



Council of the Heads
of Built Environment

CHOBE Special Interest Group Series 2023/2024.

Fostering a supportive and
inclusive transition from Level 3
into Level 4 provision for Built
Environment students.

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About Chobe and The Special Interest Group (Sig) Project

CHOBE supports and represents, with a voice of influence, those with strategic responsibility of the development and delivery of graduate and postgraduate education and research within the disciplines of construction property and surveying. CHOBE's objectives include:

- Developing communities of practice in built environment education to support heads of department/schools (or nominees) in the UK and Ireland
- Influencing policy consultations through being the collective contact point for issues about built environment education for external stakeholders and Professional Statutory and Regulatory Bodies
- Providing a forum in which people can come together to network, share and address problems in a supportive and collaborative way
- Addressing the practical, day-to-day matters associated with learning, teaching and assessment
- Funding to initiate larger research projects that can have an impact on how we deliver our businesses

In June 2023 CHOBE invited proposals to establish Special Interest Groups (SIGs) for the forthcoming academic year. The purpose was to carry out small, targeted research into specific themes facing Built Environment educators. Each group was led by an expert in that field who will worked in association with a number of interested academics to discuss and identify different forms of innovation and good practice. Four SIGs were supported with a grant of £3000 each.

Executive Summary

The investigation examined how tailored student support, extracurricular activities, and delivery methods influenced student experience and retention in the University of South Wales engineering foundation year, particularly within the Built Environment subject area. It analysed retention data, pass rates, and overall student feedback to determine the effects of the changes implemented at the beginning of the 2023 academic year. The changes had a positive impact, improving first time submissions and attrition rates. Student feedback indicated that the extracurricular activities had enabled peers to build relationships and that the block delivery mode had been a positive addition. Foundation year tutors were initially placed in as an additional level of support, with a focus on building rapport with students. To further support this the first module in the block delivery was delivered entirely by the Built Environment tutor. This study has revealed that the tutors should focus more on pastoral care and rapport-building, potentially highlighting the need for the tutor to be proficient and confident in supporting level 3 students with complex needs. Recommendations were to embed the support and extracurricular activities into the student timetable, to

develop a foundation year profile outlining the skills required of a foundation year tutor and to review the content of the Built Environment courses.

Introduction

A foundation year is a level 3 provision provided across most courses in the faculty, it is viewed as a bridging year for those students who have an education gap or have not achieved the grades required to apply for the level 4 entry point (Husbands, 2021). Additionally, it is a crucial tool for widening participation, offering a pathway for individuals whose academic progress may have been disrupted, equipping students with the essential academic skills for success at level 4 (Clifford, 2022).

Foundation years, most recently, have been a topic of interest due to questions associated with value and relevance, which may stem from nationwide retention challenges (Freeman, 2023). Furthermore, by some, they are perceived as a means for universities to secure extra funding through an additional year of study, raising questions about whether they truly benefit students (Augar, et al., 2019).

To determine the current position of the Built Environment Foundation Year provision at USW, an analysis was performed on withdrawal rates across the faculty. This analysis was supplemented by collating feedback from students through a questionnaire. The key problems identified included a high attrition rate, low student engagement, negative feedback from students and a general lack of belonging.

The Problems

Attrition

High attrition in foundation year is an issue across the sector (Freeman, 2023) and within the foundation years at the University of South Wales. In June 2023, a review of the data was conducted to assess the number of students who completed the Engineering foundation courses versus those who did not progress. 'Failed to progress' encompasses all outcomes where a student did not advance, including withdrawals during the academic year, suspension of studies, partial credit, or the need to repeat modules. It is important to note that this data is based on first sitting board results and does not include outcomes from the August resit period, providing a basis for comparison with the final data. The data presents a high attrition rate, with 63% of students failing to progress (Figure 1) which is consistent with the Built Environment provision, where 59% of students also failed to progress. (Figure 2)

