
Enhancing Learning and Teaching in Economics:

A Digest of Research Findings and their Implications

Introduction and Background

The work summarised in this *Research Digest* gives an account of a set of investigations into a range of undergraduate courses in Economics located in three different regions of the UK. The settings varied considerably in terms of type of institution, curriculum, size and nature of the student intake, length of programme, intended learning outcomes and modes of assessment used.

The first phase of the study combined a literature review with an analysis of reports on Economics departments rated highly in teaching quality assessment reports and follow-up telephone interviews with key staff. The second and main phase drew on questionnaire and interview data from first- and final-year course units in Economics departments. In total, 1664 questionnaires were analysed, along with 79 interviews with 268 students and 25 interviews with 26 staff.

The Economics study formed part of a wider investigation, the Enhancing Teaching-Learning Environments in Undergraduate Courses (ETL) project. The project was funded by the Economic and Social Research Council as part of its Teaching and Learning Research Programme, and was undertaken by a team of researchers from Edinburgh, Durham and Coventry Universities. The ETL Project has not only aimed to investigate key features of teaching and learning in contemporary higher education settings, but also to examine ways in which, in collaboration with departmental partners, student learning and engagement within such settings can be intensified.

The project has been working in twelve universities and colleges, focusing predominantly on first and

final-year course units in four subject areas: biology, economics, electronic engineering and history.

The evidence underpinning the project's overall findings comes from analyses of nearly 6,500 student questionnaires, interviews with over 600 students and almost 80 staff, and course documentation. Further information about the work of the project can be found on the project's website, from which *Digests* and other publications can be downloaded free of charge:

<http://www.ed.ac.uk/etl>

Key Findings

First year is in several respects a more challenging year for students

The disciplinary norm vs. the diversity of student intake

The need to bridge the theory-real world divide

Student difficulty in interpreting exam questions and essays

Contextual factors in curriculum change

Key Findings and Implications

Finding 1:

First year is in several respects a more challenging year for students

Students in our Economics study tended to find the first year of their courses a more challenging time than the later years of study. First year seems to present both students and staff with a more complex and busy environment. There is a greater diversity of students, more variety in terms of the needs student present and what has to be dealt with at that stage. There is generally a lot going on that has to be addressed and students need more attention to help them cope with it. It is a time when they are learning to engage with the discipline, but also to become acculturated to working in higher education more generally.

It is noticeable that the ratings of the teaching-learning environment (TLE) by final year students were consistently higher than those of first year students. This implies that the final year course units were perceived by the students as TLEs which were more likely to encourage high quality learning than the first year TLEs investigated. The only exception was the rating obtained for student peer support which was higher for first year than final year students. This may indicate, for instance, that students supported each other less in the final year or, alternatively, that there was less need for mutual support in the final year.

Implications

Of course final years students might rate final year more positively because by then they are more acculturated to the disciplinary norm, or because staff are teaching their specialism more enthusiastically. There are a number of potential variables here,

but there is a strong implication that staff need to recognize the challenge of first year for students. They need to take this difference between first and final year seriously and acknowledge that students rate first year less favourably. Tutors need to take steps to address this.

It is also notable that the scores for choice were generally low, especially for first year course units. Research on student learning has highlighted that the availability of choice is one aspect within TLEs that can influence students' approaches to learning and studying in a positive direction, as it tends to encourage a deep approach. The relative absence of perceived choice in Economics, particularly in the first year units, might therefore merit some attention.

