



Let's Make a Movie!

Introducing Economics With a Multimedia Project

In this paper, we describe a multimedia research assignment used to introduce first year undergraduates to economics. This group assignment, named the "First Year Challenge", immersed students into independent research at the start of their university life. It introduced students to economics in a contextual way and gave them a chance to connect with their peers and the world around them. We describe the setup of the project and its evaluation with respect to project output and effects on the learning process. The quality of the output produced by students was quite good on average despite few incentives and little prior knowledge of the material. There is some evidence that groups with a larger proportion of women and of overseas students tended to perform better in the assignment. We also found that student interactivity and class participation during the rest of the year as well as interest in studying economics appeared to have increased following participation in the project. Finally we provide advice on how to adapt this project for other contexts and fields of study.

Parama Chaudhury[†]

Christian Spielmann[†]

[†]University College London

1. Introduction

Universities increasingly highlight the importance of research-based education, while the education literature shows the effectiveness of exposing students to independent research. For example, Bauer and Bennet (2003) find that those who had undergraduate research experience report higher levels of satisfaction with their education as well as greater development of cognitive and personal skills. Gregerman et al. (1998) show that student-faculty research partnerships promote the retention of students, in particular, those with a higher attrition risk. But in practice, the leap from solving problem sets to doing original research remains difficult. In this paper, we describe and evaluate a unique assignment called the First Year Challenge (FYC), designed to introduce first-year undergraduate students to economics through independent research and to encourage collaboration among a diverse set of peers who bring a variety of skills into the classroom.

The FYC required small groups of students to create a brief video or podcast on the theme "Capitalism, Growth and Inequality." Students started on the project as soon as they arrived at the university, and before attending their first university classes. This meant that their first experience of university economics was through asking questions for their own research rather than just by passively listening to the lecturer. The assignment itself was defined in a fairly broad way, which meant that the students' first task was to frame a research question that could be answered in satisfactory way with a three-minute multimedia file. We found that students did indeed ask interesting questions, both in the context of the project, but also in the ensuing lectures and tutorials. We also found that, while the research project only had a general link to the first-year economics curriculum and did not contribute towards the final grade, students put in a fair amount of effort and produced high-quality output in a relatively short period of time and with a minimum of guidance. Finally, the project appeared to help students interact with their peers and improve their ability to collaborate, which we saw as a major goal of the assignment.

We have large cohorts comprising students from all over the world and find that many students go through their time at the university never having spoken with many of their classmates. The fact that the university is situated in the middle of London, one of the great metropolises of the world, makes it even harder for our students to form links with others as there are many distractions and it is difficult to find suitable meeting places. In a time when connectedness is on the agenda everywhere, this feels like an anomaly and a wasted opportunity. After all, the purpose of the university should be to facilitate a meeting of minds. From a more practical point of view, employers view the ability to collaborate with different types of people and to work as a team as an essential attribute of a successful employee (Harvey, 2000); however, they often report that recent university graduates lack these skills.

One way to view the FYC is as a curricular version of the pre-orientation activities that many American universities organize for their first year undergraduates. For example, Dartmouth College Outing Club organizes optional overnight trips for incoming freshmen as a way for them to get to know their peers. Yale's Freshman Outdoor Orientation Trips have a similar motivation. The FYC links this kind of bonding exercise with the pedagogic goal of introducing future economists to the broad scope of questions put forward by social scientists. This way of introducing a pre-term assignment also reduces the cost that may be associated with the orientation activities referred to above. The aim was for students to start interacting with each other through the lens of the project, and continue to collaborate and participate in peer learning throughout the year. We found that while many students interacted with others in the context of sporting or other extracurricular activities, they didn't have much experience of doing so in an academic or professional context. The FYC was a chance to introduce them to group work in a curricular setting, an experience which should be quite valuable for future employment contexts.

The final unique and, in our opinion, essential feature of the FYC was the requirement that the submission be in multimedia format, in particular, as a movie or a podcast. Our insistence on this choice of format was mainly in order to broaden the students' horizons. The rest of their university lives would almost surely be dedicated to written work. Because of our large cohorts, few students get a chance to present their work orally in class. We felt that by introducing students to a different format at the start of their university lives, we were forcing them to think more creatively about research, and we hoped that the memory of this experience would help broaden their research experience in later years. We also felt that allowing written or Power-Point submissions would encourage students to cut and paste from internet sources rather than thinking independently about the issue.

2. The Context

In this section, we start by describing two main features of the English higher education system that are important for the design of the FYC and its evaluation. First, students declare their major before they enter the university. When students apply for a university place, they apply for a specific degree program, e.g. B.Sc in Economics, or B.Sc in Philosophy. If they are accepted to the program, they then take classes within a fairly narrow framework, with their degree subject dominating. Therefore, for the Economics degree discussed here, students have to take specified classes in Economics during each of their first two years, and can then choose between a range of Economics field courses in the final year. In addition, they are allowed to take a very small number of classes in other departments. The second salient feature of the English university system is that the degree runs for only three years and lecture hours are often limited (in our specific context to 20 hours per course per term). This means that on the one hand, students don't have much time to spend on thinking about each course, while on the other hand, faculty have limited contact time and are therefore tempted to restrict interactive teaching and learning activities which usually take longer than a traditional lecture.

In our specific context, an additional feature which motivated the launch of the FYC was the large intake of students and their diversity. The Economics undergraduate program is one of the most competitive in the country in terms of acceptance rates with admission offers requiring at a minimum, 2 A grades in the A-level¹ exams and an A* (the highest possible grade) in Mathematics. Less than 10 percent of students nationwide achieved these grades in 2011-12,² while there are 12 applications for each available place. Along with Cambridge University and the London School of Economics, this program is considered to be the most highly regarded undergraduate economics degree in the United Kingdom, and as such is on par with a top program in the United States.³ Despite stringent admission requirements, each incoming cohort is still nearly 300 strong. This is the second largest undergraduate program in the university after medicine. Because much of the first and second years of the degree comprise required courses, students spend most of their class time in these two years in large lecture theatres with stadium seating surrounded by 300 others.

1 In the final year of secondary school, students are required to sit nationwide "A-level" exams in a choice of subjects. Most students choose to take three or four subjects, which may include traditional ones like mathematics or English, but also more vocational ones like photography and dance. The most selective universities usually require top grades in at least three traditional subjects, conditional on the program applied for.

2 Source: Freedom of Information request release from Department of Education (16 September 2013, accessed 1st February 2016) <https://www.gov.uk/government/publications/a-level-grade-combinations>.

3 QS World University Rankings ([http://www.topuniversities.com/university-rankings/university-subject-rankings/2015/economics-econometrics#sorting=rank+region="+country="+faculty="+stars=false+search=](http://www.topuniversities.com/university-rankings/university-subject-rankings/2015/economics-econometrics#sorting=rank+region=), accessed Feb 1, 2016).

The undergraduate degree program described here is not the only way to study economics at this university – there are other much smaller programs e.g. area studies programs, where a student may choose to concentrate on economics. However, probably because the economics department which houses the degree program (within a standard faculty of social sciences, rather than a business school) has a very high research profile, the vast majority of students choosing to study economics at the university do so by applying to this degree program. This brings us to the final salient feature motivating the FYC. As often happens in large high profile departments, there is much exciting and cutting edge research carried out by faculty members, but undergraduate students have little contact with this side of the institution. Students report this as a source of frustration. But for many researchers, however good their intentions, it is hard to make time for research activities in their undergraduate courses particularly when there is so little timetabled contact time.

