Journal of Academic Language & Learning
Vol. 20, No. 3, 2026, 1-17. ISSN 1835-5196
https://journal.aall.org.au/index.php/jall/article/view/949

‘Pick and stick’: Student engagement with academic language and learning services

Andrew Kelly, Miriam Sullivan, Tracy LG Ware, Kathleen Balson, and Benedicta Santoso

Edith Cowan University, Perth, Western Australia

Email: andrew.kelly@ecu.edu.au, m.sullivan@ecu.edu.au, t.ware@ecu.edu.au, k.balson@ecu.edu.au, benedicta.santoso@gmail.com

(Received 2 January, 2024. Published online 28 March, 2026.)

Academic language and learning services are a critical aspect of most university retention strategies, yet there are gaps within the current literature about the ways in which diverse student cohorts engage with these programs. This article analyses a three-year data set of the engagement by 11,111 students with four different types of services at an Australian university: individual learning adviser appointments, academic skills workshops, Peer Assisted Study Sessions (PASS), and an online writing support service (Studiosity). The data presented demonstrates that in any given year, students tend to pick one type of service and only engage with that service: 74% of students in this study only engaged with one type of service in any given year, and fewer than 1% accessed all four. This choice appears to be influenced by demographic variables, including age and domestic or international status. These findings highlight the importance of providing a range of different academic language and learning services to accommodate diverse student preferences.

Key words: Academic language and learning; retention and success; equity, diversity and inclusion; higher education; Peer Assisted Study Sessions.

1. Introduction

Australian university students come from a wide range of cultural, linguistic, and socioeconomic backgrounds, yet this rich diversity necessarily means that not all students are equally academically prepared to succeed. Previous academic performance and language proficiency have long been demonstrated as strong predictors of future academic success, but demographic factors such as age, gender, ethnicity, geographic location, and first-generation status can also influence the likelihood of success (Banks & Dohy, 2019; McKenzie & Schweitzer, 2001; O’Shea, 2015; Tight, 2020). Universities, in turn, provide academic language and learning (ALL) services such as learning advisers, peer leaders, and online writing support to improve academic preparedness for their respective students. Studies to date suggest that student use of academic skills services tends to correlate positively with higher retention and grade-average rates (Ashton-Hay & Doncaster, 2021; Glew et al., 2019), particularly for students that come from diverse literacy backgrounds (Newman et al., 2021; van der Meer et al., 2017).

While ALL programs are important initiatives to retain a diverse student cohort and prepare them for academic success, the roles of ALL programs have not traditionally been well understood within university communities. Language and learning staff are not always highly visible to students or promoted well by teaching academics, and as such, often tend to sit on the periphery of

where students are engaging and learning the most with their study (Chan et al., 2019; Evans et al., 2019). Organisational locations can also vary; some ALL teams are situated within faculties, whereas others form part of an institution's library, student success, or learning and teaching centres. This paradigm has been disrupted recently, as the discourse describing language and learning services shifts from remedial to normalised, constructive, and strengths based (Bornschlegl & Caltabiano, 2022; Devlin, 2013). ALL services are valued for enriching the learning process and catering for all students, enabling more students to feel comfortable about attending and participating in support (Evans et al., 2019). The value of these services has been explicitly highlighted in the 2023 Australian Universities Accord Interim Report. Under priority action four, the report argues that 'straightforward access to academic advice and learning support' is a critical aspect of higher education institutions enabling improved student progress and completion, especially for students in equity groups (Australian Universities Accord Interim Report, 2023, p. 12). This is an important step towards normalising student access to ALL services and raising the profile of these programs within universities.

The recent literature on ALL services tends to explore student engagement with one form of ALL service rather than comparing different forms. These include learning adviser programs (Evans et al., 2019; O'Neill & Russell, 2019; Tran et al., 2019), peer learning programs (Phelan et al., 2022; Tibingana-Ahimbisibwe et al., 2022; Sultan et al., 2013) and online writing support programs such as Studiosity (Benzie & Harper, 2020; Larkin & Hitch, 2019; Brodie et al., 2021; Dollinger et al., 2020). These studies draw similar conclusions, insofar as they explore the positive impact that each respective program can have on academic success. They also refer to similar barriers, including lack of awareness and varied student perceptions of these programs. These studies make important contributions because such findings directly inform how staff may enable greater access to support, especially in digital learning spaces (Podorova et al., 2019). However, a narrow focus on one program limits the broader conclusions that can be drawn about how diverse student cohorts engage with different forms of ALL services and the possible reasons as to why they decide to do so. Consequently, this paper addresses this lack.

The data in this article reveals that, in any given year, the students who choose to engage with ALL services tend to pick their 'favourite' and continue to engage with that service rather than access the others that are available. 74% of students only engaged with one type of service in any given year, and fewer than 1% accessed all four. In other words, they 'pick and stick' with their preferred type, though their preferred type may change from year-to-year. The choice of service also appears to be influenced by demographic variables, including age and domestic or international student status. In addition to presenting the student engagement data, this article considers the implications of these results and offers possible explanations as to why particular students might choose one service as opposed to others.