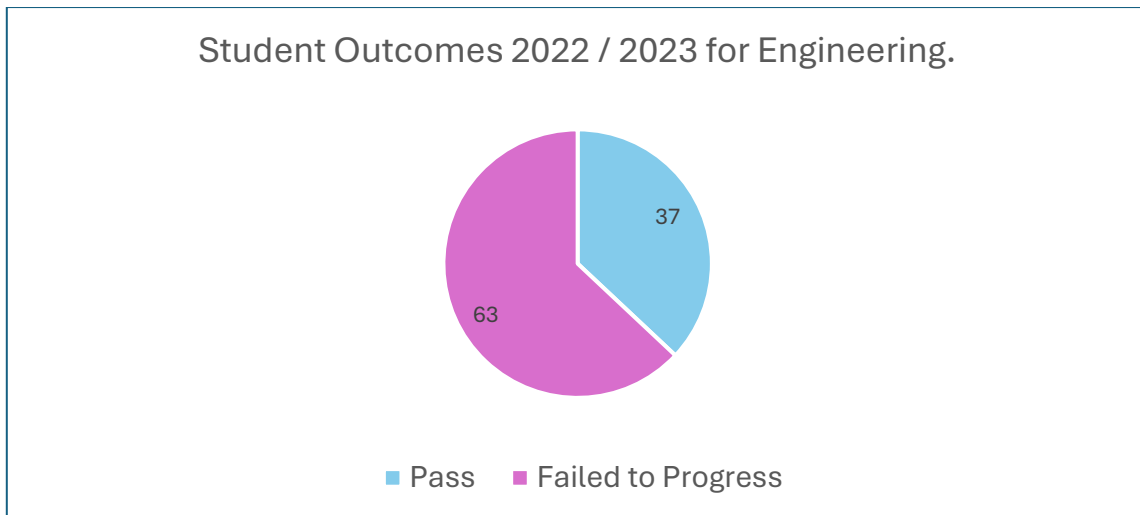


Figure 1 - Chart showing the percentage of students who passed and failed to progress from an engineering foundation year in 2022 – 2023.

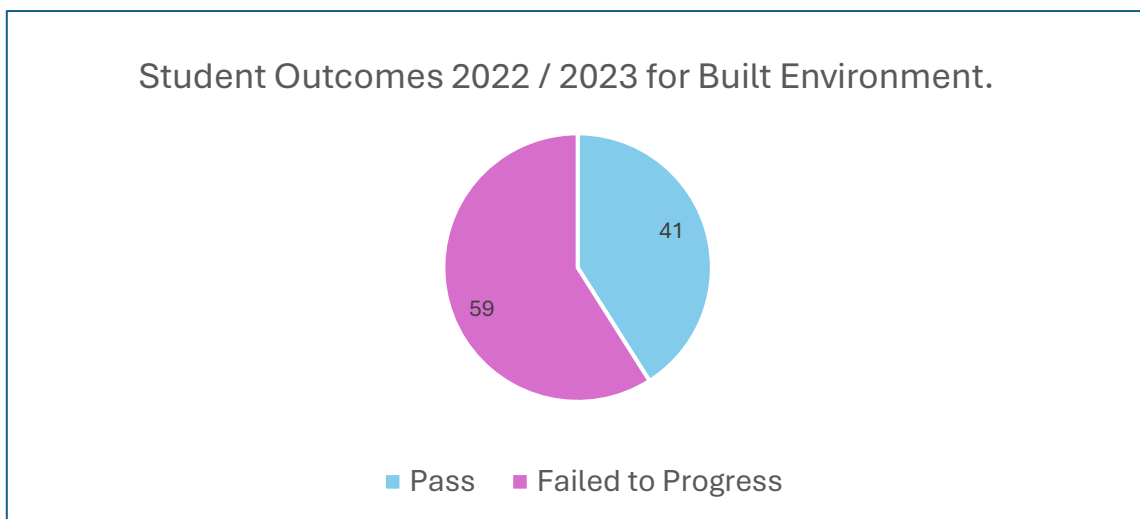


Figure 2 - Chart showing the percentage of students who passed and failed to progress from a Built Environment foundation year in 2022 – 2023.

Student Experience

To gauge an understanding of the student experience, meetings and support sessions were arranged with targeted cohorts, including the Built Environment cohort, to discuss any issues they felt needed to be highlighted; these ranged from module specific problems to university wide support provisions. Two key areas identified were student belonging and support. Built Environment students identified feeling lonely and did not socialise with peers or feel they had any connection to the university. In an aim to improve this, extracurricular activities, course specific support sessions and extended induction activities were arranged.

