Impact of Change in Student Demographics on Foundation Year Pathway Courses: A Case of Business and Economics Pathways

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Essex Pathways Department has historically offered undergraduate pathways courses (Year 0) to EU and Overseas students. In April 2016, the University decided to also offer these pathways courses to Home students. To meet the different needs of Home students, the Department needed to revise the curricula and the way in which the courses are delivered. This paper discusses three areas: First, it details the process of change and modification to our pathways provision by focusing on the Business and Economics Pathways. On this particular pathway course, Home students unexpectedly became the largest group. Secondly, the paper covers the how subject specific modules are supported by closely linking them to an Academic Skills module, which now utilises Sloan and Porter's (2014) Contextualized, Embedded, Mapped (CEM) model to 'scaffolding' student learning. Thirdly, the paper describes the challenges faced by academic staff and the initial and long-term measures taken to resolve them. The paper concludes by outlining the Department's vision for the course provided in 2018-19.

Background

Essex Pathways Department has historically offered undergraduate pathways courses (Year 0) to EU and Overseas students. In April 2016, the University decided to also offer these pathways courses to Home students. This change required the Department to revise the curricula and the way in which the courses are delivered to meet the different needs of Home students.

Whilst the opening of the Year 0 courses to Home students was an exciting development, it also created many challenges at different levels. In October 2016, on the Business and Economics pathway course, Home students unexpectedly became the largest group of students at 73% of the total student number; overseas students were 17% and EU students 10%. Not only were the student demographics changing towards more Home students, but student numbers also increased rapidly from 35 students in 2015-16 to 142 students and 175 students in 2016-17 and 2017-18, respectively.

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The entry requirements for the Business and Economics Pathways include 3 A-Levels (DDD) and GCSE Mathematics at C/4. Over 90% of our students join our courses directly from secondary education, with a small proportion of mature students. In 2016-17, 80% of Essex Pathways students had A-level qualifications and around 54% were recruited through Clearing. A similar student profile and recruitment pattern occurred in 2017-18.

To address the change in student demographics, the course structure for each pathway was revised, and the course content for each pathway was modified to support Home students develop the skills that they need whilst also continuing to cater for the needs of EU and Overseas students. Additionally, the syllabi were revised in consultation with the receiving departments to ensure that the topics covered are appropriate and enable a smooth transition into Year 1 study. Staff who had never taught Home students before had to familiarise themselves with this new student profile and understand their needs and to adapt their teaching approach.

This paper discusses three areas: Firstly, it details the process of change and the modification to our pathways provision by focusing on the Business and Economics Pathways. Secondly, the paper presents how subject specific modules are supported by closely linking them to the Academic Skills module, which now utilises Sloan and Porter's (2014) Contextualized, Embedded, Mapped (CEM) model to 'scaffolding' student learning. Thirdly, it describes the challenges faced by academic staff and the initial and long-term measures taken to resolve these challenges. The paper concludes by outlining our vision for the course provided in 2018-19.

Modification of the Course Provision

The students in Business and Economics pathways are required to take four modules: (i) Business Management; (ii) Economics; (iii) Mathematics and Statistics; and (iv) Academic Skills. Prior to October 2016, around 80% of students were Overseas students and 20% were EU students. The course structure was geared towards providing English Language as well as Academic Skills support to students, and this was reflected in module credits, where Academic Skills carried 45 credits recognizing the English language support included in the module. Business Management and Economics modules were equally weighted at 30 credits each, whereas the Mathematics and Statistics module was weighted at 15 credits.

For the 2016-17 Academic Year, the Department decided not to change the module credit weightings as the number of Home students was not anticipated to be so significant. The Department did, however, prepare for the change in student demographics and worked to address the knowledge gaps anticipated for Home students, while still supporting the knowledge provision for EU and Overseas students.