2. Service scope and university context

Language and learning support at university can encompass a variety of broad topic areas, including study preparedness, academic literacies, peer support, mental wellbeing, and accessibility. In the context of this article, ALL services are defined as extracurricular programs designed to enhance academic skills and literacies for coursework students. This article presents the findings of a three-year, university-wide data set of student engagement with four different types of services at an Australian university (described below): individual learning adviser appointments, academic skills workshops, Peer Assisted Study Sessions (PASS), and an online writing support service (Studiosity).

The first program is learning adviser appointments, which are 30-minute face-to-face, online, or phone sessions whereby a professionally trained university staff member provides ALL support to an individual student. These sessions are a collaborative discussion that aim to develop students to be independent learners with increased self-efficacy, using techniques such as scaffolding

academic skills, reflective dialogue and goal-setting (Kahu & Nelson, 2018; Mozzon-McPherson & Tassinari, 2020; Wilson et al., 2011). The purpose of an appointment is flexible depending on the student's goal for the session, but frequently involves understanding the assignment requirements, creating a personalised study plan, providing feedback on academic writing in an assignment draft, understanding feedback from a lecturer with the goal of improving future marks, and improving basic literacy and numeracy skills.

The second program is academic skills workshops, delivered by the same team of learning advisers. These sessions cover a broad range of fundamental study skills, such as planning for study, academic writing, academic integrity, and presentation skills. Workshops are offered both online and on-campus, and are concentrated at the start of each study period to prepare students for their assignments. Although they are available to all students, these sessions are primarily designed for commencing students to help them understand university expectations and achieve better results in their first assessments (Ma et al., 2018).

The third program is Peer Assisted Study Sessions (PASS), which involve high achieving students facilitating interactive group study sessions focused on unit content. PASS is an internationally standardised and recognised program developed in the United States in the 1970s, and consists of weekly, peer-led group study sessions (Paloyoa et al., 2016). PASS takes a social-constructivist approach with group activities and discussions focusing on specific unit content, thereby developing each student's confidence and sense of identity as a scholar (Spedding et al., 2017). PASS is not available to all students in this study, but is focused on core, first-year units that have high enrolments and are perceived as difficult by students or have a high fail rate. In units where it is offered, PASS is available both as online and on campus sessions.

The final program is Studiosity, an Australian-based third-party provider of writing feedback and study skills support, through a live chat and a written feedback service for draft assignments (Thomas, 2020). The primary purpose of Studiosity is to provide an accessible 24/7 service for formative, written feedback (Dekker, 2018). Student access to Studiosity is provided by the institution. It was only offered to targeted cohorts in 2019 for the students included in this study, although this was expanded to all students from 2020 onwards in response to the COVID-19 pandemic.

All these programs rely on voluntary attendance from students outside of their normal studies, although some specific cohorts of students are strongly recommended to attend (e.g., based on referrals from unit coordinators; Post-Entry Language Assessment outcomes; academic misconduct findings; or after failing a unit). Voluntary attendance means that it is often difficult to predict the likelihood of student engagement with these services, as well as which specific cohorts may be more likely to attend. The University also provides self-access resources and learning support that is embedded within curriculum content (Kelly et al., 2020), which is essential for developing student study and communication skills (Botha, 2022; Edwards et al., 2021). However, this study specifically focuses on students' usage patterns of the four extracurricular ALL services described above.

These programs were delivered at a mid-size public university based in Perth, Australia. It has two metropolitan campuses, a regional campus in the Southwest region of Western Australia, and study locations in Sri Lanka, Singapore, and Dubai. It has a highly diverse cohort of students from different linguistic, cultural, and socioeconomic backgrounds. At the time of writing, 54% of enrolled students are mature age, most of whom are female (63%). Just over half of its students (52%) study on campus, 25% study online, and 23% study in a mixed mode of on-campus and online delivery. Approximately one-fifth of the total cohort are international students. Reflecting this diversity, these programs have been consequently designed to be as accessible and as flexible as possible to cater to a broad range of student needs.

3. Methodology

3.1. General considerations

This study focused only on students who used the four ALL services discussed above over a three-year period (2019–2021). Students who did not use any service are not considered within the scope of this study. Ethics approval was obtained to collate records of student use of the four services (approval number 2021-03087). Student data was procured from the University's data warehouse and included demographic characteristics collected from students as part of higher education student reporting to the Department of Education. Given that eligibility for attendance at PASS sessions is limited to enrolments within specific units, and Studiosity was only available to designated cohorts prior to 2020, eligibility has been accounted for in the dataset so as not to understate use of services by students who were not able to access them.

Higher degree, non-award and transnational students were excluded from the eligibility criteria, as these programs were not fit to meet these particular study needs and have different options available for study support. Students enrolled to study at an alternative institution in the given period (including cross-institutional, study abroad and exchange students, and students studying a course whilst in secondary schooling) were also excluded on the basis that these students would be supported by their current institution. Data on use of support services was sourced from Studiosity usage reports, internal service booking systems, and PASS attendance record-keeping. Data on student engagement with self-access resources and learning adviser support that had been embedded into curricula assessments and activities were also omitted.

