

Investigating the transitional barriers university students face when moving from further education; what are the potential issues they may meet?

RESEARCH DIRECTIONS

Investigating the transitional barriers university students face when moving from further education; what are the potential issues they may meet?

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Abstract

The transition students face moving from Further Education (FE) to Higher Education (HE) can be a daunting experience. This transition to HE may require a substantial adjustment to a student mindset recognising that they would be responsible for their own learning and their eventual success compared to a FE environment where student learning is more structured and primarily teacher led. This project investigated transition hurdles faced by new university students (level 4 students) in the School of Life Science, Pharmacy, and Chemistry (SoLSPC). Quantitative data was obtained using a paper-based questionnaire. The findings highlighted that most students found HE assessments to be moderately or more difficult than those in FE (53%), the HE timetables less structured (63%) than that in FE, and that students had to be very much more independent in their studies (68%) in HE compared to FE, with most students finding the transition to HE difficult (51%). The findings of these transition barriers are discussed in more detail here.

Introduction

The changes that students face when moving from Further education (FE) whether this is sixth form or college, to Higher Education (HE) establishments tends to be a challenging period in a student's educational journey. The key differences students experience between FE and HE may include a loss of belonging in HE and a drastic change of learning approach, with more independent learning expected in HE in comparison to FE, and academic maturity (Tett et al., 2017). The FE setting brings about a more structured environment for students, with fixed timetables and more ordered teaching. Teaching tends to be led by the teacher, with well supported classes and revision sessions in smaller, more focused groups. This is in comparison to HE which places the emphasis for students to be independent in their studies with more report-based assessments, further reading suggestions and critical analysis being the mainstay of an undergraduate degree. The second challenge HE students face is the need for student integration in a social atmosphere. Here course cohesion is essential for not only

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positive student mental health experiences but also to allow enhanced engagement with course material and the formation of peer study groups helping with attainment and progression (Crabtree et al., 2007). One big issue that constantly arises when comparing FE and HE is the difference in the educator.

The reputation that university academics have from HE student opinions is that they are not approachable for help and advice in comparison to FE teachers, the impression being that students find teachers more approachable and seem to have a better relationship with them. FE teachers also seem more accessible than academics in HE, where contact methods maybe limited to email or specific and restricted hours. This notion seems to isolate students in HE and prevent them from asking for help if any issues arise during their studies thus potentially impacting student progression and attainment (Scanlon et al., 2007, Smith et al., 2017). The need for independence is also found to be an issue when it comes to student transition, as students may have additional responsibilities for their course, or are adapting to living away from home, thus causing extra anxiety, and increased mental health concerns (Lowe and Cook 2003, Thompson et al., 2021). Some students may even experience social anxiety due to increased class sizes. Lectures at level 4 in the SoLSPC can be up to 150 students. This can impact introverted or shy students particularly and increase their anxiety and mental health related issues. Social anxiety also seems to be increased due to negative experiences with academics in HE and can impact greatly the student experience at university (Archbell and Coplan 2022). A way in which to help ease student anxiety upon transition into university from FE could be to use a peer mentoring scheme involving students who have already had the experience and knowledge of the transition to ease student worries and concerns. (Wharton et al., 2017).

This pedagogic study aims to investigate students' experiences of their transition from FE to HE, focusing on various aspects including the support offered from their personal tutor, their opinion on their current HE timetables, as well as looking at other extrinsic factors impacting them.

Methods

Start of Project

The initial stages of the project were to receive funding as part of the Student Academic Development Research Associate Scheme (SADRAS) project at Kingston University. The opportunity for student partners to collaborate with us was advertised to undergraduates from all levels of three-year courses in the SoLSPC on the Biomedical science, Biochemistry and Biological Science, via our Virtual Learning Platform Canvas as an announcement. After interview we recruited four positions. The students we recruited comprised a first year Biochemist, a two first year Biomedical Scientists and a final year biochemist. Student partners prepared a means of communication and meeting scheduler by forming a WhatsApp group, separate to regular MS Teams meetings with staff organised meetings which occurred frequently.

Preparation and Submission of ethical approval

Before commencement of the project, we sought Full ethical approval for the project from the Kingston University CHERP (Centre for Higher Education Research & Practice).

