

Making Advanced Economics accessible: a follow-up

Figures from the Joint Council for Qualifications (JCQ) following the Summer 2011 exam results show that the number of students taking Economics at A-Level is increasing. It is likely that some of these students will be 'high flyers' and this provides us with an opportunity to be able to utilise resources that help support these more able students. Peter Imeson finds some inspiration and new ideas from a keynote speech given at the Summer 2011 EBEA conference.

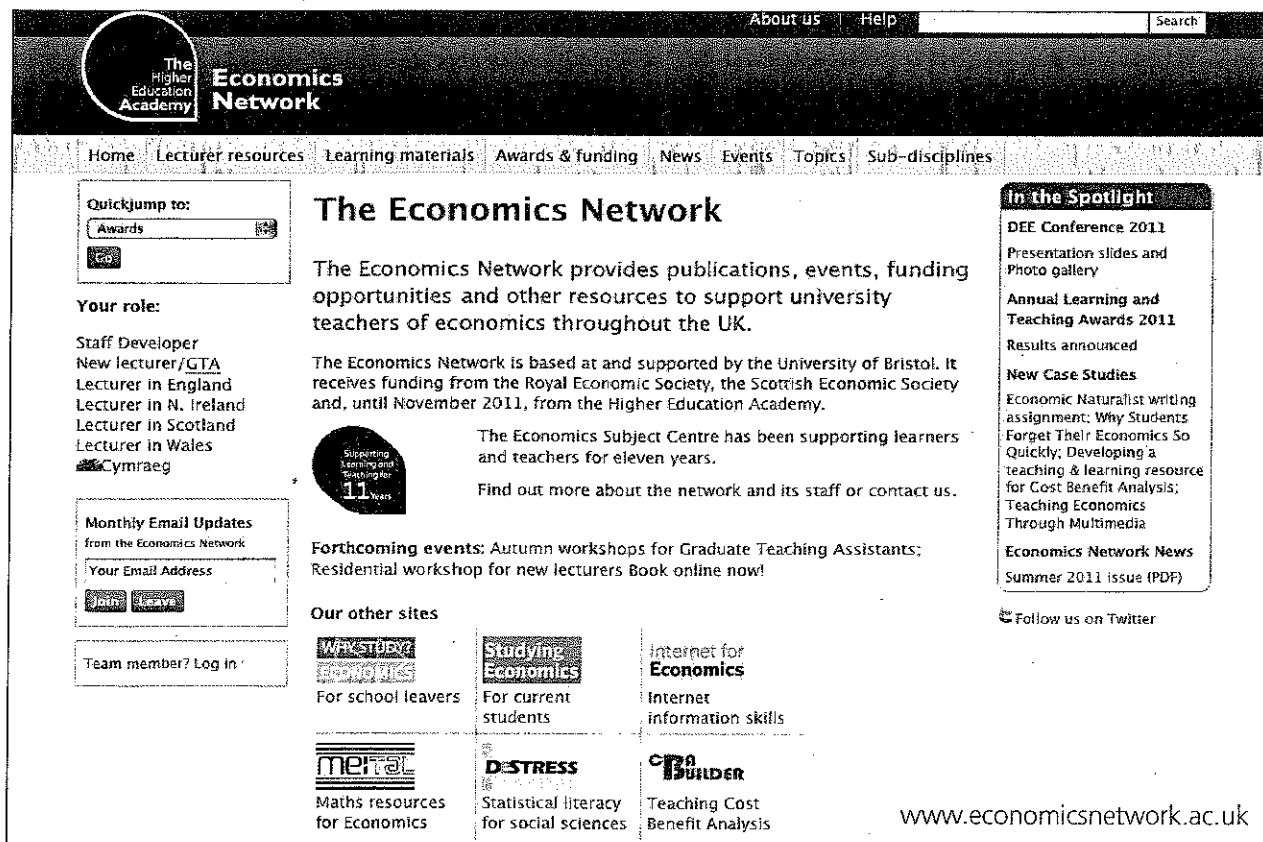
During the EBEA Annual Conference, Professor Rebecca Taylor, from Nottingham Business School, delivered a keynote speech in which she introduced a range of websites that have been developed to support the teaching of Economics at university. The presentation she gave can be found on the EBEA website. Go to the PowerPoint in the 'events' section and look also at a video of the talk on EBEA TV.

In this article I give an A-Level teacher's perspective on using these resources. The websites described in the talk all contain a huge array of resources and the problem faced by teachers when using these sites is finding the time to sift through the resources to discover ones which fit the specification and the approach to teaching one wants to take. I will give a brief description of the sites and indicate resources which I have found useful or which I feel might be useful in the future. There is not space in this article to describe all the resources fully, so there may be very valuable resources which I have omitted or which you would find useful.

