

Developments in Economics Education Conference 2019

Assessment and skill diversification in economics: A first-year undergraduate experience of a group video project

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Motivation

- Scalability: the growth in student numbers gives rise to pedagogical challenges
 - At Surrey, 2015-16: 171; 2016-17: 213; 2017-18: 265
- Employability: need to complement subject-specific knowledge with broader skills
 - e.g. research skills, communication skills, time management, teamwork
- Conventional modes of assessment are costly to scale up and often poor in developing wider skills
- Wider concerns regarding poor student engagement and resistance to challenge
- Points to a need for greater diversity in assessment that is manageable for large cohorts, while stimulating student engagement and embedding diverse skills.

What we did

- We changed the coursework assessment design of a first-year, first term module: ECO1016 Contemporary Issues in Economics
 - Before 2017-18: Individual written essay (1,000 words)
 - Since 2017-18: Group video (3 minutes) with peer assessment
- Aims of the new assessment
 1. To stimulate student engagement with the discipline and with each other
 2. To enable students to develop broader skills
 3. To make assessment and feedback more manageable

Aims of the project

1. To study students' perceptions about their learning experience with the video group assessment; and
2. Examine whether, and to what extent, students value diversity of assessment methods

Structure of the talk

- Coursework design
- Methodology and data
- Analysis and results
- Improvements that followed
- Take away messages

Coursework design

- Video project with 30% weight (final examination 70%)
- **Week 2 – 3** : allocation of students to groups by module leaders based on class list; 45 groups of 5-6 students (own groupings in 2018/19; 48 groups of no more than 5)
- **Weeks 3 – 8**: groups select research topic (approved by the module leaders), support
- **Week 9**: submission of (a) 3 minute video, (b) reference list, (c) individual contribution form; format in line with RES video competition.
- **Week 11**: marks and feedback released
 - Group mark from module leaders: 75% (60% in 2018/19)
 - Individual contribution by students: 25% (40% in 2018/19)

Assessment criteria

- (a) Knowledge and understanding (20%) - capturing the core topic by presenting key facts and evidence of research;
- (b) Analysis (40%) - application of the economics tools to explain the issue of interest, but aimed at a broad audience;
- (c) Structure and presentation (30%) - coherence, clarity and appealing visualisations;
- (d) References (10%) used to inform the topic's discussion.

Examples of topics

- Who should pay for education in the UK?
- Government intervention in the market for cigarettes
- Is the sugar tax government intervention?
- The effect of Uber
- The housing crisis
- The UK productivity puzzle
- The effect of trade and protectionism on the US balance of payments
- US monetary policy following the 2008 recession

Planning and advice to students

- Topic choice made by students
- Guidance purposefully limited – but advice on free, video editing software provided
- Students left to work out and assign tasks on their own
- University IT support for video submission

Distribution of marks

	2017/18	2018/19
Mean	69.8	67.7
Median	70	67.5
Min	45	55
Max	93	87
SD	11.0	6.6
# of groups	45	48

	2017/18	2018/19
Fail	0	0
40-49%	1	0
50-59%	5	4
60-69%	16	25
70%+	15	19
80%+	8	2

How good were they?

- Have a [look!](#)

Methodology and data

- 2017/18 class size: 265 students, 45 groups
- Ethical approval obtained to collect information from three separate sources:
 1. Focus group discussion
 2. Group questionnaire
 3. Module evaluation questionnaire
- Marks and feedback released afterwards (with the exception of the “late” groups). Highly time efficient.