Questionnaire preparation

Both student and staff partners worked in tandem to prepare a paper-based questionnaire to investigate how students found the transition from FE to HE. The questionnaire looked at into two main sections: Section 1: which investigated student demographics and Section 2, which understands some of the potential barriers students may face upon transitioning from FE to HE. Finally at the end of the questionnaire there were some free text questions which again followed the theme of transition barriers between FE to HE and included: 'comparing assessments and structure between FE and HE', and the support that FE offered that was useful. Student were asked if they would take part in a small group interview session to expand upon the questionnaire answers. Students could not be identified by name and only the Kingston ID number was visible.

Questionnaire dissemination

We wanted to analyse student transition from FE to HE, so we decided to focus on students

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early in their university career (Level 4 (L4) and Level 5 (L5) as despite the student having left FE a few years before, it allowed them long enough in HE to compare their experience to their FE experience. Lectures were targeted for the L4 and L5 core modules to disseminate the questionnaire during the student break period. The number of potential students who could complete the questionnaire was as follows: L4 ~300 students, L5 ~200 students in the SoLSPC. Core modules for Biomedical Science, Biological Sciences and Biochemistry were chosen. Any students who agreed to complete the questionnaire were provided with a sheet explaining the information for the study with a clear consent form. All questionnaire completion was optional for students, and they could withdraw at any point before completion without question.

Student focus groups

The key role of focus groups was to supplement the questionnaire data. A structured plan of questions to use within the focus groups was devised by both staff and student partners and was also part of the initial ethics application. A total of seven questions were prepared as part of the focus group schedule, these included questions which expanded upon those in the questionnaire in more detail. The focus groups were hosted either on campus or on MS teams, audio or video recorded for thematic analysis and once all information was transcribed the recordings were deleted.

Presentation and analysis of data

The data obtained from completed questionnaires was transferred to a secure excel spreadsheet with only access granted to the student and staff partners. For qualitative analysis, focus group questions and comments were analysed using thematic analysis and word cloud-based software.

Results

Questionnaire distribution

The questionnaire was handed to L4 and L5 students within core Biomedical Science, Biological Science and Biochemistry modules. Of these, 110 were completed in full, all with signed consent forms.

Demographics of student responses

Most respondents were in the range 18-21 years of age (78%). A large portion of students were female (66%), with the predominant ethnicities of respondents being from BME origin who represented 71% of total participants. Participants spanned all degree year groups (1-3) (**Table 1**).

Age					
18-21 Years	22-25 Years	26≥ Years	PNTS		
84 (77.77%)	16 (14.81%)	8 (7.41%)	0 (0%)		
Gender					
Male	Female	Binary	PNTS		
32 (29.09%)	73 (66.36%)	0 (0%)	5 (4.55%)		
Ethnicity					
White	Black/Black British	Asian/Asian British	Mixed	Other	PNTS
25 (22.94%)	18 (16.51%)	41 (37.61%)	8 (7.34%)	13 (11.93%)	4 (3.67%)

Table 1 Demographics looking at age, sex and ethnicity characteristics of students completing questionnaires, expressed as numbers and a percentage of total (%). Note: Some students did not respond to all questions.

A large proportion of students either entered university with A-Levels (52%) or BTEC qualifications (24%), with a fair split between currently on Biomedical Science (43%) or another Life Science course (Biological Science, Biochemistry, Pharmacology or Nutrition) (57%) with the majority of those completing the survey being at level 4 (65%). Interestingly students predominantly entered HE from 6th form (60%), where it is expected that teaching follows that seen in secondary school (**Table 2**).

Entry qualification to university					
A-Levels	BTEC	Foundation at Kingston University	Foundation Other	International Baccalaureate	Other
63 (51.63%)	29 (23.77%)	20 (16.39%)	2 (1.64%)	4 (3.28%)	4 (3.28%)
Course currently on?			Level of study		
Biomedical Science	Other		L4 (First year)	L5 (Second year)	
45 (43.27%)	59 (56.73%)		68 (64.76%)	37 (35.24%)	
Where did you undertake your FE entry qualification?					
6 th Form	FE College		Other		
64 (60.38%)	32 (30.19%)		10 (9.43%)		

Table 2 Demographics looking at entry qualification, course, current level of study and where they undertook their FE qualifications. of students completing questionnaires, expressed as numbers and a percentage of total (%). Note: Some students did not respond to all questions.