One of the main motivations driving the introduction of the FYC was to bridge the gap between the department's research profile and the undergraduate students' experience by immersing students in academic research from the first day of their university lives, even before they had had their first lectures. The second driving force was the desire to encourage interaction amongst students and to facilitate peer learning. The benefits of both of these aspects of a university education are widely recognized. Russell, Hancock and McCullough (2007) find that participation in undergraduate research projects increases awareness, confidence and understanding. It also increased students' interest in the field and in pursuing further study (including a Ph.D.). Gregerman et al. (1998) find that involving students in research as a way to involve them in the "core academic mission of the university" improves the rates of degree completion, particularly of vulnerable students. Finally Healey and Jenkins (2009) provide an overview of undergraduate research initiatives across several countries and conclude that exposure to and participation in such programs increases student engagement and ownership of the learning process.

The benefits of group-based or collaborative learning are also well documented. Springer et al. (2006) provide a meta-analysis to show that small-group learning is effective in promoting greater academic achievement, more favorable attitudes toward learning, and increased rates of program completion. The literature on team-based learning, e.g. Michaelsen and Sweet (2011), is extensive and shows how working collaboratively is not just beneficial for the students' academic experience; it also equips them with invaluable skills for the workplace.

The FYC may be considered as an example of a problem-based learning assignment, where students in small groups actively research a question (or problem) and apply knowledge and skills to find a feasible answer (Savery, 2015). Such active, student-centered learning strategies may also be categorized as project-based learning (Roessingh et al., 2011), case-based learning (Andersen et al., 2014), inquiry-based learning (Savery, 2015) or curiosity-based learning (Jackson et al., 2012). The latter approaches mainly differ from problem-based learning in the extent of how much guidance the teacher provides throughout the learning process. As is clear from the description below, students were quite independent in steering their FYC inquiries; hence, this project is most similar to problem-based learning, though curiosity and inquiry are built into the research process required to complete the assignment.

3. Description of the Project

A. Background Information and Group Makeup

The FYC is a pre-term curricular project that students start working on before they arrive

on campus, but that is based on the text they use for their required introductory course in economics. First-year students in the program are required to take a yearlong introductory course that is equivalent to the traditional microeconomics and macroeconomics principles courses. There are 40 hours of lectures during the year held in lecture theatres large enough to hold up to 350 students and equipped with lecture recording facilities that most lecturers use. Students are expected to attend these lectures as well as weekly tutorials that are held in groups of about 15 students and are one hour long. Before each tutorial, students are asked to complete assignments that are based on the assigned text and the weekly lecture. Graduate students typically teach these tutorials.

The FYC was introduced to students in this introductory course in the week before their university classes began, in part, so that they could use the group project to connect with other students who were also new to the city and the university. There were 274 first-year undergraduates in the 2014-15 cohort. Of these 173 (63 percent) were men and 172 (63 percent) were domiciled in the U.K. or the rest of the European Union (E.U.).⁴ Eighty-two percent of the students (223) were enrolled in the B.Sc economics degree, while six were from the European Studies department, seven were from the Bachelor of Arts and Sciences (B.A.Sc, a liberal arts type program), 18 students were from geography, and the remaining 18 were from philosophy. Students from a department other than economics were studying for a joint degree (e.g. B.Sc Economics and Geography) that has a mandatory economics element and were therefore required to take the same introductory course as the economics students.

The majority of the economics students were studying for a three-year undergraduate degree. Twenty-five economics students were studying for a four-year degree, with the additional year being spent abroad (usually at a U.S. university). All students enter the program with a fairly high level of mathematics preparation, because this is a condition of the admission offer, and those with A-levels (the majority of the group) are expected to have an A* in Mathematics as noted earlier. The student body is therefore academically quite well prepared. However, it is also true that, because of the structure of the schooling system, most have had little experience in independent research or writing extensively. Thus, an assignment like the FYC would be very different from anything students had seen before, and it was designed precisely to take them out of their comfort zones.

As noted earlier, the FYC is a group project. Because one of the main aims of the project was to encourage peer learning and collaboration beyond the duration of the FYC itself, we assigned students to groups on the basis of the tutorial groups for their introductory course. While the FYC was completed within the first few weeks of the term, students continued to work on the course material in their tutorials throughout the year. Therefore, the aim was for students to establish a peer network within the tutorial group that they could continue to use over the year (e.g., to set up study groups or for more informal consultation while doing tutorial assignments). Each of the tutorial groups comprised 12 to 15 students. Because this was probably too large of a group to work together in an assignment, we asked each group to divide into two roughly equal sub-groups, each of which would submit their own FYC output. Therefore, the final FYC groups were chosen by students themselves within the constraints of the assigned tutorial group.

Table 1 summarizes some of the characteristics of the tutorial groups. The joint degree students were placed in groups separate from the economics students; therefore, these groups are identified by the students' home department. One group (TUTM) contained students from

⁴ In this paper, we identify students who are not domiciled in the U.K. or the E.U. as "overseas." This classification is the one used by the university, largely because U.K. and E.U. students pay the same, subsidized "home" fees, while those from outside the E.U. pay close to double these home fees. The majority of overseas students in economics are from East Asia.

more than one home department, and is therefore identified as “Joint Degree.” There was diversity both between and within the groups. The proportion of female students ranged from just over 20 percent to 50 percent, while the proportion of overseas students varied from about 8 percent to over 65 percent. The joint-degree groups had significantly fewer overseas students, but the variation in the female-to-male ratio was similar.

B. The Setup

The degree program at the university started at the end of September, with an induction week preceding the first week of lectures to help students get settled in and signed up for classes. An email with the details of the FYC assignment was sent out to students a week before

Table 1 - Group Characteristics and Outcomes

GROUP	SIZE	FEMALE	OVERSEAS	DEPARTMENT	FYC OUTCOME
TUTA	14	4	7	ECONOMICS	--
TUTB	14	7	8	ECONOMICS	RUNNER-UP
TUTC	12	7	0	BASC	--
TUTD	14	3	5	ECONOMICS	SHORTLIST
TUTE	14	4	8	ECONOMICS	--
TUTF	15	7	6	ECONOMICS	RUNNER-UP
TUTH	14	5	2	GEOGRAPHY	--
TUTJ	13	6	6	ECONOMICS	--
TUTK	13	4	3	ECONOMICS	BOTH SHORTLISTED
TUTL	14	4	3	PHILOSOPHY	WINNER/ SHORTLIST
TUTM	13	5	1	JOINT DEGREE	SHORTLIST
TUTN	14	3	6	ECONOMICS	--
TUTP	14	4	5	ECONOMICS	SHORTLIST
TUTQ	15	8	5	ECONOMICS	--
TUTR	15	5	5	ECONOMICS	--
TUTT	11	6	4	ECONOMICS	SHORTLIST
TUTU	13	6	6	ECONOMICS	WINNER/ SHORTLIST
TUTV	12	3	6	ECONOMICS	--
TUTW	15	5	10	ECONOMICS	SHORTLIST
TUTX	15	5	6	ECONOMICS	--

their arrival so that they could familiarize themselves with the task. Because the assignment asked students to relate the theme of the project (London – a city of social commentators and thinkers) to the first unit of their introductory text, it was expected that they would read this unit along with the instructions before they arrived on campus. As noted before, the text is available freely online, and the theme of Unit 1 is “Capitalism, growth, and inequality.” Once on campus, the first step in the project (at the start of induction week) was to meet other group members at an assigned location within a half-hour radius of the Economics department. The groups were set up according to pre-assigned tutorial groups, which in turn were set up based on the students’ other timetabled courses and activities. Because the bulk of first-year courses are mandatory in economics, the assignment to a tutorial group ended up being more or less random.