At the end of the 2016-17 academic year, the feedback from student focus groups enabled us to identify three key issues and make relevant adjustments to the modules taught in 2017-18. The Department used the feedback received from the *Student Assessment of Modules and Teaching* (SAMT)¹ questionnaire as a measure of whether the students learnt better after the changes were made. The focus groups led us to believe that:

 $^{^1}$ The University of Essex has a policy that each module must be assessed using SAMT every year. The questionnaire contains 14 core questions and a pool of additional questions that the teaching team can use to gain more specific information. The SAMT reports displaying a scale from 1-5 indicate Strongly Disagree; Disagree; Neither Agree or Disagree; Agree and Strongly Agree, respectively.

1. Students learn better if they can see how each module complements others

Students often treated the four modules as individual subjects as they could not clearly see how they were linked with each other. The intention was to make this link more visible for the students by integrating Business and Economics problems into the Mathematical worksheet. For example, students need to apply calculus and differentiation rules to solve the profit maximization problem in Economics, and likewise, they need to apply logarithms and exponential functions to solve the compound interest problem in Business Management. One of the SAMT questions was 'The approach to teaching kept me interested'. For this question, the SAMT scores for the Business Management and Economics modules increased from 4.2/5.0 and 3.6/5.0 in 2016-17 to 4.4/5.0 and 4.2/5.0 in 2017-18, respectively.

2. Students learn better if they can see how the subject-specific modules link to real life

To keep students interested, it is vital that they understand how theoretical concepts can explain real life situations. The Business Management module extensively uses business case studies to facilitate learning on marketing and brands. The Economics module, on the other hand, maps economic concepts with everyday activities that students would not normally realise were based on economic principles; for example, price discrimination can be explained by considering cinema pricing strategy. Students who took the Economics module gave a SAMT score of 4.0/5.0 in 2017-18 to the question 'The module had a good mix of theory and practice'. This was an increase compared to the SAMT score of 3.6/5.0 received in 2016-17.

3. Students learn better if they can see that the core and transferable skills are taught in a specific context

All students in the Essex Pathways Department must take the Academic Skills module. This module is designed to support and strengthen their confidence in key skills areas including academic writing, research, and academic integrity, as well as collaborative and reflective practices. Whilst the syllabus is the same, the content of the Academic Skills module is tailored to each pathway subject. Students, therefore, have opportunities to develop core skills and transferable skills through coursework assignments and tasks that are viewed as part of the learning process rather than as a product. A specific question asked in the SAMT questionnaire was 'The module enabled me to develop my communication skills and improve my ability to express myself both in writing and orally'. The SAMT score received in the Academic Skills module, during the period of change, remained constant at 4.0/5.0 in 2015-16 and 2016-17².

From October 2017, recognising that the Home students were 75% of the total number of students, the module credit weightings were adjusted to 30 credits for each of the four modules. This resulted in less contact time in the Academic Skills module, and more contact time in the Mathematics and Statistics module. This change allowed more in-depth coverage within the Mathematics and Statistics module and thereby enhanced problem-solving skills.

² The SAMT score in 2017-18 for this question was not available due to low response rate.

Technology Enhanced Learning

Another major development in the 2016-17 and 2017-18 academic years was to further enhance the use of technology in teaching the large cohort of students, marking assessments and providing feedback. The University of Essex centrally uses a Virtual Learning Environment (VLE) through Moodle, Listen Again and FASER³ services. Module leaders in the Essex Pathways Department were encouraged to attend a Technology Enhanced Learning (TEL) conference in 2016 to explore the possibilities of integrating technology use in their modules. This led to increased use and adoption of technology on the modules in the various pathways.

In the Business and Economics pathways, the Business Management module adopted the 'flipped classroom' technique, where all the required reading and sources of information are published on Moodle prior to the lessons. The Economics module used Kahoot, a game-based learning platform, to get immediate responses from students during lectures, and set up weekly quizzes on Moodle as a formative assessment tool. The Mathematics and Statistics module used Numbas, a web-based e-assessment system that helps create online numerical tests to be used as part of students' homework.