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Responses to FE to HE transitions

Support measures at FE and HE and student integration

We found that roughly half students surveyed did not have a dedicated person to speak to in FE (48%), despite the fact, that when entering HE, students are assigned a personal tutor (PT) who should act as a point of approach if a student is experiencing any issues. More than three quarters of student's state that the support offered by their current PT is either at a moderate level or the PT does not offer any support at all, a very concerning finding. Before entering HE, students did feel fully (26%) or moderately supported into HE. When comparing student integration into HE in contrast to FE, 71% of students feel they found themselves partially integrated into HE compared to how they felt at FE, something that needs to be investigated further to enhance student course cohesion at university. Partially supported suggests that only some support measures are adequate when it comes to, HE issues. (Table 3).

Did you have a dedicated person to speak to about personal issues at your FE establishment?		How supported do you feel with your current personal tutor?			
Yes	28 (51.89%)	Fully Supported	Moderately Supported	No Support	
No	9 (48.11%)	25 (23.15%)	58 (53.70%)	25 (23.15%)	
How socially integrated do you feel on your course compared to your FE establishment?		Before starting your course at university, how supported did you feel in your further education (FE) establishment?			
Fully Integrated	Moderately Integrated	Not integrated	Fully Supported	Moderately Supported	No Support
14 (13.08%)	76 (71.03%)	17 (15.89%)	13 (25.93%)	27 (64.81%)	68 (9.26%)

Table 3 Heat maps to illustrate responses to support and student integration. Colours are represented by green to red with green representing high response (50-100%, orange medium response (20-49%), and red indicating very low response (below 20%) to the question asked.

Independence and course structure

A key observation is that 63% of students find that the university timetable is less structured their FE timetable. Students find that they must be much more independent when compared to FE (58%), (51% finding it difficult to adjust). In terms of how much independence is needed to keep up with the material, 46% of students think that 5-10 hours per week is sufficient, which is below what the university stated students should be allocating (20 hours as a rough guide) (Table 4).

How have you found your timetable at university in comparison to your FE establishment?			To what degree have you had to be independent in your course at university compared to your FE establishment?			
Very structured	Similar in structure	Less structured	Very independent?	moderately independent?	no difference in structure?	what is independence?
13 (12.04%)	27 (25%)	68 (62.96%)	62 (57.94%)	38 (35.51%)	7 (6.54%)	0 (0%)
Was it difficult adjusting to the amount of independent work required at university compared to your FE establishment?			How many hours do you set aside per week for independent studies at university?			
Yes	No	About the same	0-5 hours	5-10 hours	10-15 hours	20+ hours
56 (51.38%)	26 (23.85%)	27 (24.77%)	31 (28.97%)	49 (45.79%)	25 (23.36%)	2 (1.87%)

Table 4 Heat maps to illustrate responses to support and student integration. Colours are represented by green to red with green representing high response (50-100%, orange medium response (20-49%), and red indicating very low response (below 20%) to the question asked.

Timetable and assessment - Overall experience

Bearing in mind that a large number of our students are commuting from quite far with many from low-income households, we wanted to find out whether the current timetable is affecting their attendance in comparison to local schools they attended in FE. Their preference for a morning lecture was quite evident with a large proportion choosing 10am (32%) or 11am (43%) clearly adhering to the financial obligations for off-peak travel and making up the distance. Students also chose longer teaching days but to attend less per week (69%) compared to more shorter teaching sessions (31%). Students also found that HE assessments were moderately difficult in comparison to FE assessments. Finally, as a final question, students rated their HE experiences compared to FE as average, which suggests that we need to enhance our HE provisions to ensure that students have a much better support mechanism in place.

