student from Malaysia, Regional University B)

Some students raised concerns that counselling services were difficult to access in critical times when they needed immediate support. Counselling services usually required an appointment and were booked out or had a long waiting time. The following student voiced concerns that were also raised by other students across various higher education institutions participating in this study:

The university also provides help to students who have depression and mental health problem but it's really hard to book them .. so I just think i just cannot find the place to deal with my mental health problem... I have to make an appointment and they only have a really limited appointments choice. And probably emotion problem like depression is the most challenging thing for me. (First-year Pathway entry student from China, ATN University A)

Student wellbeing is one of the critical factors affecting students' success in their first year. With growing awareness among students about the importance of mental health, the demand for the counselling services is growing. This was also pointed out in the consultations with the representatives from the student support services in the universities across Australia. Consultations and focus groups interviews revealed that HEIs are challenged by this growing demand and are not always able to provide timely support to international students.

5.5. A framework for the holistic support of international students in the first year

The analyses of findings from the project's five strands of research activity including consultations with stakeholders and institutional staff, highlight the need for a holistic approach to supporting international students' transition and success in the first year. Figure 5.1 below presents a *Framework for the holistic support of international students' transition and success in the first year*. The six key elements or approaches are based on the analysis of findings from the focus group interviews with students, as well as desktop research of institutional supports and services in 39 universities, and consultations with numerous staff across multiple institutions.



Figure 5.1 Framework for the holistic support of international students' transition and success in the first year

Settling in and orientation

The focus group interviews revealed that the period from students' arrival to Australia to the start of their course is very important as it is during this time that many students settle into a new living environment. When asked what recommendations they would make to new students, one of the most common recommendations was to arrive early to allow time for students to familiarise themselves with a new place and arrange accommodation and basic living

necessities. Having safe and affordable accommodation, a phone, a bank account and access to transportation are important pre-conditions for students' successful transition into their studies.

The second key stage of students' transition into higher education studies is familiarisation with the new learning environment. While universities appear to concentrate much of their efforts and resources on the Orientation activities, the focus group interviews and consultations with student representatives revealed some major limitations with some current orientation programs, such as information overload or lack of information sessions offered after Orientation Week.

While students were aware that their institutions provided information and resources online, there was broad agreement among focus group participants that it was much more useful to talk to a person, rather than source information online. This has implications for institutions in planning their Orientation Week activities, possibly by re-running or extending core Orientation activities for international students soon after the start of semester. It also has implications for how universities design online resources to provide useful and easy-to-find information to support students' early transition. It is important for students to have access to clear information about supports and services from the start of their course, and throughout the year, so they know where to go for support when needed.

Ongoing support in the first year

Upon settling in and orienting themselves with their new learning environment, students' ongoing support needs are varied during the first year. A number of staff consulted for the project noted that there is a lack of coordination among different areas/units in an institution in relation to the various programs and supports for international students taking place across the institution as well as the broader community.

This study highlights six dimensions of institutional support that are important to the engagement and course experience of international students in the first year:

- encouraging English language development for learning and social interaction
- providing just-in-time academic support
- facilitating peer-based learning
- fostering social connections and belonging
- supporting student employability and work opportunities
- promoting health and wellbeing.

The next section presents 'good practice' examples of university-wide supports and resources for international students that align with one or more of the dimensions in the framework.

5.6. Good practice examples

As mentioned earlier, Australian HEIs offer a range of support programs and services for international students. From the focus group interviews and consultations with various staff responsible for coordinating and delivering programs and services for international students, eight good practice examples have been identified and are presented below.

5.6.1. Orientation and early transition support



Student-designed orientation and early transition resources 'UniSA Ready' (University of South Australia)

The UniSA Ready site is a Moodle platform filled with useful resources to help new students prepare for their time with UniSA. UniSA Ready is made up of two sections:

- Get Started – open to students prior to O Week (Explore UniSA / Find your balance / Prepare for university)
- Review and Prepare – open to students on the Friday of O Week (Orientation essentials / Make connections / Your first 6 weeks)

UniSA Ready was a 10-month student-led project. The Student Engagement Unit recruited two student leaders on casual contracts to project manage the resource development. They ran focus groups with about 100 students across the university to get information about ‘What I wish I had known when I started at UniSA’. Based on the feedback received in the focus groups, the student leaders created a list of resources to be developed.

Some of these resources already existed and new resources were developed by staff and students. Videos were created by students featuring students talking about aspects of their life at university. Overall, 15 students were engaged in producing the videos. Students received gift vouchers for their contributions and those students studying media who did the filming were paid. A staff member with experience in Moodle then created the site in which the online resources would sit. Staff and students worked together to structure the site into modules, which were revised for 2019.

Information about UniSA Ready is incorporated in the orientation communications to new students and disseminated in collaboration with International Office’s communication team. Students are also sent a reminder about UniSA Ready after O Week.