Students were given instructions⁵ and a photo of the meeting point, and asked to make their way to the location independently. Once at the location, they were asked to introduce themselves to the other members of their group, exchange contact information and divide themselves into two subgroups. Finally, each group had to figure out which “thinker” their location was linked to from a given shortlist. Some “location-thinker” links were straightforward (e.g., Charles Dickens’ house on Doughty Street, or Florence Nightingale’s workplace on Harley Street). Others were more challenging, like the library at the London School of Economics, which was linked to the founders of the school, Beatrice and Sidney Webb, but also housed many materials related to the project theme. The British Library, which contained some of Adam Smith’s original manuscript, was another intriguing link as it also contained many exhibits that related to other thinkers on the list. While we had specific links in mind as indicated in Table 2, students were given the freedom to identify different thinker-location combinations, as long as they made sense and were clearly explained.

Once the sub-groups were set up and the relevant thinkers had been identified, students were asked to brainstorm the link between the thinker and the central theme of the introductory unit in their first year text, *The Economy*.⁶ The fairly broad theme “Capitalism, growth and inequality” gave students the opportunity to be creative and define the focus of their project themselves. The project output had to be a three-minute video or podcast, and students were explicitly directed not to dwell on the thinker’s biography, but to focus on their link to the theme. Here again, the difficulty of the task varied. Some thinkers like Keynes or Marx had fairly straightforward links to the theme, while others like Charles Babbage required far more thought. Still others like Francis Bacon both had a non-trivial link to the theme, and were associated with ideas that are fairly complex, at least from a first-year undergraduate’s perspective. In the final evaluation of the output, consideration was given to the degree of difficulty involved in linking the thinker to the theme.

Over the next five weeks, students were encouraged to meet up in their sub-groups to discuss the project, do research, and start on their media production. Within each larger group, the two sub-groups worked on the same thinker, but had to choose a different aspect of the project to work on and could work in a different medium. Apart from a few encouraging words and clarifying statements, faculty involvement in the process was minimal. Part of the reason for this was necessity. With a limited amount of faculty resources and nearly 300 students, it would have been impossible to give much detailed guidance. But another reason for taking this approach was to encourage students to troubleshoot within and between groups and see how far it took them. Indeed, we had reports of cross-group student interactions particularly in terms of the technical aspects of media production but also in terms of how to access library

5 The full text of the student handout is in the Appendix.

6 *The Economy* is the free online textbook produced by the CORE Econ project and can be accessed at <http://www.core-econ.org/>. The first year introductory module is based on this text.

Table 2 - FYC Locations, Associated Thinkers, and Links to the Project Theme

Thinker	Location	Link To Theme
J.M. Keynes	Keynes' house on Gordon Square	Great Depression and policy response
Karl Marx	Marx's house in Soho	Inequality and socialism
David Ricardo	UCL Economics Department, which he founded	Corn laws – free trade
Jeremy Bentham	Jeremy Bentham pub	Utilitarianism – market economies
Charles Dickens	Dickens' house on Doughty Street	Inequality in Victorian times
Charles Darwin	Darwin Building at UCL	Evolution – use in economic theories
Francis Galton	The Galton Collection at UCL	Correlation/regression – use of data to study economics
Lionel Robbins	The Robbins Building at the LSE	Robbins report on education and its effects
Beatrice & Sidney Webb	The Brewmaster pub on the former premises of Sidney Webb's birthplace	Founders of Fabian Society - socialism
Francis Edgeworth	King's College London (Strand Entrance)	Edgeworth box – growth and distribution
Adam Smith	British Library	Free trade and market economies
MK Gandhi	Gandhi statue in Tavistock Square	Inequality and colonialism
Francis Bacon	Bacon statue in Gray's Inn	Scientific revolution – use of empirical methods
Thomas Coram	The Foundling museum	Child poverty and welfare
Emmeline Pankhurst	House on Russell Square	Political power - suffrage
RH Tawney & William Beveridge	Tawney's house on Mecklenburgh Square	The welfare state
Karl Pearson	UCL department of statistics	Correlation/regression and the use of data
JS Mill	Memorial plaque near Temple tube station	Freedom and individual pursuit of happiness
Florence Nightingale	Nightingale's former hospital site on Harley Street	Healthcare and empirical methods
AC Pigou	King's College London shop	Welfare
C Babbage	Royal College of Surgeons (his brain is preserved there)	Scientific methods – the use of computing

WS Jevons	Jevons' house on Albert Street	Modelling in economics
Giuseppe Mazzini	House on N.Gower Street	Inequality and social uprising

resources for research and the exact scope of the assignment. There were few students who approached the lecturers directly for help with the FYC.

While students were working on their projects, lectures began and the theme of the project (and the content of Unit 1 of the text) was discussed in lectures and tutorials. This discussion did not focus on any of the social thinkers per se, but did talk about the theme in more general and abstract terms. The module proceeded at a rate of roughly one unit per week, so as the students were working on their projects, the content of the lectures moved onto other topics. At the end of the five weeks, each sub-group submitted their project in an online drop box.

After submissions were completed, the lecturers evaluated the projects on the basis of content, exposition, and the degree of difficulty of the assigned meeting point or thinker as explained in greater detail in the next section. We announced a shortlist of top performing projects, two runners-up and two winners at the end of the evaluation process. The students in the winning groups each received a £5 Amazon voucher, and all the projects on the shortlist were shown during the annual Undergraduate Economics Research conference at the end of the year.

A crucial feature of this assignment is that it does not contribute towards the final grade. The main reason for this was regulation – the structure of the Economics department is such that coursework of any kind does not count towards the final grade, which is based fully on one or more examinations, and any changes to these rules are time-consuming and difficult to achieve. However, we did not view this restriction as particularly binding, as group assignments are always hard to mark in an equitable way. As mentioned above, we did hand out Amazon vouchers at the end of the year to members of the winning groups, but because we did not have funding for this when we started the project, this was not advertised. These restrictions allowed us to test how much effort students put towards an assignment when there are no obvious or extrinsic incentives at play.

C. Project Output

Developing a framework to evaluate the FYC submissions was quite tricky because we wanted to reward content and understanding as well as innovativeness and creativity. We constructed a marking system that weighted content and coherence equally (40 percent each), while the remaining 20 percent was based on the production quality of the media output. The content criterion mainly focused on the sophistication of the research presented in the output, such as whether economic theory had been used, or whether the students had created data charts or carried out surveys, and how well this related to their topic. This criterion also took into account how difficult it was to establish a link between the assigned thinker and the theme. The coherence criterion was based mostly on the link to the thinker. For example, did the content of the output relate closely to the work of the assigned thinker? Was there a coherent narrative in the output? Did the final product use the research adequately to reach a conclusion? The final criterion was production quality, which related both to the look and feel of the final product, but also to how well the different elements included in the media file had been used and how engaging it was.

The main focus of the content was on the link between the thinker and the theme. For example, if the assigned thinker was Charles Dickens, then a submission that explored inequality or child labor in the high growth days of the Victorian era received high marks. We also stressed that the submission should focus on the central theme rather than the highlights of the thinker's life. Thus, a submission on Mahatma Gandhi received more credit for discussing his ideas about small-scale production and its link to reducing poverty and inequality, than for discussing his life history and India's freedom struggle. A project on Francis Galton scored highly for referring to his work on correlation and regression (which facilitated the empirical study of growth and inequality and the factors that affect them), rather than for highlighting his interest in eugenics.

Overall, the quality of the output from the FYC was quite high. Students had clearly done quite a bit of research, gauged the scope of the project fairly well, and in many instances, showed a very high level of skill in putting together the digital media. In most cases the content was well thought-out, and students had engaged in a serious discussion about the theme. They often used understanding of economics acquired through a high school class or through popular media. The more standard thinkers like Keynes or Ricardo were more likely to receive this treatment. Strong contributions focused on a very precise aspect of the social thinker and then researched this in detail. For example, the submission on Florence Nightingale discussed both her work as a statistician as well as her role as a fore-bearer of a universal health care system in Britain.