Guidance and Support

During the discussions it became apparent that the Built Environment students were unaware of who the course leader of the progression pathway was, with many unaware of the additional student resources provided through the advice zone in

relation to extenuating circumstances, wellbeing, and disability support resulting in students feeling lost and unsupported. To provide the students with an additional level of support, foundation year tutors were tasked with providing this information and being a point of contact.

Research Aim

The investigation aimed to review the content and delivery of the Level 3 program for Built Environment Foundation Year students, with the goal of creating a supportive and inclusive environment to improve transition to Level 4. The research further aimed to identify the impact of additional layers of student support, extra curriculum activities and a change in delivery mode.

Research Design and Methods

A mixed method research design was used, providing qualitative data from informal feedback sessions and a student questionnaire, alongside quantitative data from the retention and completion figures. The data collection methods and the feedback mechanisms used were approved by the university's ethics committee.

The questionnaire was issued via Microsoft teams at the end of the academic year and included four grouped question areas, student support, timetable organisation, assessment and feedback and student experience.

The figures analysed were from the internal university student records system and assessment board information; it should be noted that the data available for the 2023/2024 academic year was provisional as it is yet to go through the official university assessment boards.

The study included participants from all engineering courses, however, the timetable structure, extracurricular activities and module delivery teams were created with a focus on the Built Environment students.

There were 71 students on Engineering Foundation Year courses, with 21 students on the Built Environment pathway.

There are eleven courses in the Engineering provision:

- Aeronautical Engineering
- Aerospace Engineering
- Electrical and Electronic Engineering
- Automotive Engineering
- Mechanical Engineering
- Aircraft Maintenance Engineering

The following five courses are within the Built Environment subject area.

- Construction Project Management
- Real Estate

- Quantity Surveying and Commercial Management
- Building Surveying
- Civil Engineering

There were no international students, likely due to there being a specific international foundation year pathway for the engineering subject area. Five students were repeating modules, and eight students had an individual support plan.

Following the initial review, the subsequent elements were implemented and assessed, the use of foundation year tutors, block delivery, tailored support activities and an increase in social events.

Foundation Year Tutors

One key change was the introduction of subject foundation year tutors as research underlines the importance of tutor-student relationships in student retention (Lochtie, et al., 2018) so having a direct contact for a specific course was predicted to lower attrition. Previously, a single course leader oversaw all eleven engineering foundation years. Six members of academic staff were allocated time in the academic workload, to support the students in a course tutor role. It was essential that the tutors taught the student early in the term and made initial connections, managing induction activities and tutorials. As this was focusing on the Built Environment students, the personal tutor was selected based on anticipated contact, essentially teaching 55% of the overall course. Additionally, these tutors were responsible for managing support sessions, tracking student performance, serving as the primary contact for support, and identifying and supporting high-risk students. The tutors were scheduled a two-hour support session every two weeks, these were offered as optional support sessions, and the individual tutor could choose how they wished to manage these sessions.

Block Delivery

During the initial review of the previous academic timetable and after discussions with students it became apparent that the timetable did not provide an equal opportunity for all to attend. Some students shared that due to the current cost of living crisis they were choosing between attending university or eating, the crisis is believed to be a contributing factor to the increase in student mental health, a leading cause of withdrawal (Universities UK, 2023). The timetable was reduced to two days a week, reducing the cost of attending university in an aim to improve engagement and to provide students with a timetable that allowed students to balance education and personal responsibilities.

The timetable was delivered in a block/hybrid format, one termly module with two block modules each semester; this was to balance the maths curriculum with subject specific modules to improve engagement and to reduce the workload of the cohort leading to an overall reduction in stress associated with difficult curriculum topics (Ghapanchi, 2022). This was also to aid in concentrated delivery contact hours with

the foundation year tutor to increase the student-tutor connection (Mahoney, et al., 2022).

Tailored Support

Additional support events were arranged, these included tutor support sessions, engagement catchups and progression events. Beverages and food were included at all events to improve engagement. The support was proactive, in that, at risk students were identified and incentivised to attend the additional sessions. There were two engagement events, one in the first term and one in the second, these were scheduled in November and January as previous data had highlighted these as times in which most students would choose to disengage leading either to discontinuation or withdrawal. The progression event was held in April, at a key point in the year where students would be completing their course specific module, again, trying to increase the likelihood that students would engage.

