What works and doesn't work in online economics education?
By Grace Feng
Supervised by Dr Parama Chaudhury

Introduction

As many of us have experienced, the majority of schools and universities were forced to shift online during the pandemic. Many instances were abrupt and solutions were usually decided upon based on speed of implementation. However, now that we are moving beyond the pandemic, these new modes of teaching must be discussed and evaluated. In addition to in-person teaching, online and hybrid options are now also mainstream, but we must explore further about how these new methods will affect students' development. All spheres of education must be investigated, including the skills gained, the social aspect of school, and the networks built.

Economics in particular is a subject that requires additional research. It is a subject with topics and theories that overlap between STEM and humanities concepts. Many universities also incorporate introductory economics classes in many different degrees, so there is an additional challenge of catering to varying backgrounds and ways of thinking.

There are many different benefits and drawbacks to in-person, hybrid, and online instruction in teaching economics. The big question is how to reconcile all the benefits and drawbacks of each to make the best combination where students perform their best. *Teaching Economics Online,* a collection of essays edited by Dr Parama Chaudhury aims to provide insight into this question of what works and what doesn't work in online economics education. This report includes key takeaways and highlights.

Key Takeaways

Although there are many facets to teaching economics online successfully, many chapters involve these three key themes.

1. Building a community and feeling belongingness

A feeling of belongingness can make or break a student's university experience — both socially and academically. In addition to having positive social interactions with peers, students must be confident enough in their own knowledge to engage in academic discussions. Socially-based learning is more effective than the individual alternative because discussion often requires the additional skills of negotiation and collaboration to build knowledge.

2. Interaction with academic staff

The role a lecturer or tutor takes on can influence the students' learning journey. Studies have shown that when instructors are slow to respond to issues related to the course, students are more likely to feel isolated by feeling a lack of community and care. By designing a course with a platform used at its full potential — engaging announcements, interactive posts, explicit instructions — instructors can increase dialogue and reduce the "remoteness" of distance learning.

3. Relevant learning material with real life applications

In order to improve retention, it is key to teach interesting and engaging material that is relevant to the students' own life. Connections to current events and other life increased student satisfaction since it reinforced the fact that studying economics was about understanding the world around them.

What works at UCL

Being such a large, international university in a busy metropolis, UCL was especially impacted by the Covid-19 pandemic. From March 2020 to June 2022, teaching largely became online or hybrid. Two events at the UCL Department of Economics had to find ways to adapt and integrate technology quickly — the First Year Challenge and the ExploreEcon conference. Through transforming these two events to their hybrid versions, instructors found that some parts actually worked better than the original, in-person ones. Although the majority of learning today is back in-person, the FYC and ExploreEcon conference have kept some of the changes made during the pandemic since the incorporation of technology actually improved the three key points discussed above.

The First Year Challenge

The FYC is a chance for first-year Economics students to ease into university rigors by working in groups to explore a real-life economics problem and develop research and teamwork skills. The assignment is to connect a London landmark to an economics concept, and produce a final multimedia submission. During the pandemic, it quickly moved online to accommodate nearly 800 students now spread across the world. The new anchor of Microsoft Teams provided an excellent way of ensuring that the key elements of online education mentioned above were carried out.

1. Building a community and feeling belongingness

There would be a major issue with the FYC if this point was not realized, as building community is the main intended outcome of the event. As the first project first-years are assigned, it is

crucial that they receive the proper support and opportunity for developing relationships. The addition of Microsoft Teams provides a fast, organized way to make announcements. It is a more informal mode of communication, which encourages students to more easily set up in-person meetings and chat more freely.

2. Interaction with academic staff

Hosting the FYC on an online platform also allows for the opportunity for staff and students to interact more. Previously, lecturers were inundated with emails and FAQs from students. With an online central platform, lecturers can host a live, recorded Q&A to make sure all questions are addressed just once. The live aspect also allows students to put a face to the name, and feel more connected to their future teachers. On the flip side, tutors also placed in each group's private channel can supervise progress quietly and respond to queries faster.

3. Relevant learning material

The FYC can also be regarded as a "practice run" for using tech collaboratively, specifically Microsoft Teams. In addition to the relevant skills gained from the project itself, such as independent research and producing a multimedia output, students can get an early start on familiarizing themselves with Microsoft Teams. Since the platform is becoming increasingly mainstream at university and at work, students benefit from the opportunity to learn the ins and outs of the app with guidance.

ExploreEcon Conference

As described in Dr R Nassehi's chapter, the new version of the ExploreEcon conference "stretches the notion of a conference" by changing it from a *one-day* event to an ongoing *process* with synchronous and asynchronous aspects. Normally, this conference would look like an in-person, half-day event where students present their work. A website may be associated with the event by posting announcements. Today, instead of emphasizing what the students have *already* learned, the hybrid version harnesses technology (especially expanding upon the associated website) to empower students by giving them a new mode of expression and presence, building staff-student relations, and promoting a research based education.