Data was aggregated based on student and calendar year. This means that each data point is an enrolled student who used a service at least once in a single year period. In other words, if a student used any or all services in one year, it was counted as one interaction. An individual student was counted to a maximum of three times if they used a service every year from 2019 to 2021. Course (degree) information is not included in this data set to reduce duplication of students who changed course mid-year. In total, this amounted to 11,111 individual students and 13,745 annual interactions (or 'use cases') that students had across the four programs.

The study period took place before generative AI became widespread, but includes the COVID-19 pandemic. Western Australia was impacted relatively lightly by the pandemic, with most disruptions from lockdowns occurring during the first semester of 2020. Western Australia had hard borders, which did limit access for international students, however, enrolments of international students were maintained at roughly 20% of the student cohort. In addition, as most students are studying undergraduate or masters degrees, they may appear repeatedly in the dataset as they continue service use, resulting in a stable dataset in spite of COVID-19 disruptions. Thus, the dataset does not represent a true random cohort of students, but by aggregating data over multiple years we get a richer understanding of service use.

Pearson's Chi-square test was used to test for statistically significant associations between categorical variables, and to monitor effect sizes, we used Cramer's V for comparing two multinomial variables (Pallant, 2020). In large data sets, it is common for even small differences to be statistically significant at the $p < 0.05$ level. However, these differences are so small they are not practically meaningful or useful (Aarts et al., 2013; Lantz, 2012). Effect sizes for Cramer's V change depending on the number of variables, but in all cases under 0.1 is considered to be small (Pallant, 2020). Consequently, given the size of this data set, this article focuses on reporting differences that have an effect size greater than 0.1. The discussion therefore refers to meaningful results (Cramer's $V > 0.1$) in addition to statistically significant results ($p < 0.05$).

3.2. Definitions

International students were defined as onshore international student enrolments. Offshore students were excluded from the data set as they are enrolled in locations where different support services are available locally and to also control for the impacts of the COVID-19 pandemic on

access to ALL support more generally. Some student characteristics (such as home residence and socioeconomic status) were not collected for international students. 'Mature age' students were defined as students who were 25 years of age or older; 'youth' students were defined as aged between 20 to 24 years old; 'school-leaver' students were defined as aged 19 years old or younger. Student location ('urban', 'regional' or 'remote) is based on the reported home residence (post-code) at student census date, as classified by the Australian Bureau of Statistics. The location for some students is unknown, as they did not provide their address to the university.

Student results from the completion of the University's Post-Entry Language Assessment (PELA) are also included. PELA is a short diagnostic language tool that all new students were expected to complete to identify language proficiency and proactively provide targeted support where required. Student results are categorised into three groups – PELA 1 indicates no need for additional language support, PELA 2 indicates a student may benefit from additional language support, and PELA 3 indicates a strong need for additional language support (Harris, 2013). The data is only presented for students who were eligible to complete a PELA in the same year, though the results were limited as not all students completed it.

4. Results

There were 13,745 use cases of ALL service access included in the analysis, which consists of 11,111 individual students who used at least one service during 2019–2021. This represented approximately 20% of the total eligible student cohort. Use of different services also did not appear to meaningfully influence retention, either at census date ($p = 0.000$, Cramer's V = 0.079) or into the following year ($p = 0.000$, Cramer's V = 0.081); and retention was high overall amongst service users (88.2%). The limitations with respect to retention will be explored in the Discussion.

The pattern of student engagement with a sole service or a combination of ALL services varied over the three-year period. Figure 1 demonstrates a substantial increase in the sole use of individual appointments in 2020. Conversely, there was a much lower attendance rate solely at workshops during that year. Student engagement with PASS as the sole service accessed increased over the three-year period, whereas use of Studiosity as the sole service accessed remained relatively consistent despite eligibility being broadened from 2020.

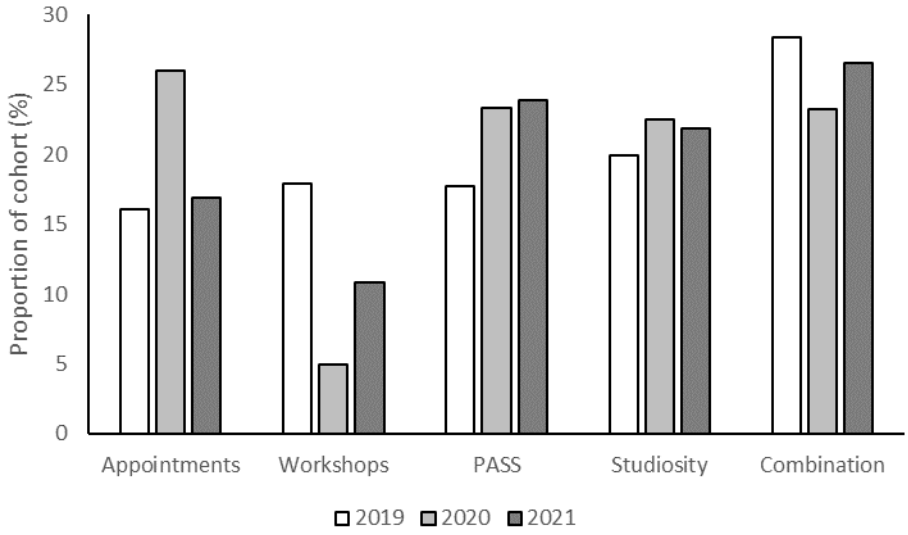

Figure 1. Use of learning support service by calendar year. (In this case, "proportion of cohort" refers to the proportion of students in a single year who accessed either one of the service types alone, or who accessed a combination of services.)