Social Events and Added Extras

To improve belonging and student relations, social events were arranged and funded. (Lowe & El Hakin, 2020). Furthermore, students were awarded course hoodies as a tool to improve the connection to the university and increase engagement in the activities.

Key Findings and Discussion

Student Outcomes

Overall, the changes have resulted in lower attrition, it is worth mentioning that these are estimations based on tracked information from the internal student records system as the boards were yet to take place, furthermore, this again, like previous data, is first sitting data only.

Figure 3 shows the outcomes for all the engineering provision, highlighting that the attrition rate is 42% which is an improvement on the 59% from the 2022/2023 academic year; even though this is still high, most students can still progress through the resit period in August, which was not reflected in the previous results, where most students failed multiple modules and had limited chances of progressing.

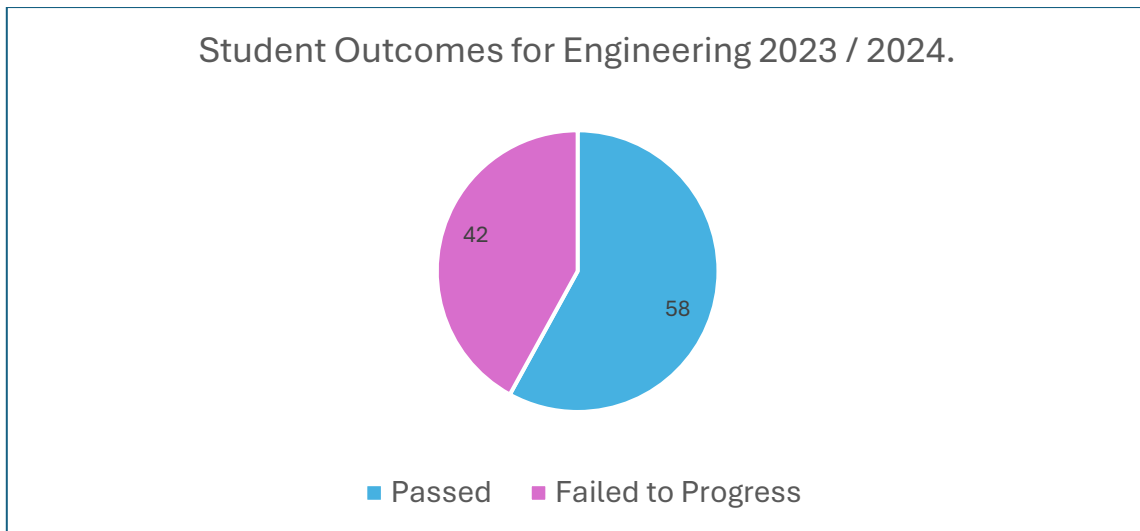


Figure 3 - Chart showing the percentage of students who passed and failed to progress from an engineering foundation year in 2023 – 2024.

The result within Built Environment shows a bigger reduction in attrition, where the overall was 29% (figure 4), a vast reduction from the 59% seen in the previous academic year. This is likely due to a large improvement in the civil engineering provision, where most students achieved, whereby in the previous cohort only 20% of students progressed.