The weakest submissions were not necessarily the ones with the most difficult thinker-link. For example, one of the projects on Jeremy Bentham comprised largely of students standing in front of a camera, reading out an explanation of utilitarianism from a piece of paper. Another weak submission was a podcast where a single student narrated the history of the Risorgimento and Giuseppe Mazzini's Young Italy movement. Other examples of weak submissions included ones where students did not make a link between the thinker and the theme, but only focused on the latter. The project on Emmeline Pankhurst started off discussing universal suffrage but veered off into talking about freedom and inequality in general. Finally, while several groups used surveys to good effect, one of the groups assigned to Florence Nightingale interviewed only one child on the street and each other, and produced a movie with little content or focus.

Despite the fact that there were very few requests for technical or other assistance sent to the lecturers,⁷ there was a wide variety of approaches on display in the submissions. Several groups used software like VideoScribe to tell an animated story. One group used a time-lapse video of one of the busiest parts of the city with a voiceover. Two groups interviewed the general public on their views about the thinker, his or her work, and its relevance today. Given that this project took place in the run-up to a general election year, this provided a fascinating insight into what a layperson today thinks about capitalism, growth and inequality in general and about the role that institutions like the welfare state play in today's economy. Other formats included a faux interview with the thinker, and a short audio play about another set of thinkers. Many groups also used more traditional approaches like presenting with a whiteboard, taking turns reading from a script, and using a video software to build a PowerPoint like presentation with standard economic diagrams.

The main shortcoming in the submissions in terms of research quality was the lack of proper citation. Wikipedia appeared to be a top source for students; however, even this was often not cited properly. Academic or print sources fared worse. This is something that cropped up in written assignments later in the year to a lesser extent, but for the videos in particular, web-

⁷ Some participants reported taking help from fellow students specializing in film or media to shoot their videos or record their podcasts.

based and other material was used extensively but rarely given credit in an adequate fashion. Many groups also did not include their own names in their projects. It seems clear that students view a multimedia project quite differently from a written assignment, and so leave out many things in the former that they would automatically include in the latter. Because students did not receive any credit toward their final grade in the module for this project and the only incentives were the possible showcasing of the contribution at a conference and a small token for the winner, it is perhaps not surprising that students were not as careful with the details of the submission as they would have been for a graded project. But even in the absence of a proper incentive structure, what was surprising and encouraging from the teachers' perspective was the amount of effort that had clearly been put in.

4. Evaluating the FYC

The FYC projects were carried out within sub-groups of the tutorial groups described above. These sub-groups were decided upon by the students themselves, and the level of interaction between sub-groups was not observed by the lecturers or tutors. In this section, we start with a brief discussion of the characteristics of groups that contained the sub-groups with the best contributions. As the numbers are small and it is hard to observe the workings inside each group, we present these numbers as a rough indication rather than a formal analysis.

A. Group Characteristics and FYC Outcomes

The ranking of the FYC submissions was carried out as described above, with credit for particularly difficult subjects as well as for content and the overall quality of the product. There were two overall winners and two runners-up announced, and a shortlist of honorable mentions. The last column of Table 1 identifies groups according to whether their subgroups were in any of these categories. Eleven of the 20 tutorial groups had at least one shortlisted (or winning or runner-up) submission.

Table 3 shows group characteristics of the tutorial groups – rather than of the sub-groups – by the category of their FYC outcome (winner, runner up, shortlist, or none). As noted earlier, the assignment to a tutorial group (of about 15 students) is more or less random, while the division of the sub-groups is something that students decided on themselves. The analysis below is at the level of the group rather than the sub-group and therefore at the level where assignment was random. This makes the interpretation of the observed associations slightly stronger. Also, since the tutorial group met every week for class, it is possible that there was discussion about the FYC and cross-sub group sharing of resources and ideas. This makes the group-level analysis all the more informative.

Table 3 shows that in terms of gender, nationality or home department, there was not much difference between the groups that had at least one shortlisted submission and those that had none. However, there does seem to be quite a bit of difference between the groups that had a winner or a runner-up and the rest. The former have a higher than average proportion of female students, and of overseas students. These groups are also slightly less likely to be economics students, though the numbers here are small, so it is hard to draw robust conclusions.

This last observation is interesting as there are two opposing possibilities for how the home-department effect might work. On the one hand, students studying philosophy are probably more likely than those studying economics to have had experience in independent thinking or research and collaborative work. This is likely both because of their school work (mathematics is required of economics students entering the university, and at the school lev-

Table 3 – Group Characteristics by FYC Outcome
(variance in parentheses)

Outcome	Female (%)	Overseas (%)	Home Department Economics?
At Least One Winner or Runner-Up	42.86 (0.70)	41.18 (1.68)	3/4
At Least One Shortlisted	33.75 (0.69)	35.00 (1.01)	6/8
None Shortlisted	36.38 (1.51)	36.71 (2.46)	8/10

el, is less likely to involve collaboration or research), and because of self-selection of students into the two departments. Students preferring more technical and less essay-based work are more likely to choose economics, while those favoring more discursive work are more likely to choose a joint degree. Therefore, it might have been expected that the students taking philosophy (or getting a joint degree in general) would do a better job at the FYC compared to the average economics student. On the other hand, as many of the economics students have studied economics at high school, compared to them, the non-economists might have found it harder to approach an economics project. It is true that since the project starts before the beginning of term (and the introduction to university economics) and the mandate was to be creative, this may not be a major obstacle. However, anecdotal evidence suggests that students who have not studied economics before (the majority of non-economists taking the introductory module) report that they are less confident talking about economic issues especially with those who have taken in economics in school. The fact that despite this, non-economists did well in the FYC (and this is even more striking this year as the discussion in Section 5 shows) indicates that one of the drawbacks of starting this project at the very beginning of the term does not seem to have been a serious issue. Despite the fact that students had little knowledge of the subject when they started the project, they were able to produce fairly sophisticated material.

Table 3 also shows that the winning groups were more likely to have women and overseas students. The first finding is interesting as many papers find that there is no clear difference in learning styles between men and women. For example, Green (1997) finds that women are not necessarily better at understanding tests of nonlinear thinking, but may be better at writing essays. Shaw and Marlow (1999) show that in computer or technology-aided learning, there is no evidence of gender differences in learning styles. There is however a slightly smaller fraction of women in shortlisted groups versus non-shortlisted groups, which is consistent with the literature showing no clear pattern.

The overseas-student⁸ effect is surprising because anecdotal evidence shows that overseas students are often quieter in class and less likely to contribute to group discussions, either for cultural or language reasons. They are also more likely to be from an educational background that does not provide much opportunity for creative and collaborative work. One possible way

⁸ As noted in Section 2, overseas students are defined as those who are not domiciled in the U.K. or the E.U. In practice, the vast majority of overseas students studying economics tend to be from East Asia.

to explain this finding is that students specialized within the groups with one set of students performing the technical tasks while others developed content. Another possibility is that, if there was a large enough number of overseas students in the group, the subgroups were formed in such a way that students from a particular country could work together, perhaps in their own language. A final possibility is that, if there are a large number of overseas students in a subgroup and they are unused to work of this kind, they might leave much of the work to the couple of (U.K. or E.U.) students who are willing to take on the leadership of the group.

B. Student Feedback

We measured the success of the FYC project in several different ways. The first method, discussed in Section 3.C., was the quality of the media output produced. The second was in terms of student participation. One interesting feature of this assignment was that since many groups opted to do a video with either their physical presence or voiceovers, it was easy to see who had participated in the making of the end product. Based on this evidence, it appeared that most groups had everyone contributing in one way or another. The last method, discussed in this section, is student feedback. This was collected in the form of anonymous surveys and focus groups. Both instruments asked students about their experience while engaging in the FYC.

Most students reacted positively to the FYC assignment. The majority turned up at the assigned location during the first week, and participated in some way in the making of the media file. According to the survey and the focus group, students felt that the best thing about the FYC was the fact that they were able to get to know their peers:

I like that the groups for the First Year Challenge were made up of our ... tutorial groups - this meant that we could get to know each other a lot better, improving our experiences in ... tutorial classes too, as we felt more free to contribute and intellectually challenge each other.