Linkage between Subject Specific and Academic Skills Modules: How does it work?

In order to strengthen the link between subject specific and Academic Skills modules, the *Contextualized, Embedded, Mapped (CEM)* model, proposed by Sloan and Porter (2010), was adopted to 'scaffold' students' learning experience. The model combines three key themes:

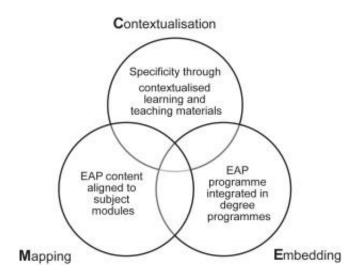


Figure 1. The Contextualisation, Embedding and Mapping (CEM) model.

³ FASER is an online platform for students to submit assignment and receive feedback.

The Business Management and Economics modules were selected to provide 'the context' for the Academic Skills module as they are core modules taken by all Business and Economics pathways students. As a first step, the contexts of these two subject modules were used to assist Academic Skills tutors to plan the teaching and learning materials. Then, meetings were arranged with the subject-specific tutors so that Academic Skills tutors could understand what the students would be required to demonstrate in the subject assessments. The subject module leaders provided lists of texts and reading to be used in Academic Skills sessions.

2. **"Embedding** reflects the position of the EAP programme within the overall degree programme and the position of the EAP tutor in the academic business team". (Sloan and Porter, 2010, p.202)

The main challenge was that the students did not perceive the Academic Skills module as a part of their academic studies. This perception was more pronounced among Home students. Therefore efforts were made by staff to change students' perceptions so that they would acknowledge and recognise the Academic Skills module as a vital part of their Foundation Year course. Part of the effort was to include information and participation from the Academic Skills tutors in Applicant Day and Open Day briefings and at Welcome Week events. Subject specific and Academic Skills tutors are continuing to work as a team rather than as individuals.

3. "Mapping involves coordinating the EAP teaching with student learning needs and outcomes throughout the academic year." (Sloan and Porter, 2010, p.202)
The aim was to engage students with subject specific assignment topics in the Academic Skills lessons. Students worked on an Economics essay in the autumn term, and on a Business Management essay in the spring term. They were provided with opportunities to learn crucial skills from the Academic Skills tutors and be able to apply these skills to the tasks related to the specific subject areas. Students had the opportunity to research, draft and submit their essays for feedback from the Academic Skills tutors in the first instance. The students then had time to reflect on the feedback they received and were able to make the changes required to improve their essays before they submitted their final work to the subject tutors.

Practically, there were two crucial stages for the students on the Business and Economics pathways. The first stage started with the library's input at the beginning of the autumn term. This involved a library tour and advice on how to borrow and return books, how to search for books and journals, and so on. This stage enabled students to develop independent research skills. The library's input also encouraged students to reflect on their methods for searching and evaluating the relevance of the sources, to understand why referencing is important, and how to use appropriate style of referencing.

In the second stage, timing was crucial. Initially, students needed to have some input from their subject tutors. They could then build up their subject understanding through research, reading and academic writing, guided by the Academic Skills tutors before the first submission of their work for feedback. They needed to use the feedback to feed forward, to draft the final submission. This process involved co-operation between subject specific and Academic Skills tutors who needed to negotiate and reach agreement on the feedback provided. Additionally,

the Department and senior staff allowed submission deadlines to be moved to provide sufficient time for each key stage of this mechanism to work.

The objective was to scaffold students' learning and skills building in order to help them to produce higher quality essays, and to reduce the number of academic offences. On reflection, the subject module leaders shared the same view that the quality of essays submitted was much better in terms of logical development, effective structure and language. However, it was agreed that considering students' marks alone was not a sufficient measure. With regard to cases of academic offences, the records showed that the number of academic offences as a percentage of student numbers declined from 5.6% in 2016-17 to 1.7% in 2017-18 in the Business and Economics Pathways. Most potential academic offences were firstly identified and dealt with in the Academic Skills module which is designed to help minimise the re-occurrence of academic offences cases in subject modules.