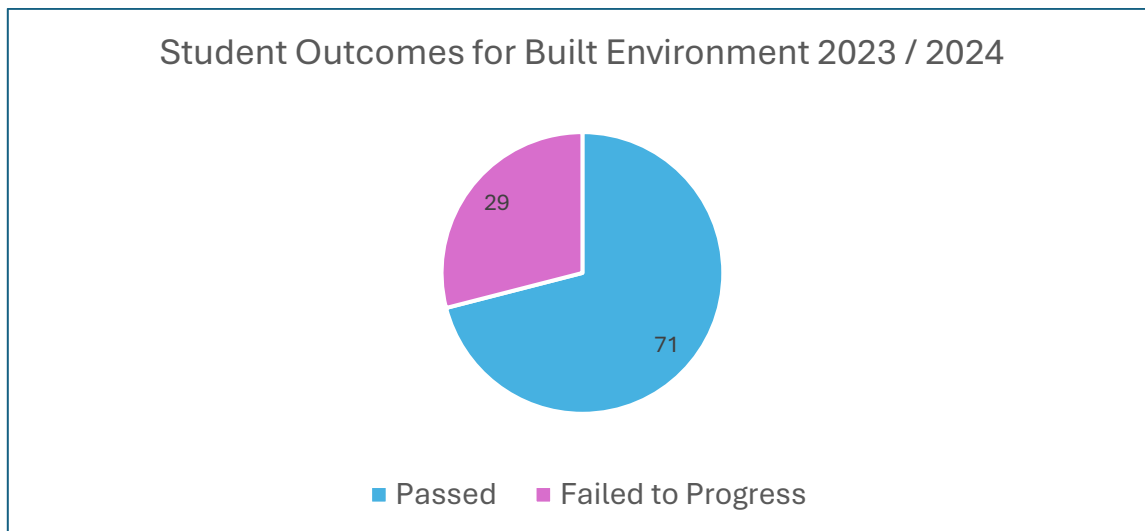


Figure 4 - Chart showing the percentage of students who passed and failed to progress from Built Environment foundation year in 2023 – 2024.

Of the five students who were repeating the year, only one has been successful, with one moving to a resit and the other three being withdrawn during the academic year; this highlights the need to offer additional support to returning students, either at academic level or at an institutional level. Another thing to note is that only two of the eight students with individual support plans have passed the course; two have suspended studies, one has withdrawn and the other three are resitting modules; highlighting again, that even more support can be put in place to help the students.

Student Feedback

Student feedback was gained through informal sessions but for this specific paper the feedback was obtained using a questionnaire created through Microsoft Teams, it is important to point out that less than 10% of the cohort responded. Although this feedback includes views from students who engaged in additional sessions and those who did not, it may not be representative of the entire cohort.

The student support theme of the questionnaire focused on the role of the course tutor. Two of the respondents failed to identify their tutor in a list of names, furthermore, they were the same students to state that they did not attend the support sessions.

One question addressed key aspects of the course tutor's role, such as tracking, support, and relationship building. As shown in Figure 5, responses varied, with some agreeing and others disagreeing. Notably, the Built Environment students responded negatively, likely due to a lack of focus on pastoral care throughout the year. The most significant negative feedback related to student contact and the tracking of grades and attendance, suggesting the need for a clear role profile for course tutors to outline their responsibilities.