In the Review and Prepare section, there is a module called ‘Your first 6 weeks’. The topics covered each week mirror the emails communications UniMentors send out to their mentees each week. The UniMentors also refer students back to UniSA Ready.

Evaluation

UniSA Ready was piloted in 2018 with 3500 students registered (10% overall including 25% international). Based on the evaluation survey, students who participate in UniSA Ready found the online resources clear and informative. Students also reported that they ‘found everything they needed to prepare for the first few weeks at Uni’ and felt connected to the university.

Student-facilitated orientation and transition advice ‘Blue T-shirts: Ask me’ student guides (University of Newcastle)

At the University of Newcastle students know to look out for people in Blue T-shirts if they have a question or a problem. During Orientation Week and into the first semester staff and students roam the campuses in bright sky-blue T-shirts with ‘Ask Me’ on the back. These are Student Central staff and a mix of student volunteers and students hired as Orientation Assistants who also have other jobs during Orientation. There are about 20 students across three main campuses during Orientation and in the first four weeks of Semester 1. Students are strategically stationed all around campus in high-traffic areas, such as large first-year lectures. Later in the semester Student Central staff do pop-ups where they position themselves in high-traffic areas and provide information and give-aways like lollies or university-branded items to students, who can just stop by and ask any questions or seek help.

The students are given a briefing prior to commencement of Orientation. However, most of them already come from other student positions at the university and have undergone intensive training and experience on most transition-related matters.

Feedback

The feedback about Blue T-shirt helpers from the University of Newcastle’s commencing student survey and orientation survey is overwhelmingly positive. One possible reason for their success is the high awareness among students about the purpose of the Blue T-Shirt helpers and the high visibility of the helpers themselves. Focus groups run by the university also indicate that the Blue T-shirt helper system is a great resource and a ‘go to’ place for students to seek help.

5.6.2. Adopting a whole-of-student approach to individual support

International Student Services coordinators Individual Case Managers (La Trobe University)

La Trobe International Student Services is a department within La Trobe International and provides dedicated support to international students across the lifecycle of their enrolment. Staff within this team possess significant international education and higher education transition experience and are employed to case manage students and advise and assist in a variety of areas (for example, financial, accommodation, health, and cultural adaptation) and university contexts (for example, university processes, academic culture, and student visa compliance).

Students typically engage with the International Student Services (ISS) team by directly seeking a confidential one-on-one appointment with a Coordinator, or if they are referred by academic and professional staff. ISS Coordinators are located at all La Trobe University campuses; with five at the Bundoora campus, and one at each of the Bendigo, Mildura, and Albury-Wodonga campuses. ISS Coordinators provide holistic case management and, where appropriate, connect students with internal and/or external support services to achieve the best possible personal and academic outcomes for international students. More often than not, the presenting academic needs of students seen by ISS Coordinators in their case management are symptomatic of underlying issues such as financial difficulties, personal issues, family problems or social/community disconnectedness.

Student participation

On average, the ISS Coordinators at Bundoora handle approximately 60 new student cases per month, in addition to ongoing case management support. There are peak times throughout the academic year such as census date, exams, results release, and confirmation of enrolment and visa expiry, in which international students request appointments and consequently resources are stretched. Additionally, it should be noted that ISS also attends to approximately 800 calls, 800 walk-ins and 400 emails per month.

5.6.3. Facilitating peer-based and just-in-time academic support

Just-in-time academic skills support Student Learning Drop In (The University of Tasmania)

The Student Learning Drop In service at the University of Tasmania is designed to help students develop their academic writing and study skills. This includes, but is not limited to, structuring essays, referencing, planning assignments and other study-related questions. Student Learning Mentors are specially trained peer students who have successfully completed at least two full semesters of undergraduate study at the University of Tasmania. Their role is to facilitate students to develop their own study and writing skills, to pass on tips for success, and share strategies. Student Learning Drop In has been offered since 2009 and has grown steadily over the years.

In 2019, 23 Student Learning Mentors were employed to provide support to students across four locations and online. About a third are international students. The students can remain in the position for up to two years. The Student Learning Drop In positions are a rewarding opportunity to improve students' communication, teamwork and leadership skills as well as inspire and help others. Student mentors are paid at a casual rate for each hour worked in the space as well as for any team meetings and training. Only current undergraduate students are employed to be mentors, as they can relate to the students' experiences more readily. The service is accessible to all students regardless of their discipline, level of study and status as an international or domestic student.

Prior to commencing in the role, Student Learning Mentors participate in program-specific training days, a general induction session for all student staff at the University of Tasmania and complete several online modules around

supporting student equity and safety on campus. Once they have commenced in the role, Student Learning Mentors receive ongoing feedback through mentoring within the space, participate in regular team meetings and can access a range of additional workshops offered to extend their leadership and employability skills.