What Figure 1 doesn't reveal is what *range* of services students used. This is an interesting question because the most noticeable finding from a more detailed analysis was that there was little overlap in student use of different types of support services. As Figure 2 demonstrates, most students (74%) used only one of the four support services on offer in any given year (though some tried different services in different years). One-fifth of students used two services, and only 6.1% used three or four services. Fewer than 1% of students used all four types of ALL support in any given year. For those who did use more than one service, the most common overlap were students who accessed individual support: learning advisers and Studiosity (4.8% of total number of use cases). Figure 2 also highlights that PASS, Studiosity and individual appointments were all used at least once by similar numbers of students (n = 4145, 4246 and 4222 respectively), while workshops were the least tried service (n = 3257). Given that most students used only a single service, using a combination of services appeared to be a discrete and interesting behavioural pattern, so we separated those students into their own category.

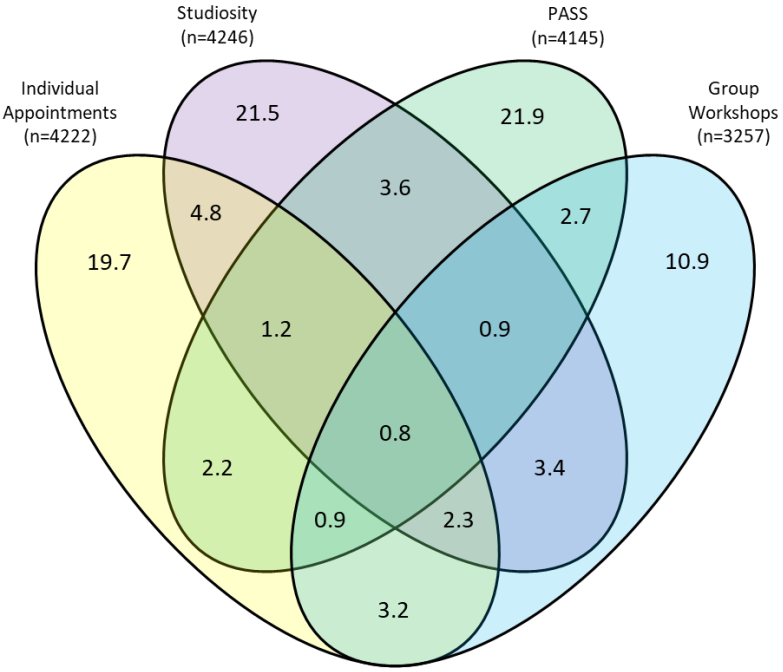

Figure 2. Overlap between student use of different support services. The number of distinct students using each service at least once across the three years is in brackets. The numbers within the figure are percentages of use cases from the total dataset.

There was a small difference in service use pattern based on region for domestic students (p = 0.000, Cramer's V = 0.11, Figure 3). Remote students used Studiosity as their only service at a higher rate than students in other locations. Location information was limited as not all students had a reported Australian home residence address in the data set (and were consequently categorised as 'unknown').

PELA results were significantly related to the pattern of services used. Figure 4 suggests students who did not complete the PELA tended to use PASS, and PELA 3 (at risk) students were more likely to use a combination of services (n = 1704, p = 0.000, Cramer's V= 0.16).

There was a meaningful difference in service use pattern between domestic (n = 10,638 cases) and international (n = 3,107 cases) students (p = 0.00, Cramer's V = 0.184). The data (Figure 5) indicate that of those students who used a service and only chose to use one service, international students preferred individual learning adviser appointments over PASS sessions whereas domestic students showed a slight preference for PASS over individual appoints as a sole service accessed. It should be noted however, that these results might also reflect international student

access to PASS, as it is only run in enabling programs and first-year undergraduate units, not postgraduate programs which typically attract higher international enrolments.

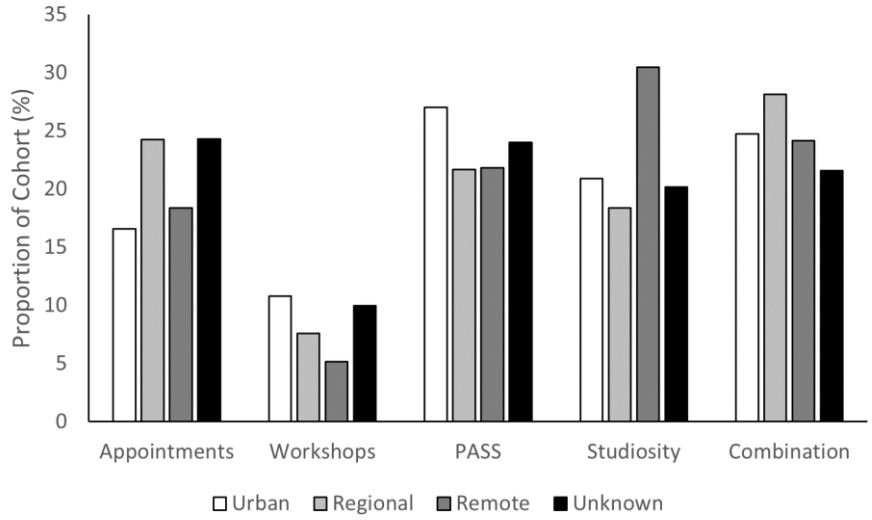

Figure 3. Use of learning support by student location for domestic students. (In this case, "cohort" refers to each of the student location categories alone.)