What time would you like morning lectures to start?				How have you found assessments at university in comparison to your FE establishment?			
9am	10am	11am	12pm	Difficult	moderately difficult	similar	easy
7 (6.14%)	37 (32.46%)	49 (42.98%)	21 (18.42%)	8 (7.41%)	50 (46.3%)	44 (40.74%)	6 (5.56%)
Overall, how would you rate your experience at university so far compared to your FE establishment?				Would you prefer to be in university for either:			
Excellent	Average	OK	Disappointing	Very Disappointing	a. up to 3 hours every day b. up to 8 hours 1-3 days a week		
13 (11.61%)	51 (45.54%)	34 (30.36%)	7 (6.3%)	7 (6.3%)	Option A	Option B	
					33 (30.56%)	75 (69.44%)	

Table 5 Heat maps to illustrate responses to timetable, assessment and overall experience. Colours are represented by green to red with green representing high response (50-100%, orange medium response (20-49%), and red indicating very low response (below 20%) to the question asked.

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Qualitative data

Students who took part in focus groups were asked a range of questions with the key ones being:

- What are some differences between assessments at FE and university?
- What aspects of university are significantly different to FE?
- What support services stood out for you at your FE establishment?

Addressing the first question students seem to enjoy online assessments and/Multiple Choice Questions (MCQs), which is something found in FE, however one response quite rightly pointed out that as the course develops, MCQs are used less so do not help in the preparation in further years. Students like the fact FE has shorter lessons than HE lessons. HE lecturers are found to be more enthusiastic than teachers which undoubtedly helps with engagement. The final question was 'what support services, stood out for you at your FE establishment?' to which students suggested that FE classes because of their size provided a more personalised experience for students, with fondness for lunchtime and after school drop-in sessions (Table 6).

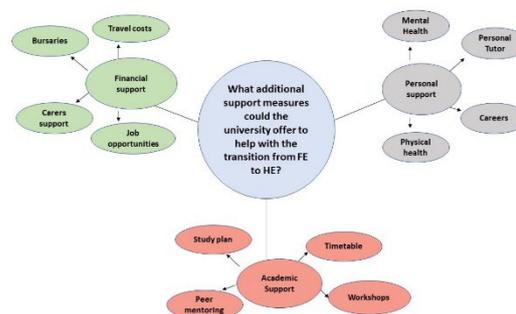


Image 1 Additional support measure to help with FE to HE transitions. Colours represent different themes, with Red showing academic support, Green showing financial support and grey showing personal support.



Image 2 Word map to illustrate key words related to HE transitions from FE.

What time would you like morning lectures to start?					How have you found assessments at university in comparison to your FE establishment?			
9am	10am	11am	12pm		Difficult	moderately difficult	similar	easy
7 (6.14%)	37 (32.46%)	49 (42.98%)	21 (18.42%)		8 (7.41%)	50 (46.3%)	44 (40.74%)	6 (5.56%)
Overall, how would you rate your experience at university so far compared to your FE establishment?					Would you prefer to be in university for either:			
Excellent	Average	OK	Disappointing	Very Disappointing	a. up to 3 hours every day b. up to 8 hours 1-3 days a week			
13 (11.61%)	51 (45.54%)	34 (30.36%)	7 (6.3%)	7 (6.3%)	Option A	Option B		
					33 (30.56%)	75 (69.44%)		

Table 6 Qualitative data responses to focus group questions.

Other key viewpoints are shown in Image 1 when students transition from FE to HE focus on a multitude of factors including the three key themes of persona, financial and academic support.

A word map was constructed to consider all the quantitative data to summarise key words students faced FE to HE transitions (Image 2).

Discussion

Project findings

The main topic that we investigated was to assess student perception when it came to transitioning from FE to HE, focusing on support offered from teaching staff, how students found course cohesion, the amount of independent learning required, and finally the structure of the timetable and types of assessments. Some of the interesting observations that arose from this project include some historic barriers such as issues with course integration for students and course cohesion, with some interesting findings when it came to personalised timetables and ideas on how we could adapt some of these findings to help students who are commuting and with possible financial pressures. Other key issues highlighted include how to help students transition into becoming more independent learners with their studies, and offering further academic support, essential when it comes to helping students adapt to university life. All

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these transition factors mentioned must be addressed to allow students to fulfil their potential.