Evaluation

Last year, the Student Learning Drop In service received 1055 visits of which 68 per cent were by international students. The program collects student information at each visit to allow for an evaluation of who is accessing the service and ensure that the service is accessible to as many students as possible. The reasons for a student's visit are also recorded to inform the types of resources and training necessary for the Student Mentors. Service quality is monitored through regular formal and informal observations of the Student Mentors within the space.

Student learning mentors SLAMs (RMIT University)

At RMIT University, students can meet with student mentors from their course during drop-in sessions called SLAMs (Student Learning Adviser Mentors). SLAMs is open from week four to 11 during semester. To be eligible to be a mentor, students are required to have achieved an average grade of at least 75 per cent in their academic course, completed a peer mentoring-supported course, and commit to at least two hours a week.

SLAMs complement another student learning program – Peer Assisted Study Sessions (PASS). PASS offers structured and fun group learning sessions for some of the courses that students find to be more challenging. The weekly one-hour study sessions are facilitated by students who have previously achieved excellent results in the course and have been trained to support other students in their learning.

Study sessions may include a review of the lecture and assigned readings, preparation for assignments, tests and exams, discussion of key course concepts and more.

The general objectives of the SLAMs PASS program are based on that developed at The University of Wollongong's National Centre for PASS. See <https://www.rmit.edu.au/students/support-services/study-support/peer-mentoring>

5.6.4. Encouraging English language development for social interaction

Conversational English practice through engaging with local communities Talking with Aussies (University of Adelaide)

Talking with Aussies (TWA) at the University of Adelaide is a volunteer program that links international students with volunteers from the local and university community to help them improve their conversational English language skills. The program has been running for 24 years and has about 200 active community volunteers, including domestic students, university staff members, retirees, and working professionals. Volunteers are linked with one or more international students with whom they meet regularly for an informal one-to-one to chat.

Volunteers are supported by the university in various ways:

- Three gatherings of volunteers are held each year. These gatherings provide a guest speaker to inform volunteers about resources and services available at the university or in the community. There is also the opportunity at these gatherings for volunteers to share their experiences, challenges, insights and ideas relating to their work with their students.

- One volunteer and student gathering is held per year with an emphasis on providing a fun, social event with acknowledgement and recognition for volunteers.
- Volunteers may be nominated for recognition and awards presented at an official end of year ceremony.
- The Coordinator and Administrator are available for consultation on specific issues as they arise.
- Talking with Aussies' blog provides updates and links to useful resources for volunteers.

TWA is promoted throughout the Orientation and International Student Welcome programs, so many students who join have just commenced their studies. However, the program is open to students at any point of their program, and some students continue with the program from commencement to graduation (and remain friends with their volunteer beyond this).

The program has seen a yearly increase in student numbers roughly in line with the overall population of international students enrolled at the university. There are currently 211 active volunteers, matched with 268 active students (volunteers can elect to be matched with multiple students). Improved volunteer outreach methods have been required to match this rising student demand.

Evaluation

Annual satisfaction surveys of students, and bi-annual surveys of volunteers, are conducted by International Student Support. Results are consistently overwhelmingly positive, and indicate a strong value provided by the program for both international students and volunteers.

Aside from the benefits of cross-cultural interaction and language practice, both student volunteers and international student participants can count hours in the TWA program towards the Adelaide Graduate Award, an employability program that runs alongside a student's degree until their final semester. Participating students show they have developed skills as 'well-rounded graduates' through a range of extracurricular activities, work experience, volunteering, attending careers workshops and written reflection. International students may claim 10 hours of 'personal development' which can be verified by their volunteer. Upon completion, the award is added to the student's transcript and they receive a formal certificate of recognition. See <https://international.adelaide.edu.au/life-on-campus/social-programs-clubs-and-sports/talking-with-aussies>

5.6.5. Fostering social connection and belonging

A sense of belonging and community engagement Culture Fest (University of New England)

University of New England (UNE) International has been running Culture Fest since 2017 as a single-day event, designed to welcome people of all backgrounds to come together and celebrate multiculturalism in the Armidale community. Now in its third year, Culture Fest 2019 has been transformed into a three-day event that celebrates cultural differences while reminding everyone of their shared humanity. It features a diverse program of activities and events for the local community and across greater New South Wales to participate in. As a free event, Culture Fest is accessible to everyone. It is welcoming to people of all backgrounds and invites the local and international community in this region to come together.

The inspiration behind this festival has been, and continues to be, the international students studying at UNE. The intention is to provide students with an opportunity to share their culture and engage with the community to help foster a greater sense of belonging. In addition, the hope is that students establish a greater sense of connection with their peers, the university and their community. It allows them to develop their identity as a valued member of their university and local community and proves empowering and indeed rewarding for students, as it allows them to share their culture, stories and experiences with the greater community.

