ABSTRACT: Despite increased investment in transition between further education and higher education during the last 10 years, direct entrants remain less likely to take an active part in class, less likely to feel part of the academic community, and also less likely to get involved in student representation (Higher Education Academy, National Union of Students 2013). During 2013/14, the School of Computing’s Associate Student Project introduced a range of partnership and bridging initiatives to provide additional support for associate students in the colleges. As the associate students complete their second year of study, the project is focusing on the student voice, directly engaging students in supporting themselves and other students through the transition. This paper introduces the College University (CU) Mentoring project which utilizes students who have successfully articulated into university to provide one-to-one support for associate students both at college and when they make the transition onto the university campus.

1 Introduction

This paper describes research and practice relating to the introduction of the CU Mentoring programme for students in transition from college to university. We provide an overview of the project to date and examine how listening to the student voice can help to develop the right initiatives, at the right time and in the right place.

The paper examines previous research on transition and persistence within higher education (HE) and has drawn on Tinto’s model of student attrition (1975, 1998). By listening to students in the School of Computing who have made the transition from college to third year at Edinburgh Napier University, we have examined the academic and social integration issues that these students face, and their proposed solutions using student peer support to benefit future students. Student integration is of paramount importance to student persistence and success and is influenced by both social and academic factors. Drawing on Lizzio’s (2006) research on transitional strategies, this paper utilizes the ‘Five Senses of Student Success Model’ to further explore academic and social integration.

2 Context

Since 2013 the Scottish Funding Council (SFC) has provided additional funding for institutions to reach ambitious targets supporting students who articulate from college to university degree study with no loss of time, by way of ‘guaranteed articulation’ (Scottish Funding Council 2013). Working with three partner colleges, Edinburgh Napier University is guaranteeing entry and offering associate student status to students who begin their studies
on selected HND programmes and then join the degree course in year 3. This shared model of delivery is known as a ‘2+2’ model (SFC 2013). It enables students to enroll on their college programme, but also gain access to additional resources and support initiatives provided to them by the university as an associate student.

In academic year 2013/14, Edinburgh Napier University was awarded funding from the SFC for an additional 107 associate student places in computing. These associate students benefit from access to a range of resources and facilities offered by the university. To date these benefits have included, familiarization visits to the university, meetings with staff to explain the links between the college course and the university degree, guest lectures from university staff at the college, academic skills workshops in the college, the opportunity to sit in on university lectures, access to the student portal, intranet and online learning environment, a 2 day symposium prior to starting at university, access to resources such as the library, journals and e-books, sports and student union facilities and most recently the introduction of a bespoke mentoring programme, CU mentoring. These student focused, targeted learning opportunities are designed to enhance student progression and attainment by creating opportunities for students to develop their confidence and the academic skills which will help them to succeed in the very different HE environment. They are designed to raise students’ expectations of their own potential (progression to a degree) and to clarify the expectations that the university will have when they begin year 3 of the degree programme.

3 Theoretical Concepts

Retention and success of students are key indicators for all universities. Widening participation is not simply about widening access but supporting the integration and success of students who gain access. Academic and social integration are the two components of successful integration required for success (Tinto 2012). New students, particularly those who join existing cohorts, have to make connections with university faculty and academic requirements i.e. academic integration, and often struggle to fit it, citing specific concerns around making friends i.e. social integration (D’Amico et al 2014). Social integration can be defined as the social interactions the student experiences either formally, through institutionally provided activities, or informally through interaction with fellow students in residential areas or various other places of study (Strahn-Koller 2012). Social integration can occur naturally when students are living on campus and their daily lives are encompassed by their student identity. All of the associate students in this study live off campus and are subject to external demands such as part-time working, child or caring responsibilities and this has a direct and significant influence on both their academic and social integration (Strahn-Koller, page 29).

Listening to the voice of students who have made the transition from college to university uncovered a number of suggestions for easing academic and social integration through peer support and social networks. Of particular interest were the offers to advise and support students by acting as peer mentors or buddies. A study by the HEA (2012) examined pre-entry interventions and emphasized the importance of interventions which nurture the formation of peer group support both academically and socially (Aynsley & Gazeley 2012).

Black & MacKenzie (2008), contended that peer support aids engagement with the institution through increased motivation and by building a sense of belonging for first year students. Like first year students, associate students need to adjust to the new environment offered by university study. This social adjustment is the process by which students become integrated into the campus community, build support networks, and negotiate the new freedoms afforded by university life (Gray et al 2013). By providing peer support through the CU Mentoring project, Edinburgh Napier University are following a protective strategy that
supports critical relationships with peers whilst building the student’s identity within the institution (Aynsley & Gazeley 2012). Tinto (2012) supported the use of peer mentors and confirmed their use in familiarization, integrating new students with the unfamiliar world of university life in ways that faculty and staff cannot. Other research carried out by the HEA found that students gained additional benefit from speaking with other direct-entry students or students in later years of university who could advise them and tell real stories of transition (HEA, NUS 2013).