Economics Network

<http://www.economicsnetwork.ac.uk/>

Although this website is not listed on Professor Taylor's PowerPoint, it was mentioned in her talk and is a useful gateway to many of the other sites she



The screenshot shows the homepage of the Economics Network website. The header includes navigation links: Home, Lecturer resources, Learning materials, Awards & funding, News, Events, Topics, and Sub-disciplines. A search bar is located in the top right corner. The main content area is titled "The Economics Network" and describes the network's purpose: providing publications, events, funding opportunities, and other resources to support university teachers of economics throughout the UK. It mentions that the network is based at and supported by the University of Bristol, receiving funding from the Royal Economic Society, the Scottish Economic Society, and the Higher Education Academy. A sidebar on the left offers a "Quickjump to:" section with a dropdown menu, a "Your role:" section with links for various roles (Staff Developer, New lecturer/GTA, Lecturer in England, Lecturer in N. Ireland, Lecturer in Scotland, Lecturer in Wales, Cymraeg), and a "Monthly Email Updates" section with a form for email address and a "Team member? Log in" button. A "Forthcoming events" section lists autumn workshops for Graduate Teaching Assistants and a residential workshop for new lecturers. A "Our other sites" section lists links to "Why Study Economics", "Studying Economics", "Internet for Economics", "MATHS", "D-STRESS", and "CPA BUILDER". A "In the Spotlight" section highlights the DEE Conference 2011, Annual Learning and Teaching Awards 2011, and New Case Studies. The footer includes the website URL: www.economicsnetwork.ac.uk.

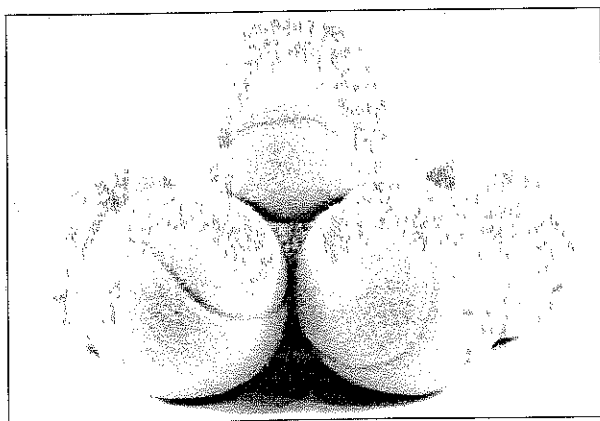
mentioned. It is a fantastic website which contains a huge range of resources. Although the website is predominantly aimed at university lecturers, there are plenty of materials that are relevant to A-Level teachers, either because they cover topics which are in the A-Level specifications or because they suggest approaches which can easily be applied in a Sixth Form context. The section of the site which I have found most useful is the 'Reflections on teaching' which can be found in the 'Lecturer resources' section. The reflections are presented in over 170 case studies written by Economics lecturers. Below I give a description of some of the resources which I find the most useful.

'Tennis Balls in Economics'

http://www.economicsnetwork.ac.uk/showcase/hedges_tennis

This article describes a game which is excellent for illustrating the concept of diminishing marginal returns. The game is explained clearly with good supporting resources, including a video of the simulation being carried out. Having tried the experiment I found that it worked well both in terms of being an enjoyable lesson and illustrating the concept. I would, however, recommend the use of plastic cups rather than tennis balls to prevent balls flying across the classroom. A version of this game plus full supporting resources can also be found on the Biz/ed website at

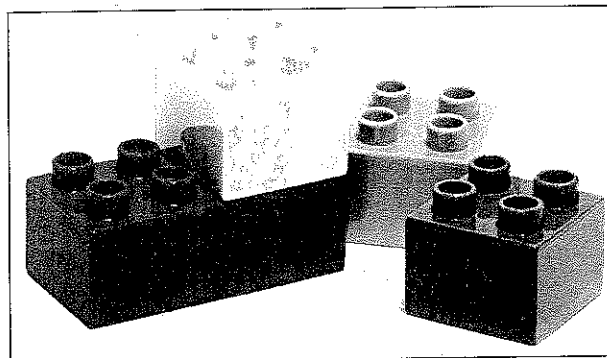
<http://www.bized.co.uk/educators/16-19/economics/firms/lesson/dimreturns.htm>



John Sloman's 'International Trade Game'

http://www.economicsnetwork.ac.uk/showcase/sloman_game

This is a simple game in which the students take the role of countries manufacturing and trading products. The game is fun for students and can lead to a wide variety of learning outcomes depending on which aspects of the game you want to focus on. There is a large range of topics it can be used to illustrate which makes it a relevant game to use at almost any stage of the A-Level course.