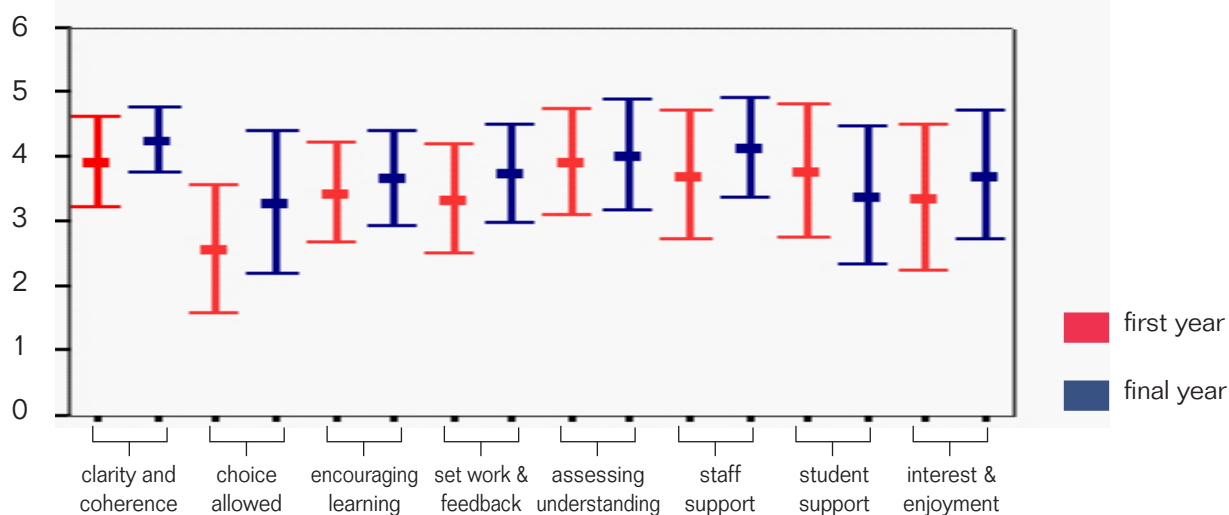
Finding 2:

The disciplinary norm vs. the diversity of student intake

Across the units we examined we found that there was a strong awareness of a standard curriculum. There was a strong consensus in terms of what constitutes the disciplinary norm, in terms both of what is taught and how it is taught. However, there was also much student diversity in terms of the cohorts within different institutions and this often required, in practice, a departure from the disciplinary norm.

The challenge of constructively aligning TLEs in Economics with the diverse students who are part of them was a strong feature of certain settings. In order to address and cope with such heterogeneity, staff in Economics were found to adopt a number of strategies. These included making the assessment of a unit more discursive in order to align it with the weaker students, or making a unit accessible to non-Economics majors by largely eliminating

Perceptions of teaching-learning environments, first and final year Economics



technical aspects, concentrating on 'clear principles' and using examples which were as close as possible to the student experience.

A relatively common strategy was to separate students by providing different tutorial groups, for instance, for students on different programmes of study, full-time and part-time students, and students with and without previous knowledge of Economics. This produced a tension in that some departments felt a greater permission to depart from the norm, whilst others felt guilty in abandoning aspects of the standard curriculum. There was tension between alignment to students on the one hand and loyalty to the disciplinary norm and the ways of thinking and practising within the discipline (WTP) on the other.

We are going to change the nature of the assessment. We are going to ask them to do fewer questions in the examination and make them more (...) discursive (...), play down the analytical theoretical core (...), give them a bigger field to gallop in rather than making them jump over hurdles. We are going to see if they can see the implications more of what they are doing more than just repeat this bit of analysis or explain this bit of analysis and then say why it's important.

Implications

There is an implication here that staff need to identify appropriate strategies to align the teaching-learning environment congruently with the diversity of the student intake in their cohort. The disciplinary 'tribe' needs to consider what different kinds of course, with different kinds of outcome, might be designed that are both congruently aligned to students but which can retain high quality economic understanding – that can take different but equally valid forms without being perceived as abandoning the existing standards of the disciplinary norm.

Finding 3:

Need to bridge the theory-real world divide

When asked what engaged and motivated them in their studies of Economics, the common thread through virtually all the interviews was the way in which students talked about the importance of examples and the application of economic theory to real life and current issues. Theory was often described as a necessary evil, the study of which did not generate great levels of enthusiasm.

In contrast, satisfaction was experienced when Economics enabled the students to understand the world around them, such as economic issues in the news, in their daily lives or their work, by applying theoretical knowledge to examples. Examples and applications used in lectures and tutorials were not only said to promote engagement, but also to contribute considerably to understanding.

The interviews suggested that students found it much easier to understand abstract concepts when they were grounded in real world experiences. Although the course units and the departments investigated differed in the attention and proportion of time devoted to theory, the crucial importance of examples for learning in Economics was mentioned by students in *all* settings, both first and final year and both in theory and application-focused units. Examples and applications helped to make abstract concepts accessible.

S: The other guy [the tutor] is brilliant, he likes to use examples.

I: What makes the other one better?

S: He puts economics in a way that we can understand. He uses football matches -

S: - or alcohol.

S: Something that we can relate to and we can say, right, we see what you mean.