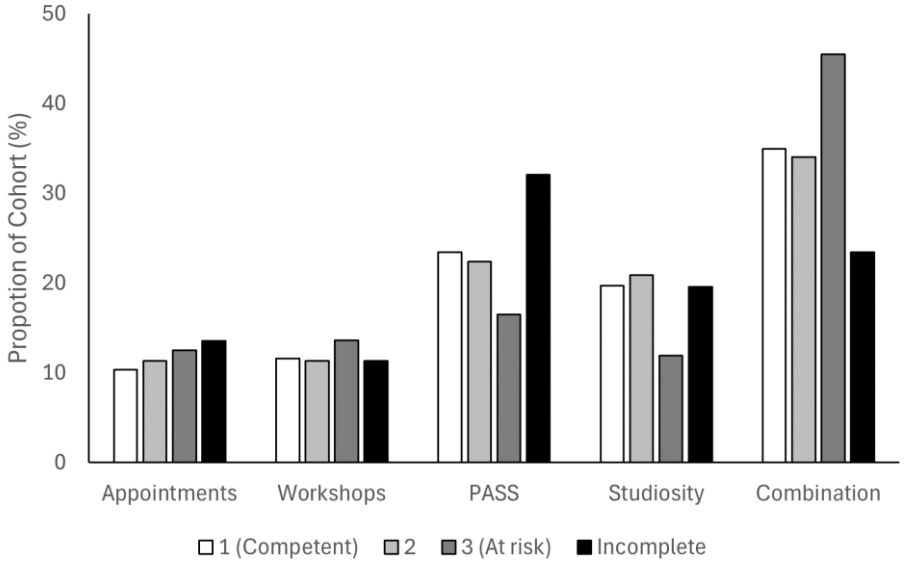

Figure 4. Use of learning support by PELA result. (In this case, "cohort" refers to each of the PELA categories in turn.)

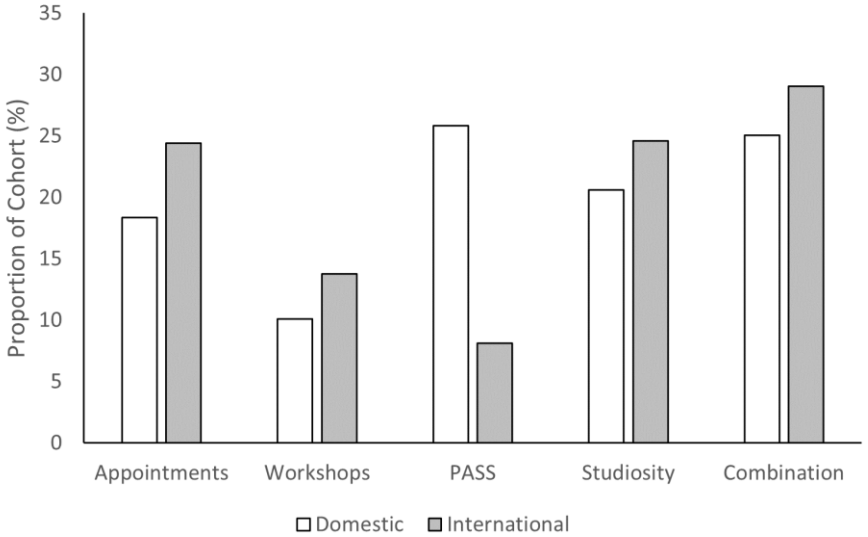

Figure 5. Use of learning support by domestic and international students.

With regards to age, students who were mature age (n = 8183) showed a stronger preference for using only appointments, while school leavers (n =1849) were more likely to use PASS alone (p = 0.000, Cramer's V = 0.185). Figure 6 also indicates a relative balance of age groups that attended workshops or used Studiosity.

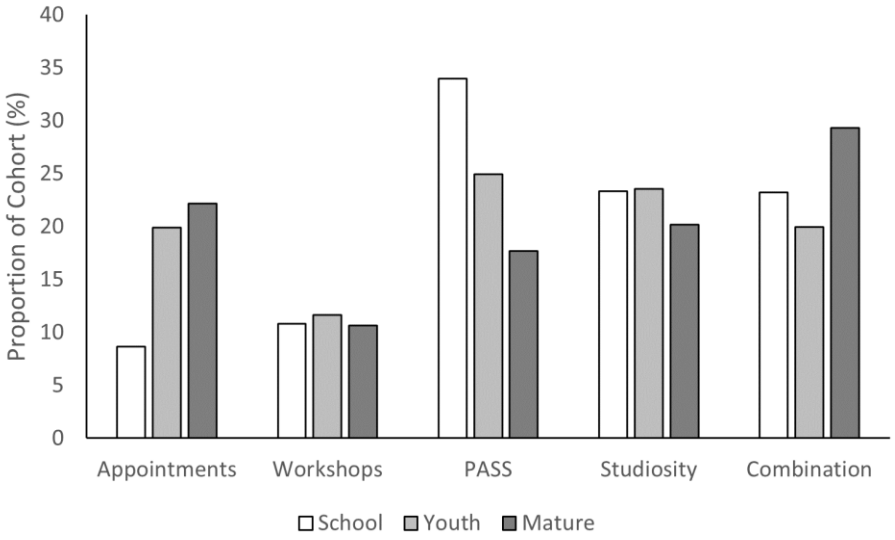

Figure 6. Use of learning support by age group.