Focus groups

- Groups invited to select a representative for the session (week 11)
- 22 group representatives attended the session
- 5 focus groups (of 4 or 5 representatives) formed
- Structured discussion within focus groups
- Each representative completed a questionnaire
- Questionnaire sent to the remaining 23 groups (“late groups”), of which 15 responded within two weeks (response rate 65.2%)
- Overall “group” response rate: 82.2% (37 out of 45)

Group questionnaire

- Group questionnaire with four sections:
 - A:** how the group video assessment contributed to students' learning;
 - B:** questions to elicit preferences on different assessment methods and perceptions on skills development;
 - C:** rates the group video assessment as a means of developing three skills (communication, team work, engagement);
 - D:** positive aspects of the video assessment and suggestions for improvements

Quantitative answers: 10-point or Likert 5-point scale

Module evaluation questionnaire

Three questions added to the module evaluation questionnaire (MEQ);
71 students responded

- A. *“The video assessment has positively contributed to my learning in this module”.*
- B. *“The video assessment was a stimulating and effective way for me to demonstrate my understanding of economics, as compared to other forms of assessments (e.g. multiple choice questions, essays and exercises)”.*
- C. *“The video assessment has helped me develop my ability to communicate economics ideas”.*

Sample

Table 1: Summary of students' participation.

Survey	Sample size	Time
Focus groups	22 groups	11.00am-12.00pm, lecture in week 11
Late groups	15 groups	Within two weeks after lecture in week 11
MEQs	71 students	10.30am-11.00am, lecture week 11

Analysis and results

Table 2: Video assessment contribution to students' learning experience: overall perception.

	Mean	SD	Min	Max
Focus group	6.0	1.414	5	8
Late groups	6.5	1.407	4	8

Note: Experience rated from 0 (worst experience) to 10 (best experience).

Analysis and results

Table 3: Group work and video assessment contribution to the development of students' skills.

	Focus groups				Late groups			
	Mean	SD	Min	Max	Mean	SD	Min	Max
Communicate economics	6.8	1.304	5	8	7.2	1.578	3	10
Teamwork	7.2	1.789	5	9	7.6	1.737	4	10
Engage with other students	6.8	1.483	5	9	8.4	1.499	5	10

Note: Experience rated from 0 (worst experience) to 10 (best experience).

Analysis and results

“I prefer the School of Economics to use a variety of methods to assess my learning rather than using one or two methods”

- Focus groups: 80% of the groups agree (rest ‘neutral’)
- Late groups: 73% of the groups agree (rest ‘neutral’)

Analysis and results

Table 4: Group video assessment in comparison with other forms of assessment: students' ranking (mean values).

	Criteria	MCQs	Essay	Exercises	Group written project	Group video project
Focus groups	Easy	1.2	3.6	2.2	4.4	4.2
	Challenging	4.8	2.8	3.4	1.4	2.2
	Engaging	4.4	2.4	3.0	2.4	1.6
Late groups	Easy	1.4	3.8	2.6	3.9	3.1
	Challenging	4.1	2.1	2.9	2.6	3.1
	Engaging	3.4	4.1	2.9	2.4	1.8

Note: Students' ranked from most preferred (1) to the least preferred (5).

Module evaluation questionnaire

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Analysis and results

Table 5: MEQ-based video evaluation.

Question	Negative	Neutral	Positive
A	24%	38%	38%
B	41%	20%	39%
C	23%	32%	45%

Note: Negative is defined as disagree or strongly disagree and positive as agree or strongly agree.

Focus group discussion

Recurring themes:

- Development of communication and organisation skills, creativity
- Importance of time management, role assignment, making a schedule of meetings, allocating tasks; most groups decided on a leader (of their own accord)
- Considerable coordination costs to be overcome; harder work than conventional assessments; free-riding issues
- Few realised until directly asked that they had developed research skills

Take away messages...

- A group video project can effectively tackle the scalability problem and develop an array of skills
- Students reported a preference for diversity in assessment methods; found the project a positive and engaging experience
- Skills developed besides knowledge acquisition:(a) teamwork, (b) communicating knowledge to a non-specialist audience
- Yet challenging due to high coordination costs; some free-riding
- Far reduced marking burden, but greater investment in student support through the term (though still relatively minimal)

Thank you for your attention!

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