How have LSE students in the Department of Economics responded to online learning, and which aspects would they like to be a permanent feature of the LSE student experience?

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Introduction

This projects studies how student satisfaction has changed as a result of the change to online learning. The "LSE experience" was decomposed into two primary channels – Classes and Lectures – and collected quantitative data through a survey. Then we considered three secondary channels – Societies, Careers and Outside Social Interactions – and collected qualitative data from interviews with students.

Through this research, we aim to provide useful insights to inform the Department of Economics' future policies regarding online learning.

Methodology

Our observed variable is an individual i's satisfaction score $\in[1, 7]$ for multiple aspects of each dimension of LSE learning $j \in$[Classes, Lectures] and our variables of interest were i's characteristics: year of study, fee status, gender, and mode of learning for MT 2020: online, hybrid, in-person.

For each dimension, the survey assessed the quality of discussion, the quality of teaching, interaction and quality of teaching materials.

Hypotheses

For lectures, there is likely to be little or no effect for "large-course" lectures: with over 200 attendees, because students feel similarly close to the lecturer in-person and online. There may be a negative effect for "small lectures", because students are more able to interact with the lecturer in-person

For classes, we expect that average satisfaction would be overall lower as a result of online learning, as students who selected in-person classes likely experienced a higher level of interaction, thus finding the classes more enjoyable and academically useful. Students who selected hybrid classes likely benefitted from the flexibility granted by this model, therefore may report higher satisfaction

Results

To analyse our survey results, we began by running a full set of regressions of our independent variable (mode of learning) on our dependent variable (the outcome questions, e.g. "satisfaction with actual content with classes" or "level of interaction with other students during classes"). Our controls consisted of gender, year group and fee status.

Whilst these regressions gave us interesting results, we struggled to produce statistically significant results in some cases, due to some small sample sizes. For example, only 2 students surveyed were in year 1 and chose hybrid learning. Thus, we expanded our analysis by coding the answers to our questions from 1-7 (highly unsatisfied=1, highly satisfied=7) and comparing means for each question across our different subsections.

Considering by turn each of the four subsections: year group, mode of learning, fee status and gender. Our year group analysis gave us the interesting result that we had hypothesised, that first years rated their satisfaction lower than 2nd and 3rd years on 12 out of the 13 questions they were eligible for. This striking result shows the differential impact on student who started their student experience vs those who didn't, and the results of 2nd and 3rd years were very similar to each other.

Analysis of mode of learning, our key variable, showed that students who chose a hybrid option were more highly satisfied with classes. The main effect driving this result seems to be the flexibility and convenience students enjoyed from attending online classes from home in the first half of MT and in-person in the second half.

However, the surprising result from this analysis, which was corroborated by the regression analysis, was online had higher satisfaction than in-person students, when comparing this years' experience to last years. This is because students who attended in-person classes experienced a marked difference in the quality of debate and interaction due to disease safety measures, whereas online students felt the new medium was a new way of learning altogether and quality was only weakly comparable with past in-person classes. Since expectations about in-person classes were already anchored by experiences in previous years, students were relatively more dissatisfied with in-person learning than online classes, despite not being worse quality.

In interviews and comments in the surveys, students were clear that in person classes were far superior to online classes: higher interaction rates were evidently more important than the possible flexibility benefits of online classes. Discussing the comparison with last year's classes and lectures in our interviews gave a possible channel for this finding.

The fee status and gender comparisons were less significant. Home fee students preferred classes while international students had higher satisfaction rates when comparing this year to last year, although the interviews and survey comments did not bring to light any channels for this effect. There was no difference in either the regressions or means comparisons for gender.

Recommendations

Overall, students had high level of satisfactions across all survey and interview topics, and did not consider themselves to have lost out at all academically. The main loss was considered to be a lack of socialising, either in-LSE or not, and students were very clear that they felt the Department of Economics had done everything it could in this aspect, which was simply an output of government pandemic regulations.

Whilst the general themes were positive, there were some specific points on which students felt there could be improvements. We split the interview questions regarding recommendations by ideas for going forward in the next few months in the pandemic, as well as more generally going forward outside of pandemic times.

Going forward in pandemics, there was one over-arching main points that students felt the Department could action in order to improve their academics and more general experience of LSE. Student felt that **more specific encouragement by teachers and the Department for student interaction helped both levels of interaction and overall understanding**. For example, students' satisfaction with interaction and overall quality of class teacher was markedly higher for courses that had a participation grade component or teachers who only marked attendance is students contributed at least once to the discussion. One particularly salient point came from a student whose teacher had changed their 'policy' after the Michaelmas Term, requiring in LT that students have their cameras on or participate in the discussion in order to be marked as present. The student described this class as transforming from one of the least interactive and enjoyable classes to by far their best, with their understanding of the content in LT increasing substantially as a result. Additional comparisons of modules with participations grades vs those without also amplified this point. Thus, a stand from the Department and class teachers at the beginning of any period of online classes of the 'expectation' of students interaction would be perceived as extremely helpful for increasing both student's enjoyment and understanding.

Going forward more generally, student had three main recommendations for the Department. Firstly, students found that classes sometimes felt rather rushed due to very long, complicated problem sets that there simply wasn't enough time to cover in hour-long classes. Thus, students found that there often wasn't any time to discuss the lecture material more generally or ask questions and sort out areas of confusion. Students therefore expressed **a desire for longer classes whenever possible**, of course while understanding the constraints on the Department to provide this.

Secondly, some students raised an issue with the support provided by the Department for careers applications and advice. While students completely understood and agreed with the focus of the Department on the importance of academics, they reported a lack of understanding of the importance of finding internships and jobs. This feeling was particularly strong for international students and students from disadvantaged backgrounds, who either for visa reasons or an inability to return home after university felt the most important issue facing them was finding a job. These students did not feel that the Department fully understood the importance of internships and the number of applications

required to get a job in highly competitive industries such as investment banking or management consultancies. Students reported being told by class teachers or academic mentors that focussing on such applications over their academics was 'unacceptable', which resulted in them feeling alienated from the Department and unwilling to approach them for advice on how to balance their academics alongside applications. Students felt that a deeper understanding by the Department of the career expectations and constraints placed on them would have helped them to balance their commitments, resulting in higher concentrations on their academics. To that end, they felt that **being signposted to a particular member of Department who was training to help with balancing academics with careers, or a mentoring program with recent LSE alumni** could help them to more successfully achieve both aims.

Thirdly, students discussed the different merits of in person and online lectures for courses of different sizes. Students found that **very large lectures were more interactive online than they had been in a large lecture theatre**, as Zoom allowed for use of the chat function, polls and other interactive elements**. In person lectures, however, were considered preferable for smaller courses**, as they facilitate interaction between the lecturer and students.

Thus, overall, the main recommendations were for **class teachers to set the standard higher for class interaction and impose this standard where possible**; for **classes to be increased in length where possible** and for a **more understanding approach to the importance of careers to be adopted.**