This event is therefore dependent on involvement from international students to co-create and develop the festival, serve as volunteers during planning meetings and on-the-day support, and promote the festival within their respective communities.

For students seeking to run food stalls, perform, or host cultural workshops, funds are provided by the university to do so. For example, each country that chooses to host a food stall receives funds to purchase ingredients and items to potentially feed 3000 attendees on the festival night. This year, just over 5000 people attended the festival night alone, making it the biggest Culture Fest event thus far.

Unsurprisingly, Culture Fest has not only been a resounding success in terms of developing international students' sense of belonging to UNE, but also in terms of enhancing their connection to their peers, local businesses and organisations, new migrant and refugee communities, the immediate Armidale regional community and greater New England region.

5.6.6. Promoting health and wellbeing

Promoting international student health and wellbeing Your Food Your Health (University of Canberra)

Issues surrounding international students' health and wellbeing have rightfully centred on their mental health, ability to adapt to the Australian cultural landscape or connection with social/community groups. At the University of Canberra, however, international students' needs are further supported through the implementation of the 'Your Food Your Health' program, including cooking classes facilitated by students from the Department of Nutrition and Dietetics, thus providing opportunities for meaningful interaction between international and domestic students.

Towards the end of 2016, a program was developed by the Department of Nutrition and Dietetics and the International Student Support Service (ISSS) to enhance positive student habits regarding food preparation, cooking and eating. At present, this program is sponsored under a partnership formed between the ISSS team and Allianz Global Assistance.

In seeking to target students from overseas, a booklet was produced to address *Nutritious meal planning, preparation, and cooking advice for international students*. Topics covered in this booklet currently include:

- the benefits of good nutrition
- Australian dietary guidelines
- where to purchase food locally
- where to find international specialist food outlets
- list of affordable and healthy fruit and vegetables on a seasonal basis
- food safety tips
- understanding food labels
- meal planning (templates provided)
- cost saving tips.

International students also have the option to sign-up for cooking classes run by the Faculty of Health. These three-hour classes are run twice a year, at no cost to students, in a fully functional kitchen within the Department of Nutrition and Dietetics. Classes are advertised during Orientation and on social media. The cooking classes are run by currently enrolled nutrition and dietetics students' as part of their Work Integrated Learning degree requirement, with academic staff playing a supporting role. Approximately 150 participants have attended these classes since 2017, with feedback indicating increasing demand for these classes and positive student appraisals.

Conclusions and recommendations

This project examined the factors influencing the transition and success of first-year students in HEIs and investigated whether international Pathway entry students have comparable academic outcomes to Direct entry from overseas students. It also examined the kinds of institutional experiences and supports that effectively support the success of these students.

The findings show that in terms of progression from first year to second year of a bachelors program, there was no significant difference between pathway groups in most institutions. However, there were some differences in the academic performance of Direct entry and Pathway entry students in some institutions and this seems to be related to the level of preparation of the incoming students. While the differences in academic performance are generally minor, where significant differences were observed, those commencing an undergraduate bachelors degree from a post-secondary education pathway appear to have more of an advantage in terms of academic performance than those entering from other pathways.

The analysis of data from a survey of over 1090 international students and in-depth focus group interviews with 201 students depicts an overall positive picture about the transition and course experiences of first-year international students, with the vast majority reporting they are satisfied with their course and overall experience so far. There were, however, several factors that negatively affected students' transition and success in the first year. Three issues in particular stood out in the analysis:

- Building social connection with peers and feeling a sense of belonging to their institutions remain problematic for many international students, particularly Direct entry students. This is a concern for institutions given the importance of social engagement and belonging to student engagement, wellbeing and academic success.
- Not being able to communicate effectively in English is a major concern and source of stress for many international students, particularly Direct entry students from EAL backgrounds. Of note, most of the students' concerns related to spoken interaction and oral communication skills, rather than English for written academic purposes, and where institutions provided programs to develop students' oral communication skills, these were appreciated and well received by student participants. Despite some students' concerns about their spoken English language skills, the majority of students surveyed indicated that their ELP was sufficient to do well in their academic course.
- Being unclear about, or not having sufficient access to, appropriate and timely institutional supports and services can be frustrating for students and leave them feeling unsupported by their institutions.

In addition to these issues, factors beyond the institution can also have a strong impact on international students' transition and engagement in the first year. Finding safe and affordable accommodation close to campus was particularly problematic for Direct entry students, especially those in regional areas, and securing part-time or casual paid work remains challenging for most international students, affecting their studies and overall university experience. Students generally expected more support from their institutions in these areas.