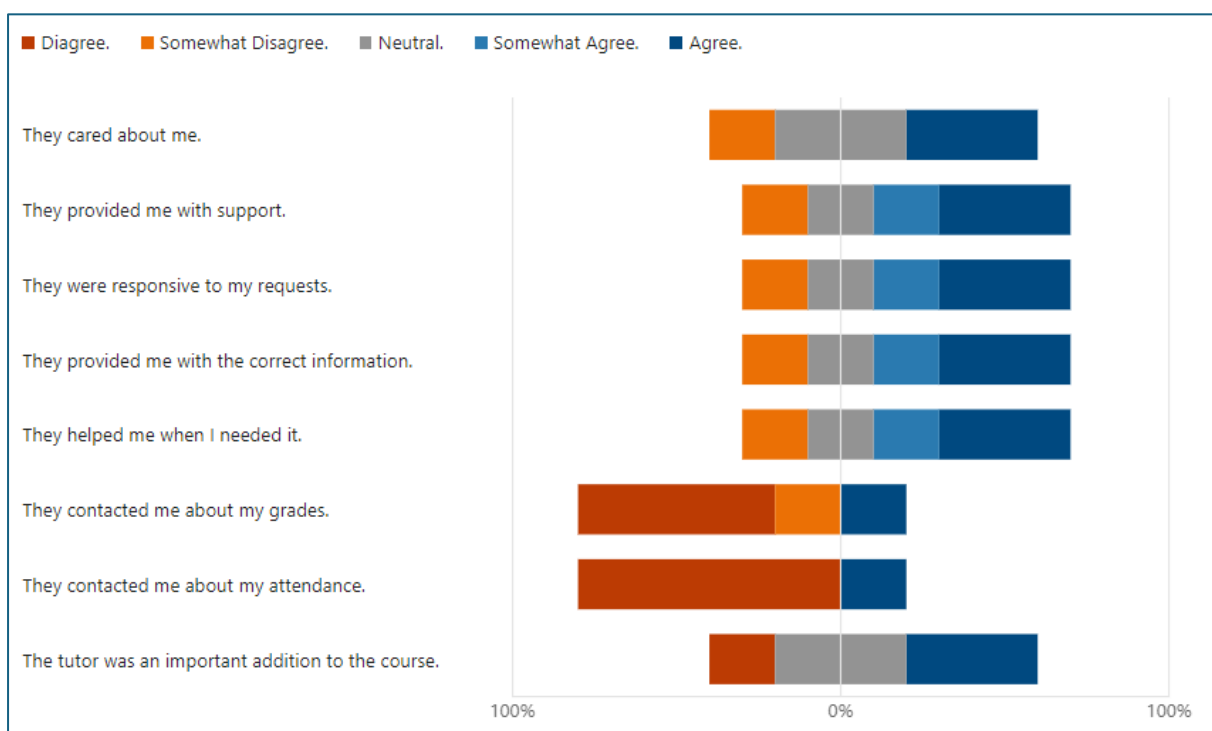


Figure 5 - Chart showing results for question 'How much do you agree with the following statements about your course tutor?'

Open questions were also provided in relation to the course tutor sessions, however, there was only one response stating that the sessions were "Very useful if any advice was needed"; again, due to the low number of responses this cannot be considered a cohort view.

The second section of the questionnaire focused on the timetable changes. 80% of respondents rated their timetable three stars out of five. When asked about the ideal timetable most students preferred three days a week, favouring an on-campus experience. Only one respondent stated that they would have preferred to be taught all modules simultaneously. The majority appreciated the block delivering model, with one student stating that “breaking the amount of modules completed at a time was very good as I never felt overwhelmed with the quantity of work.” Students also like the reduced number of days, with one student stating that the timetable allowed students to balance work and university commitments.

One area of consideration is the effect the block delivery has on the assessment timetable, as one student suggested “Evenly spaced-out assignments” stating that “sometimes it felt like we had lots of assignments due and other times it felt like we had nothing at all.” After reviewing the schedule and delivery order, it appears that the end of each block aligned with the semester maths modular test, resulting in a bunching of assessments. Therefore, assessment deadlines need to be created in conjunction with the block timetable.

The data shown in figure 6 further supports the positive feedback relating to the timetable, however, it should be noted that there were negative responses relating to order of modules. The order of modules resulted in some students not learning any course specific module content in the second term and likely led to some early withdrawals.