The five senses of student success model has been used to help build a fuller understanding of the characteristics that explain academic and social integration. The model defines five areas (capability, connectedness, purpose, resourcefulness, and culture) which can be used to shape transitional strategies for students (Lizzio 2006). Each of the characteristics has been further categorized into academic or social integration outlined in Table 1.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Characteristics</th>
<th>Academic/Social integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capability</td>
<td>Understanding the student role and mastering of academic knowledge and skills</td>
<td>Academic integration</td>
</tr>
<tr>
<td>Connectedness</td>
<td>Building relationships with peers and staff, as well as identifying with the university</td>
<td>Social integration</td>
</tr>
<tr>
<td>Purpose</td>
<td>Setting realistic goals, engaging with the discipline and developing a sense of vocation</td>
<td>Academic integration</td>
</tr>
<tr>
<td>Resourcefulness</td>
<td>Knowing about university resources and procedures. Balancing work, life, and study</td>
<td>Academic &amp; Social integration</td>
</tr>
<tr>
<td>Culture</td>
<td>Appreciating the core values and ethical principles of higher education</td>
<td>Academic integration</td>
</tr>
</tbody>
</table>

Table 1 - Five Senses of Student Success (Lizzio, 2006)

Chester et al (2013) posit that peer mentoring is one intervention that has the capacity to address all five needs in a mutually beneficial way for both first year mentees and later year mentors.

4 Methodology

A range of qualitative and quantitative approaches to data collection have been employed. Questionnaires have been used to gather feedback for formative purposes (Arthur et al 2012) and as a means of collecting data from a large sample of undergraduate students across the School of Computing. A selection of closed and short written response type questions were used to survey both college and university students at the beginning of the academic year. The questionnaire was completed online by 596 respondents, a 57% response rate, of students studying at the university and 110 college students, an 85% response rate. Comparisons are drawn between the responses of university students studying Computing at the Edinburgh Napier University campus and Associate Students studying at college prior to articulating to a university degree.

Towards the end of the second trimester, a questionnaire requiring open ended, long answer responses was administered to a further sample of year 3 university students. Eighty six students responded, an 80% response rate of the targeted groups. Fifty per cent of this sample had entered university from college at the beginning of year 3. These students were asked what problems they had faced with academic and social integration, and how they might have been better prepared for it. These students had not been associate students, since they had started before the current scheme. Their account of their integration has
been used to inform the project.

Semi-structured interviews were used to obtain rich qualitative data from students about their experiences of being a CU Mentor. The interviews were recorded, transcribed and coded. Ethical approval for this research and for the more extensive study which will follow has been granted from the Edinburgh Napier Faculty Research Integrity Committee. At all times ethical considerations and the privacy of all participants has been prioritized, obtaining informed consent from individuals and anonymizing contributions from all students.

Coding was employed as a grounded and systematic data reduction technique for synthesizing, or bringing together insight generated from interviews and questionnaire responses. The raw data was coded, according to the four main themes, student voice, academic integration, social integration and peer support, with a view to determining emerging patterns and ideas. The coded textual data revealed that both the questionnaires and interviews were appropriate means of gathering the student voice.

5 Findings - Listening to the student voice

Student responses to our questionnaires highlighted a strong realization and understanding of the problems and issues faced during transition from college to university. With hindsight, most students that joined university from college cite a lack of academic preparedness (Gazely and Ainsley 2012), signaling the major differences within the learning environment at university, the heavier workload, higher academic standards, the requirement to study independently and the more distant and formal relationship with lecturers. This lack of academic preparation (Thomas 2012) is confirmed for many during their first trimester at university when two thirds of students that had entered from college did not do as well as they had hoped in their first trimester assessments; compared with 20% of students who had studied at university for the first two years. By the end of year 3, they recognize the need to pay close attention to marking criteria and they understand the grade requirements for different classes of degree – they are becoming academically integrated (Tinto 2012).

As well as the workload being more intense, respondents describe the academic standards and expectations as being higher. Open ended responses revealed:

‘I achieved grade A at college and expected to come to university, work hard and achieve a First Class honours. But I’m struggling to achieve a 2.1. The level of work expected is higher and adjusting to the different teaching styles and expectations of different lecturers is difficult.’

The change in culture between institutions can hinder academic integration. Specific comments described the higher standards of academic writing required and the requirement to discuss and reference theory, along with a demonstration of understanding and organization.