Building Blocks of Understanding

http://www.economicsnetwork.ac.uk/showcase/smith_blocks

I think the idea behind this exercise is a stroke of genius. In the exercise the students use Lego blocks to learn the concepts of marginal and average analysis. Quite simply the students build up towers of Lego blocks and fill out a spreadsheet to calculate average and marginal changes in the number of blocks in the towers. What I find so clever about the exercise is that it takes one of the most abstract concepts which students often have difficulty grasping and turns it into a very tactile, kinaesthetic activity in which students can actually 'see' the relationships.

Embedding Threshold Concepts

<http://www.staffs.ac.uk/schools/business/iepr/etc/index.htm>

This site describes the work undertaken in a project carried out by Staffordshire University. The project starts with the premise that many students of Economics leave their courses without a strong understanding of the most fundamental concepts. The approach taken by the project was to identify which concepts were essential for a clear understanding of Economics and then teach them in such a way as to build up confidence in acquiring these threshold concepts.

The site has chosen a range of threshold concepts, such as consumer surplus and marginal utility, and has created exercises which can be used directly in the classroom. The resources are very user-friendly and tackle the concepts in an accessible way. Each of the activities takes an issue which students can relate to and encourages students to apply economic theory using a problem-solving approach. Topics covered include binge drinking (and could possibly be adapted for students following the Edexcel GCSE Unit 5 Economics specification), pollution caused by cruise ships, the price of fashion clothing and the economic impact of the Olympics.

I personally like the way the resources are structured and the way students are encouraged to think through the problems. Each resource ends with a few reflection questions which encourage students

to think about the extent to which they have understood the concepts covered. To give an example, there is an excellent activity, which I used recently when teaching Business Economics, on price discrimination, called 'Students' rail fares – Branson's good deed?' in which students must apply concepts of elasticity, marginal costs and profit maximisation to work out Virgin's motivation for charging students lower prices. Whilst the students found it quite challenging to think in this way, I felt the challenge was very beneficial and it led to some very useful discussions of concepts which will be vitally important in the microeconomics section of the A2 course, e.g. the marginal nature of pricing decisions.

FEELE (Finance and Economics Experimental Laboratory at Exeter)

A useful introduction to this site is given in an article 'Using FEELE experiments in teaching' on the Economics Network site (http://www.economicsnetwork.ac.uk/showcase/guest_feele).

The website has a range of computerised games which can be used in the classroom. No in-depth knowledge is required to run the games, though it is obviously a good idea to give them a run through before using them with a class. A list of all the experiments on the site can be found at <http://projects.exeter.ac.uk/feeel/ExperimentList.shtml>.

As with all the websites listed here the focus is university level and therefore many of the experiments concern concepts which are beyond the A-Level specification. That said, there are some which are at the appropriate level, e.g. the price discrimination game gets students to set prices for products so as to maximise profits. The game illustrates the benefits of discriminating prices according to quantity and customers' willingness to pay. As well as immersing the students in the topic in a different way, it is a useful introduction to the use of experimental economics. Other games which I have not used yet but look relevant for A-Level are Bertrand Competition (for perfect competition), Insurance Market with Asymmetric Information and the Lemon Game (both of which could be used in the market failure section of the course).

Metal: Mathematics for Economics: Enhancing Teaching and Learning

<http://www.metalproject.co.uk/>

There is a wide range of resources here for teaching students about mathematical concepts. For example, there is a number of videos that can be downloaded or viewed on YouTube. These tackle a variety of mathematical skills and apply them to economic issues. For example, percentages are shown in the context of car prices, e.g. when adding on VAT, using the Big Mac Index and compound interest is illustrated amongst a host of other ideas.

Many of the videos go beyond the level of mathematical ability needed for A-Level Economics. However, for students who are considering doing Economics at university, the videos may be a very useful way of showing the way in which Mathematics is used in the subject at that level.

TRUE (Teaching Resources for Undergraduate Economics)

<http://www.economicsnetwork.ac.uk/projects/oeer>

This site is a portal to a range of university lecturers' websites, each of which contain PowerPoints, assessment material and suggested activities. Though much of the material is well beyond A-Level, there are sections which will be of interest to A-Level teachers. In particular, there are some great activities in Peter Smith's Development Economics section of the site, many of which could easily be used by A-Level classes. My personal favourites are 'Aid in the Dragon's Den', 'Global Climate Change Mitigation Game' and 'Dimensions of Development', all of which can be found in the 'workshop/seminar resources' area. These activities deliver the topics in an interactive way which will aid student motivation and understanding of the concepts covered.

Conclusion

There are large numbers of sites available on the Internet offering resources which can be used in the classroom. However, I think the sites described above have a lot to offer teachers who are looking to introduce a greater amount of active learning into their lessons. The fact that the resources are created by university lecturers can often give an activity added kudos in a lesson, especially with the games which some students may be inclined to view as 'not proper learning'. I also find it useful to get a glimpse of what is being taught at university level so I know what students are going to be moving on to if they choose the subject. I am sure that there are many more excellent resources on these sites beyond the ones I have described.

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