The project highlights the need for a holistic approach to supporting international students' transition and success in the first year – one based on the needs of particular groups of students, and on a solid evidence base in terms of student participation and effectiveness. However, for institutions to gain more detailed insights into the needs and outcomes of particular groups of international students, it is important for them to know the characteristics of their own international students by collecting appropriate data to track and monitor students' progress.

5.7. Recommendations

1. Institutions collect and report data on student pathways and academic performance in significantly different ways, and there is little consistency in approach to collecting information that would enable cross-institutional analysis of international student pathways and outcomes. This limits the capacity for data analysis to inform practices at the institutional level, and policy at the sector level. Where information about international student pathways is reported via different systems, there would be benefit in consolidating the details as part of national reporting requirements.

Recommendation 1: *National reporting requirements should be expanded to include details of international student pathways, including student performance data (such as progression rates and completion rates).*

2. It is currently not possible to reliably identify the various pathways across sectors that international students use to enter higher education, and consultations with stakeholders revealed the difficulty in tracking international students' pathways across sectors.

Recommendation 2: *The Department of Education should lead the development of a unique student identifier for international students across all sectors.*

3. The early stages of transition are particularly challenging for Direct entry international students, many of whom find it difficult to adjust to the new learning environment, cope with the English language demands, and make social connections with peers. In addition, many spend the first few weeks securing accommodation and organising household necessities, making them unable to focus on their studies. This may explain why in some institutions, Direct entry students do not perform as well on average as international students who enter university after completing a pathway program.

Recommendation 3: *Universities should develop in collaboration with the ELICOS sector, a short academic transition program for Direct entry EAL students that is 'built into' the structure of their undergraduate course, and delivered before their formal degree program starts.*

This will allow students to adjust to the learning environment and focus on English language skills for learning and social interaction while settling into life in Australia. This program should not be seen as a 'bolt on' program, but be embedded into students' undergraduate course, delivered on campus and subsidised by the institution. A transition program may also reduce the need for institutions to administer PELAs which can be resource-intensive, and which many students find unhelpful.

4. Most, if not all, institutions offer academic skills programs and workshops for students, particularly to assist students with academic writing; however, the majority of international students do not appear to participate in these workshops. Students have a clear preference for peer-led support programs and are far more likely to participate regularly in peer-facilitated activities than those facilitated by support staff. These peer programs have the added benefit of helping to create social connections among students.

Recommendation 4: *In allocating limited resources to academic support programs and activities, universities should place more emphasis on peer-led programs and peer-facilitated just-in-time supports, in addition to other programs that have an evidence base for effectiveness in terms of ongoing student engagement and influence on learning outcomes.*

5. Universities offer a range of supports and services for international students; however, it is not always clear to students where to go, and for what kinds of issues they can seek support. Students value supports that are highly visible and clearly dedicated to meeting the range of international students' needs. While some institutions have a dedicated international student office or hub, this is not always the case.

Recommendation 5: *All higher education institutions should have a visible, dedicated international student office or hub with staff who can provide advice and holistic support on a range of matters relevant to international students such as finding accommodation, course planning, employment and health, as well as academic support.*

6. Finding paid work opportunities is a common concern among international students, affecting their studies and overall experience at their institutions. While many universities offer their students work experience opportunities on campus, this project found that international students felt under-represented and disadvantaged in securing work experience and casual employment opportunities at their universities. Many believed their institutions could do more to support them find work both within and outside their institutions.

Recommendation 6: *Universities should increase opportunities for university-based work experience and casual employment for international students and consider placing quotas that reflect the percentage of international students enrolled in the institution.*

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Appendices

Appendix A. Likelihood of progression between pathway groups: Results for Fisher's exact test by institution

Go8 University

Number of valid cases	Fisher's exact test	Exact Sig. (2-sided)
3595	14.365	0.039

ATN University A

Number of valid cases	Fisher's exact test	Exact Sig. (2-sided)
835	6.877	0.067

ATN University B

Number of valid cases	Fisher's exact test	Monte Carlo Sig. (2-sided)
923	30.636	0.013 (99% CI lower bound)

Regional University A

Number of valid cases	Fisher's exact test	Exact Sig. (2-sided)
366	8.155	0.077

Regional University B

Number of valid cases	Fisher's exact test	Exact Sig. (2-sided)
767	20.065	0.0003

IR University A

Number of valid cases	Fisher's exact test	Exact Sig. (2-sided)
1446	12.439	0.0020

IR University B

Number of valid cases	Fisher's exact test	Exact Sig. (2-sided)
716	5.917	0.1894

Appendix B. University identified pathways

Appendix B.1

Go8 University identified pathways

#	Pathway	2018	%	2019	%
1	Australian Secondary school	555	15.4	635	21.0
2	Direct Entry from overseas – post-secondary school	178	4.9	85	2.8
3	Direct Entry from overseas – secondary school	1253	34.8	1105	36.6
4	New Zealand secondary school	27	0.7	24	0.8
5	Other	4	0.1	18	0.6
6	Overseas Australian post-secondary school equivalent	260	7.2	211	7.0
7	Overseas Australian secondary school equivalent	67	1.9	10	0.3
8	University Foundation Program	1260	35.0	935	30.9