‘In college I wrote a few reports, but none in the third person, and none required thorough referencing.’

Almost all students that entered university in year 3 commented that there was a greater requirement for independent learning or self-study, in contrast to college, where they reported having been ‘spoon fed’. At university they were given direction but they had to do the work on their own:

‘Prepare for a major shift of learning dynamic. Train yourself to become better at time management. Set yourself a learning timetable for home time. Don't procrastinate. Don't feel afraid to talk to lecturers. Don't feel afraid to take command of your work
and, if in a group project, tell others to do their share.’

College entrants described having to adjust to larger classes, having a wider range of lecturers and having a more formal, less supportive relationship with their lecturers. Analysis of all responses revealed that the main areas of concern could be grouped into academic and social integration.

Given the common description of ‘feeling lost’ in the first few weeks, the study asked students how the experience of starting at university could be improved for students coming in to year 3 from college. In terms of preparing for university, year 4 students who had joined their programme in year 3 rated ‘Meeting University students’ before they came to university as ‘Extremely Useful’ (71%), more useful than going to an Open Day, which only 40% had attended. They had suggestions about how the university could help direct entrants to develop social networks and get support from other students. They recommended that new students should be given opportunities to meet each other and build networks. They suggested that it would be useful for new entrants to have a ‘buddy’, to ask questions and have someone to talk to.

‘Assigning a ‘buddy’ from the same course (the same year and subject) could be an idea. When I moved to university last year I joined a group where people knew each other and had followed university procedures already for last two years. For me absolutely everything was new. I had to ask questions, but not everyone was so keen to answer! If I had someone at that time who was willing to help me I would not have felt so lost and outside the community.’

‘Set up meetings or contacts with people who were in the same situation as these students are now.’

‘By organising a lunch or event for new students to meet. I found it quite hard joining at 3rd year and not knowing anyone and found it quite hard to make friends.’

Recommendations described methods of peer support which would aid academic and social integration.

6 CU Mentoring

Several successful mentoring schemes were already in place at Edinburgh Napier University, using both students and employers as mentors. The CU mentoring project is different, focused on providing peer support during the critical transition period of trimester 1, tailored to the needs of computing students, who spend a significant amount of time in computer labs, often preferring to communicate online and who, historically, have been reluctant to volunteer for mentoring or being mentored. The main aim of the CU Mentoring project is to provide support to associate students in their transition from college to university through semi-structured contact with another university student.

6.1 Implementation

Andrews and Clark (2011) suggest that peer mentoring is most successful when mentoring starts prior to transition and continues beyond the first few weeks. CU Mentors carried out their introductory meeting with their mentees in March, establishing contact and developing their relationship whilst the associate students are still studying at college, not making the transition to university until September. The timeline for the mentoring contact can be seen in figure 2. The contact time depicted covers the crucial transitional period, starting in trimester 2 of year 2.
By linking students with mentors before they begin studying at university, the scheme aims to help students have clearer expectations of the adjustments that will be expected of them when they start at university and to reduce the period of initial disorientation described by many students. At the beginning of year 3, the mentors will be on-hand to help with campus orientation, to provide guidance on university procedures and to explain how to access additional support services. The mentors will be someone with whom to share experiences of adjusting to a new learning environment. Andrews & Clark (page 8) hypothesized that ‘peer support impacts positively on students’ experiences by engendering a greater sense of belonging both socially and academically’. In one recent study, first-year students’ participation in peer-led support groups led to a reduction in loneliness and increased awareness of social support (Mattanah et al 2010).

The project team appointed a mentoring coordinator and the scheme was launched at a networking lunch for staff and students, which provided a positive public profile. The mentor recruitment process targeted students who had made the transition from college during 2014/15 and who were currently studying in year 3 of their degree programme. The similarity of the transition they had undertaken was critical to the success of the project. Mentors were recruited through direct mailing, interviewed and trained. In the pilot project mentors have been paid for training and student contact. It was decided that participation in the mentoring project would be obligatory for mentees, to avoid it being seen as a stigmatised ‘catch up’ service which those most in need of support might avoid. Mentors and mentees were paired primarily on the basis of their ages.

6.2 Initial indicators

Interviews carried out with mentors asked about topics of discussion between the mentors and mentees and the social and academic concerns of the associate students at first contact. These initial meetings are crucial to the successful development of the peer support relationship. The topic of conversation for one of the older mentor/mentee pairings focused on the academic differences between the college and university institutions, and covered all of the five senses:

‘He’s older like me, so he’s coming in from a pretty mature point of view. He had a pretty busy part-time job just now, almost full-time and I told him that that would never work. He kind of already knew that, he knew that he had to make changes. But I kind of hammered that home. That you just wouldn’t get away with it here. He would really need to organise his work, life, uni commitments properly if it was gonna work out for him.’

