PTAS Project Report  (for REGULAR PROJECT GRANTS)

Project Title:  Comparing the First Year Student Transition Experience in the Biomedical Sciences Programme at the University of Edinburgh and Zhejiang University

Project type
A  Research Project (research focus on particular dimension of teaching, learning, assessment)

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Schools/department: Deanery of Biomedical Sciences

Team members  (including Schools and Departments) :
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Project teams must submit a report within 4 months of the conclusion of their project.
Copies of dissemination material (eg journals/newsletter articles, conference papers, posters should be listed and attached (separate to the word count).  The brief report will be published on the IAD web pages.

Report (maximum 1500 words)

What did you do?

We studied the transition experience in first year undergraduate students on the Biomedical Sciences programmes in Edinburgh and in Haining, China: a programme run jointly by Edinburgh and Zhejiang University. The study consisted of surveys and semi-structured interviews close to the start of first year to discuss expectations and again at the very start of second year to reflect on how their experience in first year compared to their expectations.

What did you find out?

The research was, in part, motivated by previous characterisations of students from the UK and China. The major challenges of Chinese students, such as ours, encountering Western-style education for the first time are often characterised as being:
Problems with use of English, especially using correct academic style
Struggling to become autonomous learners and expecting to be spoon-fed.
In contrast studies of domestic UK student transitions often focus on social and life aspects of transition. We wanted to examine if these differences are real or the result of different focus of researchers.
Our findings were a mix of confirmation of past characterisations and some unexpected similarities and differences between the cohorts.
Perhaps the most expected finding was that studying in English was a major concern for students in China at the start of first year and was still perceived as a major challenge at the end of first year. Similarly, more students in China highlighted writing in an academic, scientific style as a
major challenge although this was also mentioned by students in Edinburgh. Also, confirming previously published findings, we found that social issues were a major concern for students in Edinburgh. This manifested as concern about making new friends, living independently and leaving family and friends at the start of the programme but, more positively, making new friends was seen as one of the most satisfying aspects of the first year experience.

However, students in China were typically less concerned by these issues. Interviews suggested that there are two main reasons for this:

- Students in China consider going to university to be all about learning whilst many students in Edinburgh also place great value on the life experience of going to university.
- Many students in China had attended boarding school before entering the university. The campus in Haining is similar to a boarding school with school managed accommodation and a dining hall. This is a very different experience from living in a new city like our Edinburgh participants, juggling study, life, commute and in some cases, a part-time job.

In addition to these findings that confirm previous studies, we found some unexpected similarities and differences between the cohorts. A striking difference was in what the students hoped to gain from their time at university. In surveys, students in China placed great emphasis on learning new skills both at the start and end of their first year. Students explained that they enjoyed the freedom of learning when the point is no longer just to pass exams. In contrast, students in Edinburgh were more likely to select achieving good grades as a satisfying aspect of first year and, in interviews, often spoke about aiming to get the grades they need to pursue their desired career. It is worth noting, however, that more than 2/3 students in both cohorts selected “Learning about biomedical sciences” as one of the most satisfying aspects of first year demonstrating that the subject matter was a major motivator in both Edinburgh and China.

Another interesting finding emerging from the interview data is that students in each cohort reported different methods in their daily study and in how they approach assessments. The majority of the participants at ZJE would, on a daily basis, preview the lecture slides and organise their notes after each lecture. These notes would become the main sources to revise when they approach the assessments. However, this preview mainly focuses on looking up each word that the student does not recognise on the slides. By reviewing and organising notes, Chinese students mainly organised and rewrote what the lecturers said and the examples given, rarely expanding or supplementing the notes from other sources. However, such a learning habit did not appear among their Edinburgh counterparts. A few participants from Edinburgh described approaching assessments by making their own notes or mind maps drawn from different sources outside the lecture and material required in the course. In this way, they were able to form the knowledge gained in a framework to their easy access and comprehension. Further study is needed to compare the different methods and the learning results, nevertheless, it may be worth introducing different learning methods to each cohort for students to explore.

Finally, the challenge of transitioning to become an independent learner was a major theme for both cohorts. “Self-organisation and time management” was the most commonly selected challenge for both cohorts, in both cases increasing as a concern through the course of first year. Edinburgh students in particular also highlighted the challenge of time management in free-text comments. More general themes of the challenge independent learning were also highlighted by both cohorts with, for example, one student stating that “Learning and thinking by myself” was a major challenge. This perhaps represents the most important divergence from previous reports. There is often an assumption that domestic UK students arrive at university confident of their
abilities to work independently but our findings suggest that both cohorts of students would benefit from more support in these aspects.

**How did you disseminate your findings?**
Presentation at the Enhancement Themes conference available here: [https://www.youtube.com/watch?v=4QlW2b3qYnc&feature=emb_imp_woyt](https://www.youtube.com/watch?v=4QlW2b3qYnc&feature=emb_imp_woyt)
This presentation was also shared with all staff at the ZJE institute.

Upcoming presentation at the UoE Learning and Teaching Conference.

**What have been the benefits to student learning?**
I introduced a student skills week to the core first year course IBMS1 which addresses some of the concerns of the students in China. This week contains lots of practical advice, and theoretical justification, for elements of independent learning which the students reported finding challenging. For example there is a How Learning Works lecture which discusses the neuroscience of learning and how students can use that to support their learning. The students then use this information in a workshop where they plan a learning strategy. There is also a session on how to practically use lecture slides. Plan for sessions on time management have been disrupted by the pandemic but will be revisited next year. Although we hope that students would see the benefit of this learning we assess this learning through exam questions and a reflective report of the students' first year experience.

**How could these benefits be extended to other parts of the university?**
Through the dissemination, particularly the Learning and Teaching Conference, we hope that we can increase awareness of the challenge of becoming an independent learner faced by all students. Although there has been an increasing focus in recent years on skills rather than just knowledge, the skills that are included as integral parts of undergraduate programmes are typically the most academic focused such as academic writing style. More general skills of how to be a student could be integrated in to credit-bearing courses more widely.