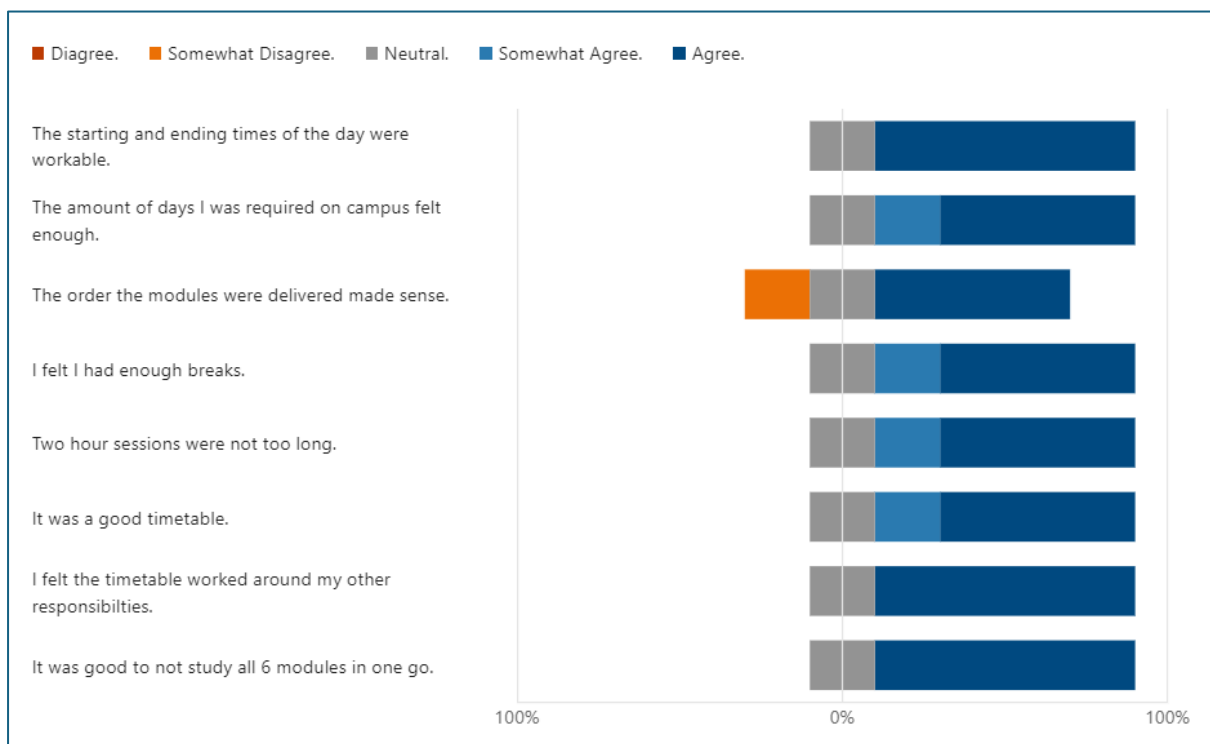


Figure 6 - Chart showing results for question 'How much do you agree with the following statements about the course timetable?'

The third theme of the questionnaire focused on assessment and feedback. Each module was individually analysed, highlighting that there was no significant difference between impressions of module assessments and students appear positive about the feedback that they received.

The fourth theme of the questionnaire related to student experience and included questions related to the progression event and the social events. Many of the respondents did not attend any of the events provided, but those that did, were positive about the experience stating that “it was fun and could interact with peers” and that it was “great to have an event available to us free of charge”.

The final question concentrated on the overall student experience, asking about the foundation year and whether they valued their experience and if they would recommend the course to others. As figure 7 below shows, there were varied responses. One aim of these changes was to increase belonging, yet 60% of the cohort recorded an answer of ‘neutral’ when asked ‘I felt part of the university’, that said, the sample size was smaller than anticipated and cannot represent the entire cohort.