The FYC is a good opportunity for us to get to know our friends better, especially for people not from the U.K.

It was instructive that the first benefit the students thought of was the group connectivity, and even those who mentioned other positives did so after they had talked about getting to know each other. Several did however comment mainly on the content and structure of the assignment:

I enjoyed researching the person and making connections to the curriculum. Trying to link a person to a location was interesting and the fact that you had to travel to a location made the project more interactive.

I enjoyed working on the First Year Challenge and being given the opportunity to be able to choose the particular focus of the task given the thinker to which we were assigned. We could choose to work on something that we were interested in, as opposed to something we could feel we were obliged to do.

The main drawback that most students highlighted was the possibility of free riding:

As with any group project, some people do nothing but it is to be expected.

... It was difficult to make sure everyone attended meetings and work on the project. So there was not ... equal effort from everyone in the group and I think this was because the project didn't count towards our final grade and we weren't told what the prize for this project was.

A few people also commented on the fact that the assignment could have been completed

with a tighter deadline, and it might, in fact, have been easier to keep group members engaged in a shorter timeframe.

I think the deadline could've been earlier - the entire could've been done in 2 weeks. We just left it to the final few days.

The project itself doesn't take too long to finish, but because you gave us so long to do it and there isn't even a real reward/consequence, most people didn't bother. Having a time pressured deadline and a more tangible reward would have been better.

Overall student feedback signals that the project was positively received and that students understood the aims of the project, but there may be scope for some mostly minor improvements.

C. Other Outcomes

One of the main aims of the FYC was to encourage students to engage in peer learning and to inspire them about economics through independent research. In this section, we provide some evidence about these outcomes. To address the effects on collaborative learning, we asked the graduate students ("tutors") who taught the tutorial classes about the atmosphere in these classes. As mentioned earlier, along with weekly lectures in the large lecture theatres, students had weekly classes in groups of 15 or so to supplement the learning in the lectures. The tutors reported quite a diverse set of experiences, with some classes having so much student participation that the tutor had trouble keeping the discussions within the allotted one-hour slot, while in others, students did not participate without quite a bit of nudging. Much of this variation probably has to do with exogenous factors such as the setup of the room (some were free seating, or seats around a table, while others were in fixed rows), the time of the tutorial (the earliest started at nine in the morning, while the last ones were at five in the evening). Tutors did however report that across the board, students seemed willing to talk to each other at least in small groups and that this was a big difference from previous years where many students would spend the entire term in the same small group of students without knowing most people's names or ever having spoken to them.

The last set of outcomes relates to how much students were inspired about economics as a result of the FYC. As students in this context choose their majors before they start the university and the vast majority complete their degree in the allotted three years, there is little variation in commitment to the degree based on whether students participated in the FYC or not. Instead, we looked at the proportion of optional modules a student took in the Economics department. As the joint degree programs are set up slightly differently, we focus on only those in the Economics program here. In the first two years of the program, most modules are required Economics courses. However, students do get the opportunity to take two courses in any department, subject to pre-requisites. In the past, it has been common among students to take these optional courses in the accounting or finance departments in the belief that these would help them get a job upon graduation. We found that in the 2014-15 cohort, students were almost twice as likely to choose an optional course within the Economics department. However, we also found that the 2014-15 cohort scored about six percentage points lower on the overall grade for the introductory economics module compared to the previous cohort.

A caveat to interpreting these results in a casual way, apart from the usual reservations, is that the text used with the FYC project was introduced in 2014-15, and is very different from a standard introductory text. As such, new and more interactive teaching methods were also introduced to complement the text, and in fact, the FYC was part of this raft of innovative teaching and learning activities. Therefore, it is hard to separate out the effects of this new curriculum or these new methods from those of the FYC by itself.

5. Adapting the FYC in Response to Feedback

In 2015-16, we adapted the structure of the FYC to reflect some of the issues we had identified with the previous year's iteration. The main aspects changed were the duration of the assignment, the breadth of the theme, some locations, and instructions about citation and referencing. We also tried a couple of ways to address the free-ridership problem and to incentivize effort. The incentive structure remained the same, though students were told at the start that winners would get Amazon vouchers. In this section, we discuss these changes and their effects.

As students clearly felt that the work of the FYC could be done in a shorter period of time and that this immediacy may address free-riding issues, we tightened the deadline to two weeks after students arrived at the university in September. There were no problems with late submissions or complaints about the tighter deadline in general, so this change does not seem to have created any obstacles. We stayed with the theme of the first unit of the introductory text, "Capitalism, growth and inequality," but dropped the requirement of a link with a thinker. Thus, the specific link to "London – a city of social thinkers and commentators" was deleted, even though many locations could still be linked to a thinker. This helped in two ways. First, it enabled us to use a wider range of locations, including a post office, a primary school, the offices of the Guardian newspaper, a public park, and the university hospital. Second, it pushed students to focus on issues and analysis, rather than a description of a person's life that could be used as a fall back. We kept several of the thinker-related locations, e.g., Charles Dickens's house, but found that even the submissions assigned to those locations did not focus on purely historical or biographical detail.

Because citation and referencing had been a main concern in the 2014-15 round of the FYC, we spent the summer working with a student assistant and the university's legal team to draw up a referencing guide for the project. This gave examples of how to cite properly, and also legal constraints (e.g., using YouTube clips in a submission). Students were also asked to sign a statement saying that they had read the university's policy on plagiarism and agreed to abide by it. Finally, when submitting their assignments, students were asked to submit a separate document listing all of their references. We found that almost all groups completed these requirements in a satisfactory manner. However, the drawback was that the submissions from this year were somewhat less creative, perhaps because students had chosen not to use sources where there was any doubt about how to reference properly or about the legal consequences. For example, there were few YouTube clips of commercial movies used this time around probably for legal reasons, but students also did not use clips from sources such as the library's stock of the same movies, which would have been legal to use.

Because free-ridership issues had been mentioned in much of the student feedback, we devised a few additional features of the assignment to address this. First, we asked students to submit several files as a part of their final assignment. In addition to the video or podcast file, they had to submit a list of references and an anti-plagiarism statement as noted above. This statement had to be signed by each member of the group, which we hoped would make sure that each member had to interact at least a bit with the rest of the group and that this social interaction would reduce free-ridership. We also asked that each group submit a photo of themselves at their assigned location. Again, the aim of this was to make sure that there was some physical interaction between group members that might help to incentivize effort. We found that a few groups were unable to get all members together for the photo and resorted to photo-shopping them in; however, for the most part, even these groups showed that most members had contributed in their project submission.

Finally, to highlight the importance of the project and to incentivize effort, we started this year's lectures by showing a short video mashup of some top-ranked contributions from the previous year's FYC. This was presented to this year's students as a movie about capitalism, growth and inequality. Once they had watched the movie and answered a few questions on it, we revealed its source and highlighted this as an example of how in this course, they would get an opportunity to create their own learning materials, and materials to be used by future cohorts of students. In this way, the FYC assignment was very different from other course assignments that may have little value beyond the assessment process. We found that students referred to this video in subsequent discussions about the FYC and used the previous year's submissions as a baseline with which to compare their own submissions.