Appendix B.2

ATN University A identified pathways

#	Pathway	2018	%	2019	%
1	A higher education course (Australian or overseas equivalent; complete or incomplete)	251	26.8	216	27.7
2	A VET award course other than a secondary education course (Australian or overseas equivalent; complete or incomplete)	21	2.2	17	2.2
3	Other basis	24	24.9	160	20.5
4	Secondary education undertaken at school, VET or other higher education provider (Australian or overseas equivalent)	432	46.1	388	49.7

Appendix B.3

ATN University B identified pathways

#	Pathway	2018	%	2019	%
1	1 year of a bachelors degree at Australian University	11	1.0	0	0.0
2	AQF Advance Diploma	8	0.7	5	0.4
3	AQF Certificate IV	2	0.2	3	0.3
4	AQF Diploma	59	5.4	24	2.0
5	AQF or equivalent qualification awarded by private provider	1	0.1	0	0.0
6	Australian University Foundation Program	38	3.5	18	1.5
7	(X) College	14	1.3	36	3.0
8	ATN University B International College Diploma	302	27.6	341	28.4
9	Completed 4 units equivalent to 25 credit value ATN University B Units	1	0.1	2	0.2
10	Completed Tertiary Qualification	22	2.0	17	1.4

11	Completed VET Qualification	2	0.2	8	0.7
12	Completed (State) Secondary Education	26	2.4	32	2.7
13	Credit Transfer Agreement	111	10.2	148	12.3
14	ATN University B Diploma	0	0.0	6	0.5
15	ATN University B Foundation Program	13	1.2	1	0.1
16	Forecast – GCE ‘A’ Levels	3	0.3	0	0.0
17	Forecast-International Baccalaureate	1	0.1	1	0.1
18	GCE ‘A’ Levels	55	5.0	28	2.3
19	Incomplete Higher Education Course	88	8.1	125	10.4
20	Incomplete VET	0	0.0	1	0.1
21	International – Associate Degree	3	0.3	3	0.3
22	International – Certificate	6	0.5	3	0.3
23	International – Diploma	64	5.9	71	5.9
24	International – One-year bachelors at a recognised university	3	0.3	10	0.8
25	International – Other diplomas	4	0.4	11	0.9
26	International – Other qualifications	5	0.5	14	1.2
27	International – Secondary education	72	6.6	108	9.0
28	International – Technical qualification completed	2	0.2	4	0.3
29	International – Tertiary qualification completed	85	7.8	95	7.9
30	International – University Foundation Program	4	0.4	7	0.6
31	International Baccalaureate	11	1.0	9	0.8
32	International only – Pathway provider	15	1.4	10	0.8
33	Interstate – Secondary education	3	0.3	4	0.3
34	Other basis	4	0.4	12	1.0
35	(X) Foundation Program	55	5.0	42	3.5

Appendix B.4

Regional University A identified pathways

#	Pathway	2018	%	2019	%
1	Higher education	95	26.0	91	33.1
2	Mature age special entry	11	3.0	0	0.0
3	Other	24	6.6	21	7.6
4	Secondary education	85	23.2	52	18.9
5	VET award course	151	41.3	111	40.4

Appendix B.5

Regional University B identified pathways

#	Pathway	2018	%	2019	%
1	Higher education course	427	50.5	252	44.2
2	Other basis	81	9.6	79	13.9
3	Professional qualification	4	0.5	6	1.1
4	Secondary education	272	32.3	199	34.9
5	VET award course	61	7.2	34	6.0

Appendix B.6

IR University A identified pathways

#	Pathway	2018	%	2019	%
1	Higher education course	1004	68.8	572	71.8
2	Mature age special entry	1	0.1	0	0.0
3	Other basis	8	0.5	0	0.0
4	Secondary education	361	24.7	183	23.0
5	Unknown	9	0.6	0	0.0
6	VET award course	81	5.5	42	5.3

Appendix B.7

IR University B identified pathways

#	Pathway	2018	%	2019	%
1	Higher education course	317	40.1	180	32.1
2	Mature age	1	0.1	0	0.0
3	Other	141	17.8	96	17.1
4	Professional qualification	8	1.0	2	0.4
5	Secondary education	151	19.1	115	20.5
6	TAFE award	173	21.9	167	29.8

Appendix C. 2018 significant between-group difference in mean WAM/GPA by pathway

Appendix C.1

Go8 University 2018 significant between-group difference in mean WAM by pathway

	1	2	3	4	5	6	7	8
1		0.0002				0.0001	0.0016	
2			2×10^{-7}					
3						3×10^{-9}	0.0001	2×10^{-7}
4								
5								
6								
7								

The same process used for identifying any significant between-group differences in mean WAMs between pairs of pathway groups in the 2018 data was applied to the 2019 data. The 2019 pathway x WAM ANOVA was significantly different – $p < 1 \times 10^{-19}$ and the 2019 test of homogeneity of variances based on mean was significantly different – $p < 3 \times 10^{-8}$.