Of students who used at least one service, males were slightly less likely than females to use a combination of support services (21.4% vs 27.6%, p = 0.000, Cramer's V = 0.095). Use of ALL services for intersex/indeterminate students are not presented in the results as the sample was too small for statistical reliability. Other key demographic variables did not indicate any meaningful differences in the proportion of students with differing demographic characteristics who used at least one service. For example, there were no meaningful differences in the patterns of service use for students who self-identified with a disability (n = 941) and those who did not (p = 0.000, Cramer's V = 0.055); those who were the first-in-family to study at university (n = 6506, p = 0.000, Cramer's V = 0.049); domestic students who spoke English as an alternative language (n = 325, p = 0.000, Cramer's V = 0.071); students who identified as Aboriginal and Torres Strait Islander (domestic students only, n = 160, p = 0.486); or low socio-economic status (domestic students only, n = 668, p = 0.000, Cramer's V = 0.065). Note that while most differences were statistically significant (i.e. $p < 0.05$), all effect sizes, as discussed in the methods, were quite small (i.e. Cramer's V < 0.1).

Thus far, we have only considered whether students accessed a service or not, and whether they accessed multiple services in any given year but have not considered how often the different services were used. That is, having picked a service, were they likely to "stick with it" by using it multiple times? Regarding how many times students accessed services, one of the key observations from Figure 7 is that students who used PASS appeared more likely to attend again compared to those who attended workshops. The data also revealed that, on average, about 38% of students who used a service did not return within the same year. This may indicate that this student cohort had their academic support needs met through engagement with their chosen service and did not need to reengage for additional support.

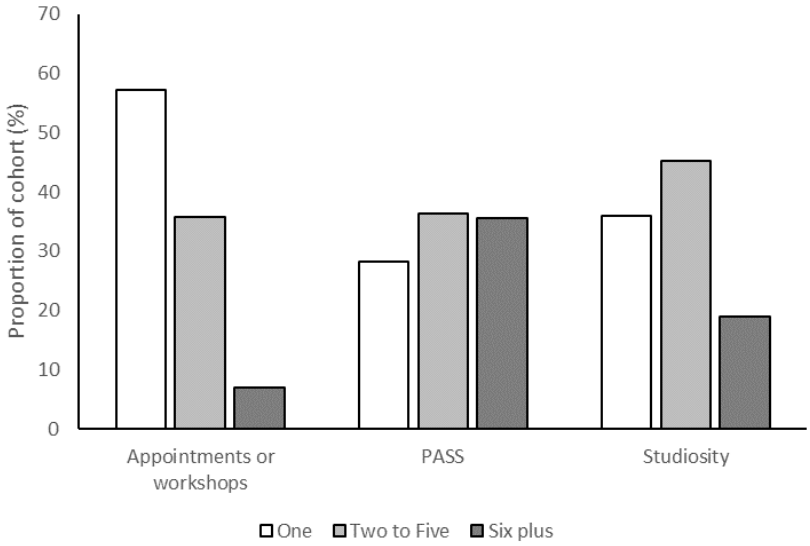

Figure 7. Number of times that students used an individual service in a year across all three years.[1]

5. Discussion

The reported data indicates that while students engaged with *all* types of service, in any given year, there was a strong student preference for picking *one* type of service and sticking with it. This trend suggests that it is critical that universities provide different types of ALL programs to accommodate the diverse preferences of its respective student cohorts. It also aligns with findings within the current literature that highlight ALL services are critical for supporting diverse student populations (Wanti et al., 2022; Bornschlegl & Caltabiano, 2022). In other words, a diverse student cohort requires a diverse offering of ALL support.

These results can be interpreted and applied in different ways. On the one hand, promoting different services to underrepresented cohorts might increase engagement with these services, and consequently have a positive effect on academic results. On the other hand, promotion might be more effective targeting specific types of ALL services to key cohorts, such as Studiosity for online and regional students. Overall, however, there needs to be a rich mix of learning support that is offered on-campus and online, at different times of the day or night, and in different formats (i.e., individual or group based). One size will not fit all.