This mentoring relationship builds capability by further defining the student role; encourages connectedness by building the relationship; creates purpose, particularly in this instance, when setting realistic goals was a strong feature of the conversation; resourcefulness because the work/life balance was discussed and finally the culture – ‘you just wouldn’t get
away with it here’.

For other mentors the conversations focused on what they would have found useful and on the academic and social differences, with emphasis placed on the capability, purpose and cultural senses:

‘I think the intensity of it, that the amount of work compared to college, very quickly, how much work you’re going to get, as soon as you're in the door, you're starting third year, like I did. Within 3 or 4 weeks you just get battered and it doesn't really stop until Christmas. It's relentless. I was trying to get that over. Different things that maybe he's hasn't done at college that he should probably have a look at over the summer. Things that would have helped if someone had told me.’

Aside from culture changes, some mentors focused on practical differences, ‘It was about the examination process, how that was going to be. The workload and going into the exams, making sure you're prepared for that kind of thing.’ This explanation of capability is important for students’ future success:

‘We mainly talked about the college experience, what I'm doing at University, what she's doing at college and then trying to figure out what it is that she is going to do at University when she joins. Just more about the timetables, how many trimesters, how often you had to be in university for lectures and practicals. How you get there. Questions about life.’

7 Developing peer support: other interventions

In addition to the CU Mentoring scheme, the project is developing other initiatives to increase college entrants’ social integration. Informal networking of staff and year 3 entrants has been promoted through ‘pizza lunches’ in the first trimester where lecturers, support staff and new students are invited to meet and mingle at lunch time. The lunches are designed to allow students to discuss common concerns and raise issues informally with module leaders and programme leaders. College entrants reported in their questionnaires having problems adjusting to a more distant relationship with their university lecturers. One student described the difference as:

‘College lecturers carry through struggling students more. At University you are expected to approach the lecturers and let them know you are struggling. The difference is acting more adult, which is what is expected in the real world.’

The findings of the What Works programme (Andrews & Clark, page 32-37) confirm the importance of students feeling they can contact university lecturers for clarification, guidance and feedback. Students who had poor relationships with their lecturers were more likely to withdraw from programmes and reported being less motivated. (Thomas 2012).

Social networking, in particular Facebook, has also been adopted to allow students to find out about future classmates through social information seeking (Ellison, Steinfield & Lampe 2011). The creation of an associate student facebook group designed for students to join whilst at college has allowed for informal communication between ASP staff, and more importantly, peers. Research by the Higher Education Research Institute (HERI 2007) found that students who spend time on Facebook tend to be more involved with on campus activities and more closely connected with their university peers. One mentor confirmed this social connection during his interview:
'We're friends on Facebook now, so if he has any specific questions he can always contact me there.'

8 Conclusions

Cropper (2000) posit that peer mentors provide a wide range of support and enable mentees to develop the structural context required for university study. To date, the CU mentors have provided the crucial first introduction to university peer support and started the associate students on their journey to develop the five areas necessary for student success.

By analyzing the voice of current students who have made the transition from college to university, the ASP team have better understood the transitional support necessary and implemented the peer support programme. The transitional mentoring timeline provides the early peer support necessary to encourage academic preparedness, integration and social support. By encouraging associate students to develop social connections via social media, exposure to university and campus life is strengthened as the mentors discuss coursework submissions, exam preparations and social events.

Although the CU Mentoring project is in its infancy, our early research findings indicate that the mentors and mentees are developing successful relationships, focusing on the issues and concerns around academic and social integration whilst developing the five senses necessary for their success. The project team propose to continue to listen to the student voice and acknowledge that their views must shape the transitional model developed during the longitudinal study if it is to be successful.

9 Future and Ongoing Research

Developing an effective framework of support, that is sustainable beyond the period of the increased funding, is the long term goal of the ASP team. In 2015/16 the first cohort of associate students will make the transition into year 3 of their degree programme, with peer support already in place, their voice will be used to shape the future of the project. College entrants currently have a high profile and there is support from academic staff within the school and across the university for piloting a range of initiatives. Research outputs are raising staff awareness of the challenges faced by transitional students within the school and beyond, increasing provision for them is seen as both acceptable and necessary.

Over the last 2 years as the students have studied in college, the focus of the project has been on interventions to support them pre-transition. As they move into university the focus will change to ensure transitional and post-transitional support is effective. All interventions and initiatives will be evaluated, with strong emphasis on listening to the student voice. Further studies exploring aggregated quantitative data obtained from the student record systems, tracking the progress of direct entrants in comparison to their 1st year entry counterparts are also underway.
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