The average quality of output in this year's FYC was probably about the same as last year's, though there was a slight fall in creativity and innovativeness. However, the distribution was narrower and there were far fewer contributions that were very weak. The weakest contributions were the one which met in front of the BBC and submitted a video about the history and financing of the BBC, and the one which was assigned to the main hospital and submitted a podcast where one student argued that private healthcare provision was more efficient than public provision without presenting much evidence. The best submissions added a twist to the theme. One of the winners met at Tavistock Square, which was among other things the site of the 2005 London bombings and made a movie investigating the role of inequality in promoting terrorism. Our original idea had been for them to focus on the British Medical Association, whose headquarters is also at Tavistock Square. The other winner was allocated to Bedford Square that we thought was a public park, one of many small green spaces scattered around central London. We had assumed that the group assigned to this location would focus their assignment on environmental issues or perhaps on house prices because Bedford Square is also in the middle of one of the most expensive areas of London. The group reported back that when they arrived, they discovered that the park was actually private property (and was padlocked). They used this opportunity to make a very perceptive movie about the limits of private property and its role in the history of capitalism and growth.

The patterns in terms of group makeup of this year's FYC were similar to last year. One of the winning groups was from the newly set up Politics, Philosophy and Economics (PPE) degree, while the other one was a mix of joint degree and economics students. Of the runners-up, one group was from the PPE degree, while the other two were from economics. There were eight other submissions that were shortlisted, of whom six groups were from economics while the other two were from PPE and joint degrees. The gender effect was more mixed – the winning groups had slightly fewer women than average, while the shortlisted groups had slightly more women than average. The proportion of overseas students was lower than average in the winning groups, which was expected because non-economics students were heavily represented in these groups and are less likely to be from overseas. But of the economics groups that made it to the shortlist, the proportion of overseas students was slightly higher than the average.

At the end of the first term when the FYC was completed, we again surveyed the graduate students about the dynamic within the class. There was quite a bit of variability across tutorial groups like last year, but it seems clear that the majority of the sub-groups that ended up in the shortlisted top 15 of the FYC were from tutorial groups that have a high level of interactivity in class and appear to have good camaraderie between group members. However, across all the tutorial groups, tutors reported that the willingness to participate in group activities or to interact with peers in pairs or threes seemed at least as high as last year, and greater than in previous years. The caveats about causality remain the same as in Section 4.C., but these patterns are consistent with the FYC enabling collaborative learning.

6. Adapting the FYC to Other Contexts

Because the structure of the FYC is fairly flexible and the theme fairly broad, we believe that it can be adapted easily to many contexts quite different from our original one. In this section, we suggest ways to do so. It is worthwhile noting that this project could potentially be applied to fields other than economics, as well as to higher levels of economics courses (such as field courses) or at the school level. The three main elements of the FYC that we think are essential are (1) the collaborative aspect which facilitates group work skills important at later stages in students' careers, (2) the multimedia format which encourages non-linear thinking, and (3) the starting point at an early stage of the term, before students are set in their ways of thinking about the subject or are too influenced by the lecturer's or the textbook's views. Keeping these elements in mind, we discuss below how the FYC can be adapted to different contexts

A. The Challenge in a Non-Metropolitan Context

The most obvious question is probably about how to find relevant locations in a setting that is not a global metropolis with a prominent place in the history of intellectual thought. If one sticks with the assigned text and the general theme of "Capitalism, growth and inequality," it is quite straightforward to extend it to a typical university campus. For example, possible locations could include the business school (the finance department could lend itself to a project on the role of global capital in the rise of the present economic system), the art department (students could look at the market for art in a capitalist system versus a pre-capitalist system) and the sports field (a potential question could address how the capitalist system has facilitated the rise of superstars and therefore inequality). Other departments like the medical school (especially the epidemiology department, useful in studying the role of the eradication of disease in the rise of capitalism), the sociology department (how other social sciences study inequality) or the English department (how the media or literature view inequality) are also excellent potential locations for FYC-style projects. In addition to this, locations like campus stores, banks, local schools, recreation grounds, and the post office can all be used as examples of institutions that play an important role in an economic system. For our context, we used a biological sciences building (conveniently named after Charles Darwin) as one of our locations. As noted earlier, the 2015-16 version of our FYC uses a local post office, a state school, a trade-union office and a chain grocery store as assigned locations.

B. The Challenge for Other More Standard Introductory Economics Courses

Applying this assignment to a standard introductory economics book is straightforward. Many "Introduction to Economics" textbooks start with a section or a chapter on "What is Economics?" This is an ideal topic for a project similar to ours, as it is both broad enough for students to define their project in their own way, but also closely linked to the curriculum. We found that, throughout the first year, many of our students struggled with the question of what was and wasn't economics. Those who had studied economics at school were quick to label some of our material as history or sociology or political science. This provided an ideal opportunity to reiterate two points – first, that economics is one among many social sciences, and second that what distinguishes economics from other social sciences are the methods used rather than the topics. A lecturer could easily use some of the university locations listed above to facilitate this project. Other locations might include a local shop, a large chain store, a government office, a non-profit organization, or a school.

C. The Challenge and Field Courses in Economics

We feel that this project works best for introducing a subject. The FYC could be easily adapted to an introduction to any particular field. For example, a course on labor economics could

ask students to do the assignment on different kinds of labor markets around them. These could include a standard job market, perhaps with an assigned location at a local recruiting center or a newspaper office, a spot labor market (e.g., for seasonal fruit pickers), a public sector labor market with an assigned location at a municipal office, and so on. Similarly, a course on international trade could assign an FYC assignment based on the theme of globalization with locations including a multinational company's offices, an immigrant cultural center, a local grocery store which stocks products from around the world, as well as university departments such as finance, international relations or politics. The basic structure of this assignment could also possibly be used as a starting point for a more advanced research project (e.g., the effects and reactions to a recent trade agreement). Some of our students surveyed public opinion on inequality and the welfare state; this would be an excellent way to do a FYC-style project about any applied economics topic.

D. The Challenge Outside Economics

From the discussion above, it is clear that it is a fairly straightforward task to extend the FYC to subjects other than economics. An engineering project for example, could be based on a set of buildings and their role in the history or future of engineering. An English literature project could be based on locations that have a link to different authors or different styles of literature. A political science project could be based on different institutions such as a government department, a local council, public roadworks and so on. In some sense, the innovativeness of the FYC is in the fact that different forms of assessment are used less in economics compared to other fields, so this assignment should actually be quite familiar to those outside economics.

E. The Three Key Elements of the Challenge

We feel that there are three essential elements of the FYC, around which the assignment can be molded depending on the context. The first is that the research is done in groups. This is essential to the *raison d'être* of the assignment – it encourages peer conversations and learning in an ever more connected world – and it eases novices into academic research. The second essential element is the requirement for a multimedia output. We feel that allowing students to do a traditional written essay or a slide presentation restricts the scope of the project. These are formats that they will typically use in the rest of the course and may have been using in the past. The FYC enables students to think outside the box not just in terms of content but also in terms of formats. Hence, it encourages creativity. This includes using non-text based sources or using text-based sources in a different way. We believe that allowing a traditional format for the research output would have a negative knock-on effect on the content as well. Finally, we feel that starting the project (but not necessarily completing it) at the very beginning of a course enables students to think outside the box and not try to map their research onto the course texts or lectures exactly. The course leader may ask students to reflect on (or go back and edit) their research output once the relevant topics have been covered in class. As long as the basic project begins at the start of the course, this still allows students to approach the topic with an open mind. Within these constraints, we think that the FYC can be adapted to many different contexts, but it may work best as an introduction to a field.

7. Conclusion

The FYC project was conceived as a way to introduce students to economics through research rather than lectures and textbooks, as is usually done. It was also meant to facilitate peer learning and collaborative work. Overall, we felt that the quality of the FYC output produced by our students was quite good and that the students had learned both new material and so-

called “soft” skills from the assignment. We also felt that the group atmosphere in the tutorials throughout the rest of the academic year was enhanced as a result of the FYC. As such, we think that this assignment could be adapted to teaching economics in other contexts, as well as to teaching in other fields (especially introductory material). However, it was clear that the group aspect of the assignment was quite tricky, as free-ridership was a common complaint in student feedback. In section 5 above, we described how tweaking the structure of the FYC has helped in alleviating some of these problems in its original setting. Shortening the timeframe as suggested by students seemed to work well, and more direction in terms of how to submit the assignment, what to submit, and how to reference properly also helped improve the base quality of the submissions.