5.1. Engagement with services

Despite a high level of cross-promotion between services, only one-quarter of students who used support chose to use multiple services, and less than 1% took advantage of all four services. These results raise an interesting question about the way in which universities promote ALL services: should promotional activities for each program be tailored to the types of students that tend to use them the most, or should the specific purpose of each support be better communicated to attract all students? A well-established marketing principle is to take a targeted approach to those most likely to use a product or service (Palmatier & Sridhar, 2020). Conversely, however, lower student engagement could be due to factors not related to study. For instance, increasing access for some equity groups can be challenging because these students often face additional cultural and social barriers in accessing support at the same frequency as other students (Chang et al., 2020; Wanti et al., 2022). These considerations suggest that it is important to take a balanced approach: offer

[1] In Figure 7, "proportion of cohort" refers to the proportion of students who accessed a particular service. For example, of all students who accessed PASS, 28.2% only did so once, 36.3% did so 2 to 5 times, and 35.6% did so 6 or more times.

a diverse range of services, tailor promotion to those most likely to engage, and do so in such a way that normalises use for every student. Practical examples include offering more support options outside of normal business hours as well as using diverse student photos and testimonials as part of promotional activities. In addition, instead of promoting services by the specific skills they support, promotion could also focus on practical features, such as available times and whether it is a group or individual session. These approaches might better help students to find their favourite method of engaging.

Student engagement with services can also be examined in relation to repeat visits. PASS was the most commonly revisited service, which is a positive outcome given research has shown that academic performance in first year is correlated with the number of PASS sessions attended (Spedding et al., 2017; van der Meer et al., 2017). However, 37% of students did not return to a service after using it once. This pattern is similar to Ashton-Hay and Doncaster's (2021) study of learning adviser consultations, but the number is surprisingly high given that our internal feedback and external studies consistently show high levels of satisfaction with learning support services (e.g. Dollinger et al., 2020; Ma, 2018). Interestingly, workshops had the lowest repeat users of any of the services, despite Ma's (2018) study finding that workshops had a stronger influence on a student's decision to continue studying than individual appointments. The decision not to reuse a service may be an indication that it did not meet the student's needs or expectations. For example, students who expect that they will get their work 'fixed' or receive specific content support, as seen in Stevenson and Kokkinn (2009), may be less likely to use a service more than once if that expectation is not met. However, a single visit to an academic support service is not necessarily a bad outcome, given that often the aim of learning support is to help students become self-regulated, autonomous learners (Hamilton, 2020; Wilson et al., 2011).

5.2. COVID-19 and its impact on student engagement.

Student engagement with ALL services during this period was fundamentally impacted by COVID-19 and the disruptions mandatory social distancing measures had on university teaching and student support services. In early 2020, learning adviser appointments were scaled up by temporarily doubling the number of sessions through offering 15-minute appointment times instead of the usual 30-minute allocation (Kelly et al., 2020). This partially accounts for the large increase in appointments as a sole service accessed during 2020 compared to 2019 and 2021, but the challenging nature of a rapid transition to remote learning also meant that more students required individualised support to do so effectively. The move to remote learning also resulted in workshop attendance dropping dramatically during the same year. Some workshops were cancelled due to social distancing requirements, and those that were revised for online delivery initially had poor attendance. However, low workshop attendance appears to align with other studies that demonstrate reduced student attendance in learning activities during the first year of the pandemic (Gupta et al., 2022; Qutishat et al., 2022).

Despite lower rates of engagement with workshops during 2020, student attendance at PASS sessions as their only service accessed increased. This trend continued into 2021, even as social distancing measures were reintroduced when COVID-19 cases occasionally spiked in Western Australia. The University also deployed other forms of online peer support in response to the COVID-19 pandemic, although engagement was not as high as it was in PASS (Kelly et al., 2020). These results highlight the success of peer programs such as PASS in engaging students during challenging transitions, both in terms of academic preparedness and maintaining connections with other students.

Student engagement with Studiosity as a sole service accessed increased slightly from 2019 to 2020, which is likely due to expanding access to all students in response to the pandemic. However, student engagement did not increase as significantly as with services such as learning adviser appointments and PASS sessions. Moreover, the total proportion of the student cohort that used Studiosity alone dropped slightly in 2021. Studiosity use as a single service accessed

remaining relatively stable during 2019-2021 despite increased availability, which suggests that attracting new students to engage with the service had limited success. Instead, existing users continued to access the service most regularly.

5.3. Age

While many demographic variables did not appear to have a significant impact on service choice, one notable exception was age. Younger students who used a single service were less likely to access an individual learning adviser appointment but more likely to attend a PASS session. One plausible explanation is that school leavers have had more recent experience in a high school environment, and as such are more comfortable with a group learning environment than mature aged students. Similarly, mature aged students are generally more likely to have other non-study commitments such as work or caring responsibilities that limit the times in which they are available to access an extracurricular ALL service (Heagney & Benson, 2017). Learning adviser appointments are more flexible and personalised than PASS sessions; students can choose a face-to-face, online or phone appointment option at an available time that suits them, whereas PASS has a scheduled timeslot that rarely changes throughout a teaching period. These differences might account for the variations in student engagement with these ALL services. We found no difference in use of Studiosity as a single service by age, which contrasts with Thomas (2020) who observed that mature students used this service more at most institutions.