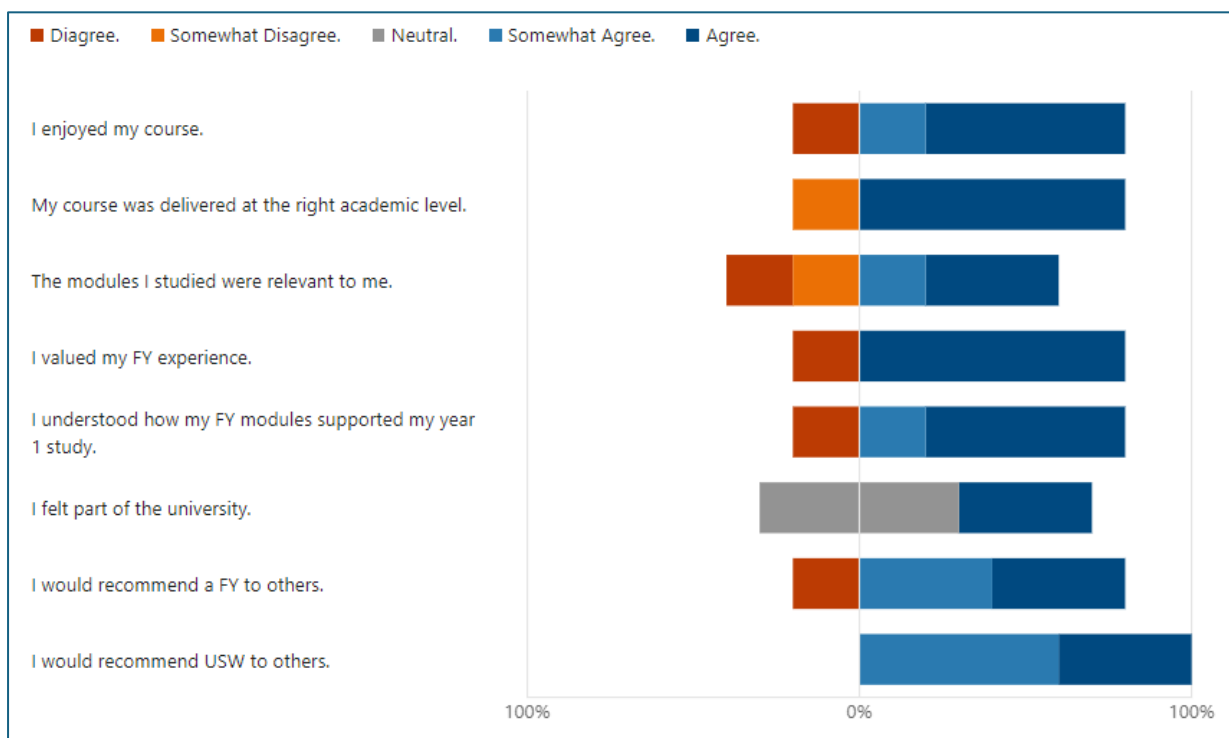


Figure 7 - Chart showing results for question 'How much do you agree with the following statements about your course?'

Limitations

Key limitations were identified, either through student feedback or analysis of engagement figures through the academic term.

Engagement was a key issue identified, less in the academic sessions but more within the social and extra activities added to the student experience, nonetheless,

the sessions were well received with 100% of student responses agreeing that the bowling, careers fair and lack of engagement workshops were a positive addition. These activities were also not prescheduled, they were added during the academic year, possibly resulting in conflicting plans, furthermore, they were scheduled on days that were not initially timetabled, again reducing uptake from students with other responsibilities.

The foundation year tutor for the Built Environment students was a good support system but many students did not identify them as the main support as anticipated; they did not engage in the additional activities that were included to improve student mattering and belonging. It is believed that this influenced the disproportionate failures for the returning students and those who had an individual support plan, who would have likely needed that pastoral focus. Student feedback has also indicated that there was little communication between the tutor and student, that they had not engaged with the support sessions and were not aware of their academic progress. There are many reasons to explain this, the lack of a pastoral focus from the tutor, a lack of formal requirements provided to the tutor prior to the role and the heavier workload that the tutor had to undertake due to the block delivery.

The biggest change that was implemented into the foundation year was the switch to block delivery, with the modules previously being delivered in a linear approach. Previous research has identified that blocking out topics allows students to learn topics fully before moving on to another topic, removing stress and pressure (Ghapanchi, 2022). This research has identified the importance of topic order. Students disliked the module delivery order, finding that the course specific module likely led to student disengagement as it was scheduled in the final six weeks of term.

Few students completed the questionnaire which is not representative of the entire cohort and possibly has outcomes related to those that actively engaged and is lacking information as to why a student disengaged or chose not to participate in the social activities.

Conclusion

The aim of the project was to improve the retention of students by offering tailored, proactive student support and increased opportunities to improve student belonging. The results indicate that there has been a positive improvement in retention and completion; eventually leading to increased transition to level 4. Multiple elements were changed for this research, so pinpointing one element as the driving force for improvement is difficult, however it can be concluded that all elements improved the overall student experience and should be continued. There were limitations to some of the changes implemented, student engagement in the social and support activities were low, there were also questions raised about the suitability of some of the course tutors who potentially were lacking a pastoral focus, furthermore the block delivery

resulted in additional workload for some, with some students not understanding the order in which they were delivered. Overall, the changes implemented had a positive impact and will be utilised in further years, implemented with the report recommendations.

Recommendations

Reviewing the findings and limitations have led to the following suggested recommendations for university institutions that provide foundation year qualifications and wish to include these changes:

- Ensure the social and extracurricular activities are timetabled, this will allow students to plan for the activities and increase the engagement in activities leading to an increase in opportunities to bond with peers.
- Provide responsibilities profile for course tutors to ensure that all the academics that are identified as potentially tutors can fully understand the role and the impact that the support has on retention and student achievement.
- To improve attendance and meaningfulness of the tutor sessions it is recommended that each week has a theme, either academic or support based, essentially creating a tutorial programme that supports the student through the academic journey.
- Further understanding about student belonging is essential, therefore discussions and sharing good practice between institutions is central to foundation years remaining as an offered pathway to future students.
- Ensure that module order, assessment bunching and staff workload are considered when deciding to implement block delivery.

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