In other group projects, we have found that having a designated group leader (selected either by the lecturer or organically by the group) helps mitigate the free-riding problem, so this might be another way to address this issue. Another possible solution is to break down the assignment into smaller tasks that could be completed by selected individuals. Of course, this risks the group activity becoming just a collection of individual activities. In several other instances we noticed the importance of training students how to effectively work in groups. Letting students discuss the assignment during contact hours may help to draw attention to the work being done and encourage potential free-riders to take responsibility. This kind of directed discussion (facilitated by the tutor or the lecturer) could also help address the previous point; that is, it could help in creating synergies between the individually assigned tasks so that the whole of the group project ends up being more than just the sum of the individual parts. However, this approach implies a strain on limited contact hours, which is why we did not do this for this year’s FYC. One way around this might be to use the FYC output (e.g. of previous years) to cover the introductory material in the lecture. For our context, a large chunk of the chapter on which the FYC was based could be discussed in the lecture using past year’s media contributions. As described in Section 5, we started this year’s lectures using last year’s FYC output and found that students did indeed pay more attention to the project as a result.

Finally, students noted that the assignment’s link to the curriculum was not strong enough. This is perhaps a comment on how the students perceived the text – which the first chapter does not link very closely to the rest of the book. It may also be a reflection of the fact that students have a fairly rigid idea about what constitutes economics. Several students mentioned that it was interesting to learn about the history of economics at the start of the year when they were not as consumed by their curricular work as they might otherwise be. Others complained that their assigned thinker did not have much to do with economics. Using previous years’ FYC output to discuss the chapter might be a good way of addressing this problem as well. A reflective exercise (e.g., asking students to write a sentence about how their project relates to the textbook definition of economics) once at the start of the project and again after completion may also help to make this link. Such an exercise is also a perfect opportunity to reiterate the breadth of study that economics spans.

In conclusion, we think that the FYC is a very good way to highlight the importance of research-based university education and to encourage independent thinking in a large cohort. This may be used as a prelude to more involved research in term papers or theses, but it could also be used in a context where extended research projects are not possible. The FYC is also a way to model academic collaboration among students, and as such, acts as an introduction to a skill that is highly valued in many different kinds of work contexts.

References

- Anderson, E. & Schiano, B. (2014). *Teaching with cases: A practical guide*. Boston, Massachusetts: Harvard Business Press.
- Bauer, K. W. & Bennett, J. S. (2003). Alumni perceptions used to assess undergraduate research experience. *The Journal of Higher Education*, 74, 210-223.
- Greene, B. (1997). Verbal abilities, gender, and the introductory economics course: A new look at an old assumption. *Journal of Economic Education*, 28, 13-30.
- Gregerman, S. R., Lerner, J. S., von Hippel, W., Jonides, J., & Nagda, B. A. (1998). Undergraduate student-faculty research partnerships affect student retention. *The Review of Higher Education*, 22, 55-72.
- Harvey, L. (2000). New realities: The relationship between higher education and employment. *Tertiary Education & Management*, 6, 3-17.
- Healey, M., & Jenkins, A. (2009). *Developing undergraduate research and inquiry*. York: Higher Education Academy.
- Jackson, N., & Ward, T. (2012). Curiosity based learning impact study in 1st year electronics undergraduates. Paper presented at the 2012 International Conference on Information Technology Based Higher Education and Training (ITHET), Istanbul, Turkey.
- Michaelsen, L. K., Sweet, M., & Parmelee, D. X. (Eds.). (2011). *Team-based learning: Small group learning's next big step: New directions for teaching and learning*, San Francisco, CA: John Wiley & Sons.
- Roessingh, H., & Chambers, W. (2011). Project-based learning and pedagogy in teacher preparation: Staking out the theoretical mid-ground. *International Journal of Teaching and Learning in Higher Education*, 23, 60-71.
- Russell, S. H., Hancock, M. P., & McCullough, J. (2007). Benefits of undergraduate research experiences. *Science*, 27, 548-549.
- Savery, J. (2015). Overview of problem-based learning: Definitions and distinctions. In A. Walker, H. Leary, C. E. Hmelo-Silver & P. A. Ertmer (Eds.) *Essential readings in problem-based learning*. West Lafayette, Indiana: Purdue University Press.
- Shaw, G., & Marlow, N. (1999). The role of student learning styles, gender, attitudes and perceptions on information and communication technology assisted learning. *Computers and Education*, 33, 223-234.
- Springer, L., Stanne, M. E., & Donovan, D. D. (1999). Effects of small-group learning on undergraduates in science, mathematics, engineering, and technology: A meta-analysis. *Review of Educational Research*, 69, 21-51.

Appendix – The First Year Challenge Notes

FIRST YEAR CHALLENGE

Dear First-Year-Student,

Welcome to XXX and congratulations on your choice to study economics with us. We want you to dive into this exciting subject straight away and have prepared a little group challenge for you. So let's not waste any time and get started!

You have each been assigned to a PERSONAL TUTOR GROUP (5-10 students per group). A group meeting with your personal tutor has already been scheduled for induction week (You should have received this information via email - make sure you come to your group meetings, as they are compulsory!). You have also already been assigned to **tutorial group for your ECONXXX** module and mostly, two personal tutor groups form one EconXXX tutorial group. Don't worry if you do not know your tutorial group yet, for the first year challenge it is enough **to know the name of your personal tutor**.

The first year challenge is a group project which forms part of your Introduction to Economics module (EconXXX). We ask students to **collaborate and create TWO short videos or podcasts** within their ECONXXX tutorial group. You should start the project during induction week and continue working on it during the first four weeks of term 1. You will upload your final contribution just before reading week onto the Econ1001 Moodle Page. The winning group will then be announced in one of your Econ1001 lectures. The best contributions will also be featured in an economics undergraduate conference in April 2015.

Project description:

Students will collaborate in their ECONXXX tutorial groups to create TWO short videos or podcasts. This media contributions should be no longer than 3 minutes and focus on a **topic, which relates to** this year's first year challenge theme, to your group meeting point as well as to any part of Unit 1 of your 1001 textbook.

You can access this **FREE E-BOOK** by registering on this website: www.core-econ.org. The e-book is on *the Inkling platform* and can only be accessed using Google Chrome. Best to register straight away! This is your main EconXXX course book and you will need access to it from induction week onwards.

Students from one tutorial group should **form two roughly equal sized sub-groups**. The sub-groups work on the same topic but should focus on a slightly different angle. It is up to you if both groups create a video or a podcast of if your group output is one video and one podcast. How you split your group is up to you!

This year's theme is: *"London – A city of social commentators and thinkers"*

Group Meeting Point: On Monday 22 September (during induction week) you will meet up with the other members of your Tutorial Group. We have assigned a unique meeting point to each group. All meeting points are listed at the end of this document and are linked to the **name of your personal tutor**. Check who your personal tutor is and find out where you will meet the other group members.

You should **go to your meeting point** straight after your 'First Year Induction Session (which ends at around 5pm). So we would expect all group members to be at their meeting point by 5:30pm. Stay at your meeting point till after 5:30pm to make sure you meet all your group

members. Note: Your personal tutor will NOT be at the meeting point, but you will meet her or him during induction week

If you are a **joint degree or BASC student**, you will not have been to the Economics Induction Session, but you should also make sure you meet with your fellow group members on Monday 22 September at 5:30pm at your assigned meeting point.