Appendix C.2

ATN University A 2018 significant between-group difference in mean GPA by pathway

	1	2	3	4
1			0.0049	0.0008
2				
3				

Appendix C.3

ATN University B 2018 significant between-group difference in mean WAM by pathway

	4	8	13	15	18	19	23	32
4			0.0008		0.0090		0.0066	
8			0.0001				0.0021	
13						0.0003		
15								0.0084
18						.0034		0.0065
19							0.0022	
23								

For the 2019 commencing students at ATN University B, the analysis of the 2019 pathway x WAM one way analysis of variance was significantly different – $p < 3 \times 10^{-10}$. The 2019 test of homogeneity of variances based on mean was

not significantly different – $p > 0.015$. Tukey’s HSD post hoc test was used to identify significant between-group differences in mean WAM.

Appendix C.4

Regional University A 2018 significant between-group difference in mean WAM by pathway

	1	2	3	4	5
1					
2				0.005	
3					
4					0.001

Appendix C.5

IR University B 2018 significant between-group difference in mean GPA by pathway

	1	3	4	5	6
1					0.0004
3					
4					2×10^{-6}
5					

Appendix D. 2019 commencing students' mean WAM/GPA and standard deviation by pathway

Appendix D.1 Go8 University

2019 pathway x WAM descriptive statistics

#	Pathway	Count	Mean WAM	Standard deviation
1	Australian secondary school	623	67.95	12.64
2	Direct entry from overseas – post-secondary school	64	70.84	12.44
3	Direct entry from overseas – secondary school	940	66.97	13.48
4	New Zealand secondary school	23	67.75	11.51
5	Other	18	79.72	5.04
6	Overseas Australian post-secondary school equivalent	170	69.93	9.67
7	Overseas Australian secondary school equivalent	4	65.38	7.74
8	University Foundation Program	835	72.11	9.58
Total		2677	69.17	12.08

Significant between-group difference in mean 2019 WAM by pathway

	1	2	3	4	5	6	7	8
1					1x10 ⁻⁷			4x10 ⁻¹⁰
2					0.0007			
3					4x10 ⁻⁸			0
4					0.003			
5						2x10 ⁻⁶		0.0002
6								
7								

Appendix D.2 ATN University A

2019 pathway x GPA descriptive statistics

#	Pathway	Count	Mean GPA	Standard deviation
1	A higher education course (Australian or overseas equivalent; complete or incomplete)	216	2.30	1.02
2	A VET award course other than a secondary education course (Australian or overseas equivalent; complete or incomplete)	17	2.05	0.78
3	Other basis	160	2.12	1.00
4	Secondary education undertaken at school, VET or other higher education provider (Australian or overseas equivalent)	388	2.25	1.01
Total		781	2.23	1.01

Appendix D.3 ATN University B

2019 pathway x WAM descriptive statistics.

#	Pathway	Count	Mean WAM	Standard deviation
4	AQF Diploma	16	59.50	7.86
6	Australian University Foundation Program	16	48.25	23.45
7	(X) College	18	58.68	9.55
8	ATN University B International College Diploma	232	56.75	14.26
10	Completed Tertiary Qualification	15	70.39	13.59
11	Completed VET Qualification	4	60.02	12.50
12	Completed (State) Secondary Education	26	72.35	14.32
13	Credit Transfer Agreement	43	58.54	16.85
14	ATN University B Diploma	3	55.33	4.91
18	GCE 'A' Levels	20	73.03	11.51
19	Incomplete Higher Education Course	87	60.22	17.23
23	International – Diploma	47	62.81	17.79
24	International – One-year bachelors at a recognised university	6	55.08	18.33
25	International – Other diplomas	3	63.65	11.69
26	International – Other qualifications	7	64.89	6.64
27	International – Secondary education	58	67.85	10.83
29	International – Tertiary qualification completed	52	62.46	17.47
30	International – University Foundation Program	5	74.33	12.15
31	International Baccalaureate	7	72.71	6.70
32	International only – Pathway provider	5	53.30	13.04
34	Other basis	10	59.60	12.96
35	(X) Foundation Program	40	64.01	13.28
Total		720	61.00	15.63

Significant between-group difference in mean WAM by pathway

	6	8	10	12	18	27
6			0.0075	0.0001	0.0002	0.0008
8				0.0002	0.0007	0.0002
10						
12						
18						

Appendix D.4 Regional University A

2019 pathway x WAM descriptive statistics

#	Count	Mean WAM	Standard deviation
1	87	64.74	14.25
4	52	64.32	12.07
5	110	65.16	11.55
Total	249	64.84	12.62

Note that in 2019 there were no students in the Mature Age Special Entry category, and no WAM was provided for students in the Other category, so these groups are omitted from the analyses.