Implications

An appreciation of the relationship between theory and the real world seems to lie at the heart of ways of thinking and practising (WTP) in Economics. If this is the case, then the way in which students can be helped to understand the nature of this relationship and make connections between the two poles of the theory-real world continuum must be a *central concern* of the pedagogy of the discipline. The kinds of approaches which may be helpful in achieving this aim, such as case studies, problem-based learning, scenario-based learning and classroom experiments, merit serious further investigation by teachers of Economics. The Economics Education literature has advocated this but there needs to be a more systematic embedding within practice. A further implication is for there to be more sustained activity around materials development. There are at present insufficient high quality materials of this nature available.

I've actually found the economics side of things really interesting. Previously economics has been a complete bore. It's so drawn in theory. What they've done is driven it out into real life. Some of the textbooks we had were actually quite interesting because they were relating economic principles to what is happening in the UK or US. That has given me an appetite to think about doing something else in economics. When we were taught economics at school or in bank exams, it was just equations, what does it do, it's a bit dry. I actually think the course has been a help. If I stay in the particular aspect of work I'm in, the course will help me develop in that. I was surprised.

Finding 4: Student difficulty in interpreting exam questions and essays

Analysing an essay or examination question and interpreting what it is asking them to do was an issue which caused problems for some Economics students. For the essays in one unit this involved thinking about which direction to take and what specific aspects to include in the answer.

For the short answer questions used in one examination, identifying the theory or concept which the question referred to plus the associated graph were crucial. Difficulties students may have experienced with interpreting questions were not necessarily due to a lack of general essay writing skills or exam techniques as such, but were subject-specific, as they were closely related to the conceptual content which the questions aimed at.

An interesting point on the assignment was the vagueness of the question, because I asked a couple of people to look at it and the general concern was it was quite vague, in the sense of what direction we were expected to take it in. And it was interesting the comments that did come back on one of the assignments was that I hadn't been very specific.

Some TLEs were very successful at conveying a sense of what was required. One unit provided the students with a very clear sense of direction and understanding of what was required to give good answers to short answer questions in the examination. Part-time distance students in another unit found it helpful to obtain formative feedback on essay outlines, but the unit leader was unable to integrate this option explicitly into the assignment task as it would present a considerable strain on resources.

Implications

There are gaps in the explicit guidance and feedback available for assessed work. Students don't get enough feedback, and the level and quality of the feedback they do receive varies quite considerably. More explicit guidance and timely feedback is required, but as part of what is taught, and integrated within the teaching, within the tutorial, in a way that addresses student difficulty and helps students understand what is required.

Finding 5: Contextual factors in curriculum change

Many of the issues which our collaborative initiatives with institutional partners tried to address tended to

S1: What I found useful, before I did my assignment, with both the topics I've done, I actually did a rough outline of what I was going to put in my assignment, and sent it to the tutor and said 'This is roughly what I'm going to put in my assignment, how does this look, am I on the right path?' And both times, from both modules, I got constructive feedback that actually made me change what I was putting in it slightly.

S2: I did as well.

S1: And I think that's why I've... in both modules I've had a good mark for my assignment, and I think it's purely because I actually said, 'Look, this is what I'm going to do.' They said 'Well what you need to do, make sure there, that what we're really looking for is this and this, make sure that you're covering this sort of thing.' And that helped.

arise from contextual (rather than subject-specific) imperatives. This reflected local determinant factors such as current funding environments, issues of recruitment and retention, and staff workloads. These contextual determinants on the whole overrode subject-specific determinants in the TLEs investigated, and the initiatives differed considerably from each other, reflecting a similar variation in contexts.

These strong contextual drivers meant that staff in the collaborating departments were motivated by a logic arising from their immediate departmental context, their institutional culture and history, and their policy environment. In several settings staff operated under conditions of considerable pressure and increasing workloads.

Implications

In order to effect curriculum change within Economics, going with the grain of the particular *context* concerned was found to be probably as important as going with the grain of the subject. Interestingly however a considerable proportion of the data collected in the Economics study brought up issues related to assessment. The quality of student learning in Economics in all the settings investigated was, at least to a certain extent, affected by assessment and staff in Economics readily picked up suggestions which required changes related to assessment. The core role of assessment for high quality learning is stressed in Biggs' notion of constructive alignment (Biggs 1999) and in Economics it may well be one possible key to, or lever for, the enhancement of TLEs. It seemed in these initiatives to offer a powerful means of looking afresh at the teaching-learning environment.