Once you are at your meeting point look out for other students from your group. Each group has about 10-15 students and usually comprises students from **two** personal tutors. The group will be working together on the project, so you should exchange names, emails and phone numbers to make it easy to contact each other. Also make a note which students are assigned to which personal tutor and bring a list to your personal tutor meeting. This way you can identify whoever was missing on the 22nd September. The whole group will meet again in your first week of lectures for your first ECONXXX tutorial. Check your timetable where and when you meet. Use the time at your meeting point to brainstorm for a good topic... You may even want to continue your discussion over a cup of tea or coffee once all group members have arrived?

Content of your media contribution: Your meeting point has a connection to a social scientist or thinker with a link to London. We have provided you with a list of people further down in this document. Choose a person, which you think has a connection to your meeting point. Sometimes the connection may be obvious, but sometimes you have to do some additional research. It could also be that more than one thinker fits to your meeting point. In this case it is up to you to choose. Your video or podcast should relate to this person and his/her ideas as well as to some aspects or the overall theme of unit 1 of your EconXXX textbook.

Be creative. It's up to your group to find an interesting topic, which combines all three aspects (thinker, meeting point, unit 1 of your textbook). Brainstorm a couple of possibilities and decide. Also decide what kind of media file your group would like to create (a video of **max 3 minutes** in one of the standard video files such as .mp4, .avi, .mov, .mpg, .rm or a podcast of **max 3 minutes** in .mp3 format.). **Try to keep your media file below 30MB.**

Decide on a strategy on how and when to work on the project during the week and when to meet up again during induction week and over the course of the term. There are around 15 students in your group and you should make sure that everyone contributes to the project. We would expect some students to be more involved with the technical side of production, others more with the research part of the task, others with the presentation.

Need help with creating media files? This is a basic tutorial: XXX

Also, distribute the tasks wisely. Some of you may be experienced with creating media files, others will prefer to work on a research task. It's up to you to distribute these tasks as you see fit.

Upload your media contribution on your ECONXXX Moodle Page:

Your Moodle EconXXX course page includes a link to upload your media contribution. The **deadline** for uploading your file is WEDNESDAY 29 OCTOBER 2014 at 6pm. You may not be able to log onto this page yet but you will gain access once registered during induction week.

Do you have more questions:

Contact your EconXXX TA or send an email to either XXXX or XXXX

Timetable for the project

Induction week:

- Meet your tutorial group on Monday during induction week at your assigned meeting point.
- Meet your tutorial group AND your personal tutor during induction week
- Start discussing the project and distribute tasks to individual team members.
- Read chapter 1 of the textbook.

First week of term:

- Meet your tutorial group during the first week of term (check your timetable) for your first EconXXX tutorial.
- Organise further group meetings (this is your own responsibility!) to work on your project.

Week 2-4 of term:

- Meet with your tutorial group during these weeks to work on your project

Week 5 of term:

- Upload your group project on Moodle. Deadline is Wednesday 29 October XXXX at 6pm.

After reading week:

- Announcement of winning group.

London – A city of social commentators and thinkers

Please find below a list of noted social commentators who are linked with the themes explored in Unit 1 of the CORE text. Each of you will have also received an email indicating a location in central London. Please go to this location on Monday 22 September after your First Year Induction Session, where you will meet up with the rest of your group at around 5:30pm. Your location will have a link to at least one of the thinkers below. The group project involves identifying the thinker/s associated with your location and making a three minute video/podcast focusing on the thinker's contribution to the themes of capitalism, growth and inequality as explored in Unit 1 of your textbook.

Note that some locations might have connections to more than one person on this list, whilst others on this list might be linked to more than one location (Bloomsbury has been a hotbed of intellectual activity!). Your job is to make the most interesting video/podcast you can, given your location, so if there is a connection to more than one person, choose the person you think makes for the most interesting project!

Also note that some locations will have more obvious connections than others. If your location is not one of these, you should view this as an opportunity to be more creative and use all the resources at your disposal to make a connection between your location and someone on this list. If all else fails, remember that Google is your friend!

This is the list of thinkers:

- ❖ JM Keynes
- ❖ Karl Marx
- ❖ David Ricardo
- ❖ Jeremy Bentham
- ❖ Charles Dickens
- ❖ Charles Darwin
- ❖ Francis Galton
- ❖ Lionel Robbins
- ❖ Beatrice and Sidney Webb
- ❖ Francis Edgeworth
- ❖ Adam Smith
- ❖ MK Gandhi
- ❖ Francis Bacon
- ❖ Thomas Coram
- ❖ Emmeline Pankhurst
- ❖ RH Tawney and William Beveridge
- ❖ Karl Pearson
- ❖ JS Mill
- ❖ Florence Nightingale
- ❖ AC Pigou
- ❖ C Babbage
- ❖ WS Jevons
- ❖ Giuseppe

Frequently Asked Questions

1. How do I find my group's meeting point?

Ans: The table on the last few pages of this document lay out the specifics of each group's meeting point with a **map** and a picture of the location. It might be useful to have a wireless-enabled device (smartphone, tablet etc.) with you in case you get lost.

2. Who else will be in my group?

Ans: The others in your groups will be first years just like yourself, and will have the same EconXXXX tutorial group for the coming year. You will meet them at the meeting point on Monday. This is a good opportunity to introduce yourselves (maybe over a cup of coffee!) and exchange **phone numbers or email addresses**, as you will need to work together over the next few weeks.

3. I couldn't find the rest of my group, what should I do?

Ans: Make sure you are at the right meeting point (each group has a unique meeting point). If you're at the right place, perhaps others are finding it tough to find. So wait for **15-20 minutes** at least, hopefully at least a couple of others will find it. If all else fails, you can liaise with the rest of your group when you meet your Personal Tutor later in the week.

4. What is the final output of the project?

Ans: A video or a podcast lasting no longer than 3 minutes. You can record this on your phone/laptop/tablet and on any software you choose, but it should be submitted in .mp4, .avi, .mov, .mpg, .rm or .mp3 (podcast) format. The final output does not have to be of professional quality – the **content** is more important!

5. How do I make a connection with my assigned location?

Ans: This is really up to you and your group. One idea might be to do something like the **Economists-in-Action** videos in the CORE online textbook.

6. How can I find out about the thinker associated with my assigned location?

Ans: Some locations will have an obvious connection with a specific thinker, but for others, you will have to do a bit of work. It might be handy to have a wireless-enabled device with you, so that you can do a quick bit of **research** to figure out who the most relevant thinker is and also a bit about their work.

7. So are we making a video about the life of this thinker?

Ans: No! The video/podcast should focus on how this thinker's work links to the themes explored in Unit 1 of the CORE online textbook. For example, if your thinker was Max Lorenz, the obvious connection to Unit 1 is the measurement of inequality. Your project could then focus on how Lorenz's work influenced the study of inequality and the link between capitalism, growth and inequality. Remember that this thinker's arguments may not necessarily be correct, so do try to be **critical** in your analysis

8. There is a lot of information about my thinker in the ECONXXX textbook. Do we need to find any more information?

Ans: Yes! This is your chance to do some research and come up with something new and interesting. You should connect your video to **specifics** of the text and/or the lecture, but try to show us how you can extend this. When you do your research, remember that Wikipedia can be a useful starting point, but as anyone and everyone can write or edit a Wikipedia entry, this is not always the best source to use. Also, note that XXX has a very strict policy on **plagiarism** ([LINK](#)) and a lack of proper acknowledgement will be penalized.

9. My assigned location is the British Museum, and 10 of the thinkers on the list are linked to it. What should I do?!

Ans: Which thinker do you think you can make the most interesting video on? Choose him or her! For example, if you were doing a project on Elizabethan drama and your thinker was Shakespeare, it might be hard to do something really new and interesting because everyone knows so much about Shakespeare already. But Christopher Marlowe is not quite so familiar and might make a more interesting subject. Of course, if you can unearth something **new and interesting** about Shakespeare and link it to your location and to the text, you should go for it!