The 2019 pathway x WAM one way analysis of variance was not significantly different – $p > 0.921$. There was no observed significant difference in mean WAM based on admission pathway.

Note that the data from Regional University A also provided a measure of student academic performance in the form of a GPA (out of 7.0). An analysis using GPA produced the same results relating to between-group differences in academic performance between pathway groups as the one based on WAM presented above.

Appendix D.5 Regional University B

2019 pathway x GPA descriptive statistics

#	Pathway	Count	Mean GPA	Standard deviation
1	Higher education course	252	3.92	2.07
2	Other basis	79	4.09	2.22
3	Professional qualification	6	5.96	1.13
4	Secondary education	199	3.92	2.16
5	VET award course	34	3.89	2.13
Total		570	3.96	2.12

Appendix D.6 IR University A

2019 pathway x GPA descriptive statistics

#	Pathway	Count	Mean GPA	Standard deviation
1	Higher education course	572	4.61	1.20
4	Secondary education	183	4.68	1.40
6	VET award course	42	4.80	1.49
Total		797	4.64	1.26

Appendix D.7 IR University B

2019 pathway x GPA descriptive statistics

#	Pathway	Count	Mean GPA	Standard deviation
1	Higher education course	178	4.77	1.43
2	Mature age	96	4.72	1.39
3	Other	2	5.00	0.00
4	Professional qualification	113	4.91	1.20
5	Secondary education	167	4.83	1.23
Total		556	4.81	1.32

Appendix E. Survey respondents by institution

Number of survey respondents by institution and institution response rate (N = 1098)

Institution	<i>n</i>	%	Survey response rate (%)
Go8 University	393	35.9	14.9
ATN University A	76	6.9	12.2
Regional University A	57	5.2	26.9
Regional University B	271	24.7	57.9
IR University A	79	7.2	11.8
IR University B	44	4.0	10.2
TAFE institute	97	8.9	26.8
Other/Did not specify	78	7.2	NA

Appendix F. Student perceptions of university services and resources

N = 1098

		Not useful / A little useful	Moderately useful	Very useful / Extremely useful
Course planning	Direct entry from overseas	12.8	29.7	57.5
	Pathway entry	7.7	30.1	62.2
	All	9.8	29.9	60.3
International student services	Direct entry from overseas	9.3	31.8	58.9
	Pathway entry	10.4	35.0	54.6
	All	9.8	33.3	56.9
Academic skills unit	Direct entry from overseas	8.4	30.6	61.0
	Pathway entry	8.5	34.3	57.2
	All	8.5	32.5	59.0
Employment and careers	Direct entry from overseas	20.0	27.2	52.8
	Pathway entry	16.8	32.8	50.4
	All	18.5	29.8	51.7
English language workshops/tutorials	Direct entry from overseas	10.8	29.0	60.2
	Pathway entry	13.2	29.8	57.0
	All	12.1	29.4	58.5
Counselling	Direct entry from overseas	14.0	26.7	59.3
	Pathway entry	10.2	33.6	56.2
	All	12.0	30.4	57.6
Housing	Direct entry from overseas	16.6	16.8	66.6
	Pathway entry	16.7	30.0	53.3
	All	16.7	22.2	61.1

Likert scale: 1 (Not useful) – 5 (Extremely useful)

Appendix G. Students' information needs and help-seeking preferences

N = 1098

		Disagree	Neutral	Agree
I have as much information as I need about the resources/services available for international students at my university/institution	Direct entry from overseas	12.6	27.8	59.6
	Pathway entry	10.0	30.4	59.6
	All	11.2	29.2	59.6
I know where to go for academic support if I need it	Direct entry from overseas	6.3	14.6	79.1
	Pathway entry	10.1	16.7	73.2
	All	8.4	15.7	75.9
I know where to go for advice about my course	Direct entry from overseas	7.5	10.9	81.6
	Pathway entry	7.2	15.3	77.5
	All	7.4	13.2	79.4
I feel comfortable asking for advice/help from staff at my university/institution	Direct entry from overseas	8.3	19.6	72.1
	Pathway entry	8.2	23.4	68.4
	All	8.2	21.7	70.1
I feel comfortable asking for help/advice from my peers	Direct entry from overseas	7.3	17.3	75.4
	Pathway entry	6.0	20.6	73.4
	All	6.7	19.0	74.3



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