Support for Academic Staff

The change in student demographics not only required the modification of course provision and the adjustment of the Academic Skills module, but also posed some challenges for the academic staff who had little or no previous experience in teaching Home students. Essex Pathways Department recognised this problem and put plans in place to support academic staff.

Initial Support

The Department arranged a workshop for staff on how to engage with Home students. Staff had opportunities to share their experiences, concerns and good practice amongst their colleagues within and outside the Department. The key areas of discussion included building trust amongst colleagues, building partnership with Home students and focusing on the student-centred approach.

Long Term Support

The two keys areas the Department focused on were, firstly, to promote collaboration among staff who teach on the same pathways. This is to further develop the relationship between subject-specific and Academic Skills tutors when defining the scaffolded tasks that the students will complete, and to emphasize how important it is that the modules complement each other. Secondly, in order to support the academic staff to manage the increased student numbers, and to enhance the way in which they teach and assess these students, staff were encouraged to attend various workshops provided by the University, including delivering teaching to large groups, large group assessment, and innovative assessment methods.

The Department has always been proactive in reviewing its course provision. A Task and Finish Group has recently been established to review the current practices with respect to assessment types and frequency of assessment within a module and across modules, as well as to enhance the ways of evaluating students' work. The objective is to address problem areas that were identified regarding assessment and feedback on the courses and the high levels of corresponding demand on staff.

Conclusion: Our Vision for Course Provision in 2018-19

From October 2018, the Essex Pathways Department will further streamline its provision for Home and EU students. One of the current developments is to promote a learning community to improve student engagement, by using a Peer Assisted Learning (PAL) mentor scheme. PAL mentors are the Department's former students who achieved good results in their Foundation Year studies. The University provides training to PAL Mentors so that they can provide learning support to students who are in their Foundation Year.

The Essex Pathways Department organised a trial PAL mentors scheme in the Computer Programming module within the Computer Science and Electronic Engineering Pathways in 2017-18. The scheme was very successful and received positive feedback from the students and the module leader. The Department, therefore, is in the process of extending the scheme to all the other pathways. PAL mentors have already been recruited for 2018-19 for the Business and Economics Pathways to support the students enrolled on the Business Management, Economics, and Mathematics and Statistics modules.

Other developments are at the subject level. In the Academic Skills module, the focus will be on a Research Skills Development (RSD) Framework, inspired by the work of Willison and O'Regan (2007) and Willison et al. (2016).

The RSD is a conceptual framework for the explicit, coherent, incremental and cyclic development of the skills associated with researching. The RSD describes a continuum of five levels delineating the extent of autonomy – the conceptual space – that students are given or experience when using skills associated with research. (Willison *et al*, 2016, p.432)

In the Mathematics and Statistics module, the plan is to enhance students' skills in Excel, in order to improve the effectiveness of their learning of Statistics. Students will be able to learn features and functions that are commonly used in Excel spreadsheets to understand, manipulate, present and interpret Business and Economics data. In the Business Management and Economics modules, the focus will be on improving student engagement by the use of technology and encouraging active learning. Encouraging students to be inquisitive is an initial step to improve their attentiveness.

To conclude, the Department and its course provision have undergone many changes over the last two years. This was primarily due to the changes in student demographics and the increase in Home student numbers. Recognising these challenges, the Department has worked very closely with all staff and provided relevant support and guidance to them. The Department's work will continue over the summer months, when further reviews of the teaching of subject modules will be undertaken, with a particular focus on the effectiveness of the scaffolding approach used within the Academic Skills module. The review will take into account the feedback from students and staff alike.

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