5.4. International student status

Domestic and international students also tended to make different choices when accessing an ALL service. Figure 5 shows international students chose appointments as a sole service more than domestic students, but were less likely to attend a PASS session. This could be related to enrolment patterns, as PASS is not offered at postgraduate level. However, based on similar trends found in the current literature, the authors hypothesise that the international students represented in this study may have demonstrated anxieties about speaking English in group learning environments at university (Dovchin, 2020). Additionally, international students also faced additional barriers during the COVID-19 pandemic that most Australian domestic students did not, including instances of racism and discrimination in public settings (Nguyen & Balakrishnan, 2020). In this context, it is plausible that international students may prefer seeking support on an individual basis rather than from a group-based service. International students did attend workshops at slightly higher rates that domestic students, although workshops tend to require less individual speaking in front of others than PASS sessions, which are highly interactive.

5.5. PELA results

The conclusions that can be drawn based on PELA results are somewhat limited, because not all students in the sample population were required to complete it. However, there were some interesting trends worth exploring further. The first is that students who were required to complete but did not complete the PELA tended to use PASS more often. This finding is difficult to explain with certainty, though one possible explanation is that domestic students, who tended to choose PASS as a single service more often compared to international students, are less likely to see the value in completing the PELA because they are more likely to be native English speakers. The second trend is that PELA 3 (at risk) students were more likely to use a combination of support services. This result is encouraging, as these students are proactively contacted about the range of services that are available to develop their respective language skills. Increased use of a combination of services may be thereby due to additional targeted promotion that highly encourages using multiple forms of support for this cohort.

5.6. Limitations and future research directions

There are two notable limitations to the research data. The first is that we only considered relative service use amongst students who had already chosen to use support services, not relative take up

by all students. This means that individual motivation to seek support was not controlled for in this analysis. Such motivation is likely to be a strong predictor of whether a student will engage in university services in the first place and the extent to which they gain value from the decision to interact with support (Collins & Sims, 2006). The total number of students in this research project constituted approximately 20% of the eligible cohort that could have accessed an ALL service, and many of whom may have chosen to do so because they were more intrinsically motivated to improve when compared to their peers. Any initiatives to improve uptake of services, and subsequently analyse engagement patterns, will thereby be limited unless large numbers of students have the individual motivation to engage with support (Black & Allen, 2019). The factors examined in this study were chosen because this data is routinely collected for government reporting. Universities may wish to consider how best to collect data on other measures.

These unknown student motivations for attending ALL services present an opportunity for future research to expand on the findings within this article. Conducting surveys and focus groups about the reasons why students chose to access these services (and the reasons for their choice of which one) would provide further insights into how universities can increase participation and maximise the value of these services for academic success. It would be equally valuable to analyse feedback from students who chose *not* to engage in support and their reasons for making that decision, including the extent to which that choice was due to lack of awareness or time, subjective norms, or a belief that it would not be beneficial (e.g., Mergelsberg et al., 2021). Another possible barrier for seeking academic support is the impact of mental wellbeing on the likelihood of accessing ALL services, especially as the proportion of students who report mental health illnesses increases (Baik et al., 2019; Wadman et al., 2019).

The second limitation is that there was no detailed exploration of the degree of causation between service engagement and academic success. This omission is principally because of the difficulties in controlling for the impact of one support program and its direct connection to improved academic results. The researchers initially explored the viability of performing a linear regression analysis of each type of service and its impact on academic results, but were unable to draw helpful conclusions; this was because the significant majority of enrolled students during this period chose not to engage in these support services (approximately 80%). Those who did engage were mostly commencing students, with no baseline of academic results before they used the service, thereby skewing the data in such a way that it was not meaningful to analyse. As there are multiple complex factors that impact student retention (Burke, 2019), strong correlation (and not causation) is the best connection that can be drawn between accessing an ALL service and academic performance. Future research that includes a large data set with a higher proportion of the total student cohort engaging with ALL services may be able to demonstrate a clearer evidence-based link between this type of service and academic results.

6. Conclusion

Diverse student cohorts require an equally diverse mix of ALL services available to enhance their preparedness to succeed at university. As this article has presented, varied service options enable students to pick their favourite – this could include individual options such as learning adviser appointments and online writing feedback via third-party providers, and group environments such as workshops or peer learning sessions. Consequently, as this paper demonstrates, once students choose a type of ALL service that suits their needs, they tend to stick with that type of support rather than access other options, though some students do change their preferred option from year-to-year. Higher education institutions, in turn, should aim to offer a diverse range of ALL services and actively promote engagement with them – including advertising the reasons why particular services might be most beneficial for supporting students to learn and succeed academically. The data also suggested that demographic variables may play a role in which service any given student chooses to engage, especially age and international student status. These findings have important implications for understanding and addressing student engagement with ALL services, as well as

university services more generally. Further research into student views is needed to better understand the reasons why students choose to access a service and why they may choose one type of ALL service over another.

Acknowledgements

This work was supported by the Association for Academic Language and Learning (AALL) under grant number G1005997 (AALL number 21/3). The authors would also like to thank Dr David Rowland for his support in copyediting the final version of this paper.

Declarations

1. **Ethics approval**: Ethics approval was obtained to collate records of student use of the four services (approval number 2021-03087).
2. **Competing / conflicts of interest:** The authors declare no conflicts of interest.

ORCID iDs

Andrew Kelly 0000-0002-2896-5993

Miriam Sullivan 0000-0002-9870-2734

Tracy Ware 0000-0002-2534-7516

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