Student Support

Student support is a critical service when it comes to HE. The key support individual when it comes to university life is the personal tutor (PT). The importance of a PT cannot be underestimated. The PT offers emotional, financial, academic and personal support throughout a student's university life and accessibility for a student is essential. The PT-student relationship allows better student course cohesion and belonging (Wakelin, 2023). The variability of different PT attitudes can be seen in the data with 77% of students stating that their PT only offers moderate support or no support at all. One issue is that newer members of staff may not understand how to approach the role of the PT, with possibly more training and support needed for newer PTs especially on the pastoral side of the PT role (Walker, 2022). Students did feel moderately supported at their FE establishment with 65% of respondents stating this. Even though 48% of students did not have a dedicated person to speak to at their FE establishment, some responses that arose during the focus group interviews include:

'Drop-in sessions with teachers at lunch time' & 'After school revision' were very useful sessions.

'For those that struggled with practical work in FE there were options to redo practical work after school for practice, something that HE does not currently offer'.

Another key positive from FE which came out of the focus group was:

'Smaller class sizes offered a more personal experience with teachers'.

As a consensus, students felt that FE support was better than experienced at university.

Student integration

Student integration is essential for the mental health and wellbeing of students. It has been investigated that early withdrawal rates tend to be higher during the first 12 months of enrolment at a HE institution than at any other

stage of a student's HE studies (Hayman et al., 2022). The results from this project show that 71% of students feel moderately integrated in their course, while more concerning 16% feel not integrated at all (and potentially could be at risk of withdrawal).

Some of the findings from the focus group responses include the fact that students living in halls of residence tend to integrate more with their course and other students. Obviously, fresher events tend to be alcohol orientated, which is an issue especially with our demographic predominantly being BME and non-drinkers. An interesting comment from the focus group was:

'I never meet people from freshers ever again'

It may be an important aspect to make course specific events to enhance course specific cohesion, separate to university cohesion and belonging. Another poignant comment was:

'Level 4 feels lonelier than FE'

This suggests that students may find the transition to HE is daunting and intimidating and that more induction-based events may be required to ease student anxiety.

Student independence

A key difference between FE and HE is the level of independence required for a university degree. Independent studies are a key example of this, however other types of independence include students having to look after themselves outside the family home. A key issue students may face is a lack of preparedness which can cause severe anxiety for students who may feel that what they accomplish at Level 4 may affect their opportunities success at university and in their career (Thompson et al., 2021). The results from this study show that 58% of students must be more independent at university than when it came to FE. 51% of students found it difficult adjusting to the amount of work required for university compared to FE. The other issue is that 46% of students set aside 5-10 hours per week for independent studies, not nearly enough and well below the suggested 20 hours many universities suggest as a minimum. Some content to come out of the focus groups include:

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'I feel the need to do more consistent revision at level 4 or I will fall behind'.

'Independent learning is unfamiliar to students because we would just cram-revise in FE'.

Therefore, more study support sessions and potentially peer support sessions may benefit students just entering HE to advise them on how best to structure their studies.

Timetable

The difference between FE and HE timetables can be quite vast in the sense that there is a specific, ordered timetable in FE, while in HE the timetable is in addition to a large amount of independent study and no set schedule, with lectures varying each week. Interestingly, the comments which came out of the focus groups tended to be quite negative in relation to the university timetable:

'Students should not have any scheduled sessions on a Wednesday afternoon, so any outside work is scheduled for 4pm every Wednesday. Then, suddenly a lecture appears from 3pm-5pm'.

'Commuters get home late if lectures finish past 4pm'.

These are important observations as our demographic in the SoLSPC tend to be commuters with an obligation to work, therefore we should adapt our timetable to support these students.

Assessment

The first obvious aspect in HE is the inclusion of MCQs which are not found in FE. Interestingly, there is mixed reactions when it comes to MCQs from our focus groups:

While some students like MCQs: ***'I like MCQs because they're easier than written questions'.***

Others are not so keen:

'I dislike MCQs because we are tested less and less in MCQs at Levels 5 & 6'.

The point regarding MCQs used less and less at Level 5 and 6 is not entirely correct. However, it is a valid point that more long answer question practice is essential as students are required to have more critical writing skills not only for their final year project but also as a transferable skill for their future career. Also, assessments linked to workplace situations such as in the case of scientists, a case study-based theme would help students adapt for when they begin in their chosen career (McCarthy & Prezioso, 2023).