1. Building a community and creating a feeling of belongingness:

Previously, the website associated with the conference mostly posted announcements and introductions. Today, the website is given a wider purpose — participants are meant to interact with it before even going to the in-person part. They can post their submissions, view others', and get excited about the event. By allowing students to record, edit, and post their presentation on the website, there is less emphasis on live "elevator pitches". Students are able to put their best submission forward, which boosts confidence and gives them a more lasting presence.

2. Interaction with academic staff

One aim of the conference has always been to bring academic staff and students closer together. Previously, the conference would be held in March. Students would have 10 minutes each to present their physical posters to lecturers. Today, with the in-person part held in mid-June and posters displayed online mid-May, the staff have much more time to interact with the students' work. In addition, the website now includes "How-to" guides, recordings of live Q&As, and other resources from the staff. With this change, technology is now used as a dynamic educational tool that links both sides together.

3. Real-life applications in university level research

Another aim of the conference is to enhance research based education at the undergraduate level. Students have deeper insight into certain aspects of a "real" academic conference. Submissions are peer reviewed by a Scientific Committee comprised of internal academics and recruited students (an opportunity for students to participate from the other side curtain). Other judges involved include professional economists from the corporate and government sector, further inspiring students to take part and explore future career options. Additionally, the new timeline of the conference — start advertising in October, and having the asynchronous and synchronous aspects a month apart at the end of the school year — allows for more skills workshops, which are recorded and posted on the website. Students are motivated to learn research skills needed for academia, such as data analysis and performing literature reviews.

Additional Chapter Highlights

There are twelve additional chapters in this book, covering various topics in online learning. In my opinion, there are three standout chapters that provide more unconventional advice and methods.

<u>Making learning stick, by Dr M. Enz</u>

How can we use science-backed concepts to implement and improve learning in an online course?

1. Providing students agency in their own learning will increase motivation and allow them to own their work. The final product would come from their personal choice, activating emotions and creating a positive connection with their teacher. This in turn strengthens memory and effort, since the assignment is no longer just a checkbox on their to-do list.
2. Experiments have shown the positive, lasting effects of interleaving on retention. Interleaving, or studying multiple topics rather than blocks of subjects, should be used with related but distinct material to experience its benefits.

Experiments for teaching economics, by Dr H. Llavador

Experiments engage students more than simply memorizing theory. What are the impacts of using technology to execute them?

1. Increase in students' engagement, performance, and enjoyment: Instructors can create memorable learning activities by triggering multiple senses. Not only have studies shown that students' test scores improve through performing experiments, there were also improvements in their understanding of the subject and a better attitude toward the material.
2. Reduced cost and effort: There are many online platforms on which to deliver experiments, most of which are compatible with students' smartphones and personal computers. Instructions on how to run experiments on popular platforms such as *classEx* and *MobLab* are also becoming more widely available.

Team-based Learning Online, by Dr P. Ruder

What factors are necessary for a high quality online educational experience?

1. High level of cognitive and social presence from the students: Sustained efforts to construct meaning from classwork plus opportunities for the students to express their own knowledge will result in a culture of individual accountability.
2. A compelling teaching presence from the instructor: Required from the instructor is an effective course design and ongoing encouragement to promote students' cognitive and social presence.

Miscellaneous recommendations for Economics Educators

Teaching Economics Online is a treasure trove of advice and evidence behind pedagogical decisions, with gems of specific actions to improve both the teaching and learning experience placed about. I believed the following to be particularly useful, as they can be considered mundane and easily skipped despite their importance.

- Enforce introductions early on to establish a social presence, and also introduce yourself to set a positive example. Students can feel unappreciated and disengaged if they post an unacknowledged introduction.
- Provide the students the opportunity to both give and receive feedback. Besides the ongoing benefit of receiving feedback from the course instructor, it is also encouraging for students to see their suggestions implemented in real-time.
- Students who connect classroom concepts to personal experiences are shown to have higher retention of the concepts. For example, when explaining the rules and expectations

of the course, instructors can tie in economics concepts such as opportunity cost and incentive.

- Protect your own time and energy during “off” hours to be your best teaching self during “on” hours. Set clear boundaries about your presence since it’s impossible to teach effectively while depleted.

Project Reflection

I would like to express my gratitude to the Laidlaw Foundation for funding this pertinent project and to Dr Chaudhury for placing her trust in me! Besides the highly relevant skills and knowledge I gained from the research, and the eye-opening leadership training I received, an overwhelmingly positive experience has been getting to know my fellow Laidlaw Scholars. It has been a great pleasure learning from each other, hearing a diverse collection of thoughts propelled by our varied backgrounds, and having such a supportive environment. I’m eternally grateful to have this network, and I cannot wait to see what incredible things everyone will achieve through their Leadership in Action project.