How can these findings be applied to the university scenario?

Conclusion

The study presented, has raised several common themes in the transition between FE and HE. These include academic barriers such as different methods of assessment, support, and a student's relationship with their personal tutor. In regard to the issue of HE course integration, some ideas could be to initially look at the timetable. It should be the case that the timetable is adapted to cater for commuting and students with a requirement to work or financial constraints, by possibly having lectures starting late during off peak times to save on travel cost, having lectures streamed and presented in person to also cater for students who want to work at home or can't come due to family or anxiety issues. For course/university cohesion, the difficulty of Life Science is that the programmes are shared across multiple courses, so having more course events and activities may encourage course cohesion. Also having regular course specific meetings would allow students on the same course to bond and get to know each other to increase this cohesion. Going forward, this project should be expanded to target key learning sessions where an assessment is linked to attendance. Going forward there is a need to obtain more valid data for analysis which could be proved statistically significance.

References

Archbell, K. A. and Coplan, R. J. (2022). Too Anxious to Talk: Social Anxiety, Academic Communication, and Students' Experiences in Higher Education, *Journal of Emotional and Behavioral Disorders*, 30 (4), 273-286.
<https://doi.org/10.1177/10634266211060079>

Investigating the transitional barriers university students face when moving from further education; what are the potential issues they may meet?

Crabtree, H., Roberts, C and Tyler, C. (2007). Understanding the Problems of Transition into Higher Education.

Hayman, R., Wood, M., Wharton, K. and Shotton, L. (2022). Supporting the integration of first-year undergraduate widening participation sport students into university: the role of online programme induction, *SN Soc Sci*, 2, 268.

<https://doi.org/10.1007/s43545-022-00574-7>

Hong-Meng Tai, J., Dollinger, M., Ajjawi, R., Jorre de St Jorre, T., Krattli, S, McCarthy, D. and Prezioso, D. (2023). Designing assessment for inclusion: an exploration of diverse students' assessment experiences, *Assessment & Evaluation in Higher Education*, 48 (3), 403-417.

<https://doi.org/10.1080/02602938.2022.2082373>

Lowe, H. and Cook, A. (2003). "Mind the Gap: Are Students Prepared for Higher Education?", *Journal of Further and Higher Education*, 27 (1): 53–73.

<https://doi.org/10.1080/03098770305629>

Scanlon, L., Rowling, L and Weber, Z. (2007). 'You don't have like an identity ... you are just lost in a crowd': Forming a Student Identity in the First-year Transition to University, *Journal of Youth Studies*, 10 (2) 223-241.

<https://doi.org/10.1080/13676260600983684>

Smith, M., Chen, Y., Berndtson, R., Burson, K. and Griffin, W. (2017). "Office Hours are Kind of Weird": Reclaiming a Resource to Foster Student-Faculty Interaction, *InSight: A Journal of Scholarly Teaching*, 12, 14-29.

<https://doi.org/10.46504/12201701sm>

Tett, L., Cree, V.E. and Christie, H. (2017). From further to higher education: transition as an on-going process. *High Educ.*, 73, 389–406.

<https://doi.org/10.1007/s10734-016-0101-1>

Thompson, M., Pawson, C. and Evans, B. (2021). Navigating entry into higher education: the transition to independent learning and living, *Journal of Further and Higher Education*, 45:10, 1398-1410.

<https://doi.org/10.1080/0309877X.2021.1933400>

Wakelin, E. (2023). Personal Tutoring in Higher Education: an action research project on how to improve personal tutoring for both staff and students, *Educational Action Research*, 31 (5), 998-1013.

<https://doi.org/10.1080/09650792.2021.2013912>

Walker, B. W. (2022). Tackling the personal tutoring conundrum: A qualitative study on the impact of developmental support for tutors, *Active Learning in Higher Education*, 23 (1), 65-77.

<https://doi.org/10.1177/1469787420926007>

Wharton, Y.C., Ramminger, S., Myles, L. and Briars, K. (2017). "Transition from college to university: peer to peer student mentoring, *3rd International Enhancement in Higher Education*, Glasgow.