

Student Outcome Effects of Nudged Engagement

Will Moindrot (Centre for Innovation in Education, University of Liverpool)

Jennifer Rose (Alliance Manchester Business School, University of Manchester)

Paul Middleditch (School of Social Sciences, University of Manchester)

Simon Rudkin (School of Social Sciences, University of Manchester)

Nudged Engagement

Nudging is relatively new in the behavioural sciences, but is becoming understood as *a method of changing behaviours by changing the environment*; Hadit (2001), rather than appealing to/relying on rationality.

The use of this theory in terms of decision making in education is still emerging. Weijers, Koning and Paas (2020) categorize use of this theory in education in terms of *transparent and non-transparent nudges*.



“When do we get the solutions?”

We aim to create a teaching environment that discourages ‘surface learning’

- **Learning focussed solely on the exam;**
- **or learning backwards from sample exam sheets**

Could nudged engagement be an effective technique for shaping learner engagement with explicit enforcement/reward being avoided?

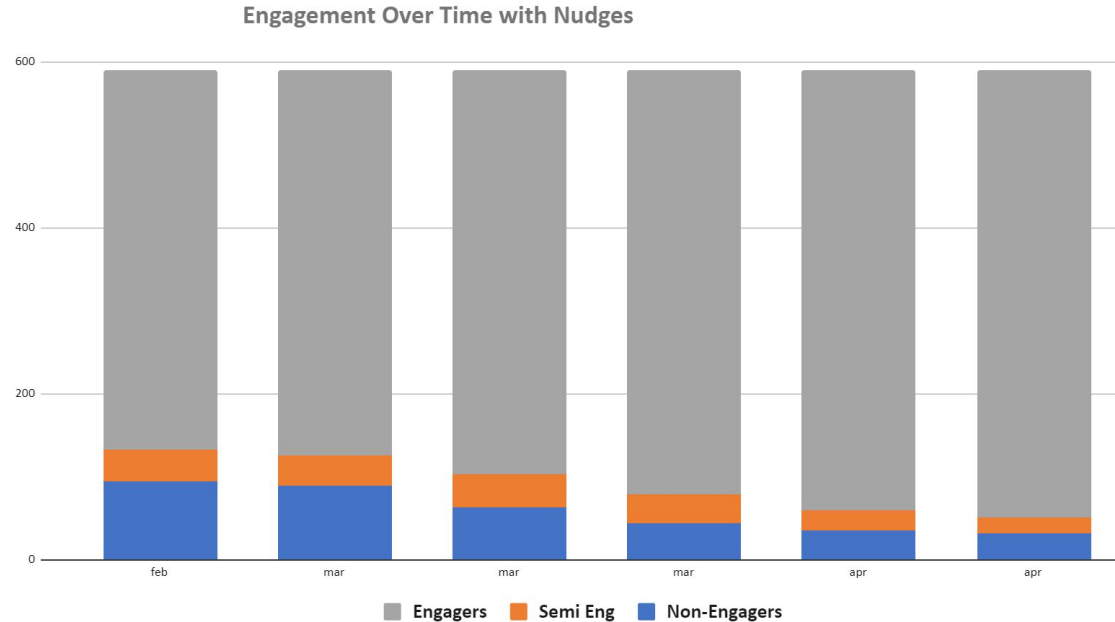
The Project 2020-21

- Course: Macroeconomics 1
- Type: Non Economics Degrees ('Service teaching')
- Period Semester 2: Academic Year 2020/21
- Number: 589 Students (Maths, Languages, Physics, AMBS, Politics)
- Nudges: Reminders (York et al 2019); Weekly Quizzes (Barasz et al 2017);
Linear Structure with Incremental Progression
- Future: Up for discussion - Mid-term exam conditional on engagement.

Early Data from ECON10252

22/02/21 to 14/04/21

- Engagement has increased over time and after nudging interventions
- Non engagers on a service teaching course decreased from 22% to 8% *tbc
- Not shown in data: Unexploited period of engagement before the course started (4 weeks!)



Outline of Approach

Course Structure

Introductory 3 question test on course outline unlocks resources such as weekly videos of course meetings and lecture quizzes.
Engagement with lecture quizzes in turn unlocks sample material for mid-term summative assessment.
Provides linear structure.

Reminders

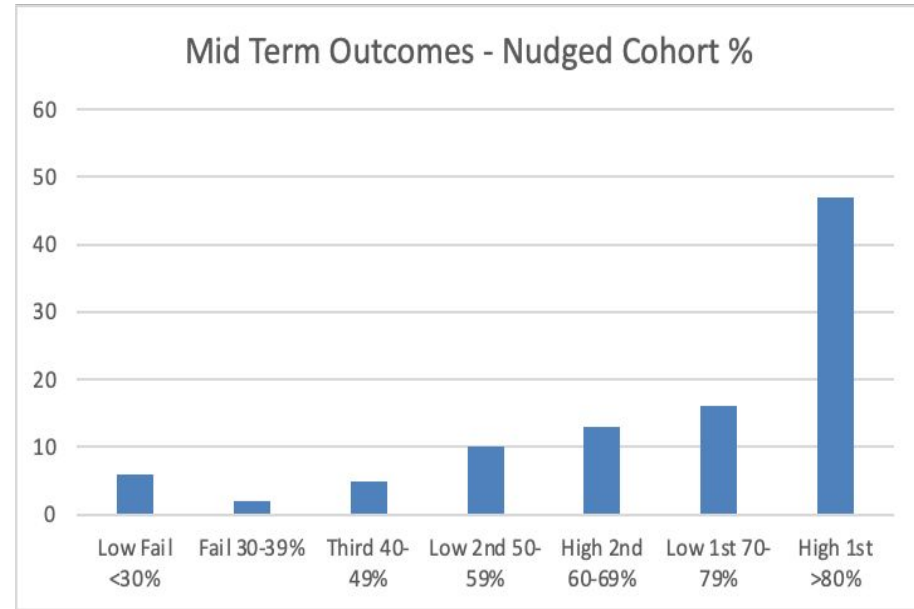
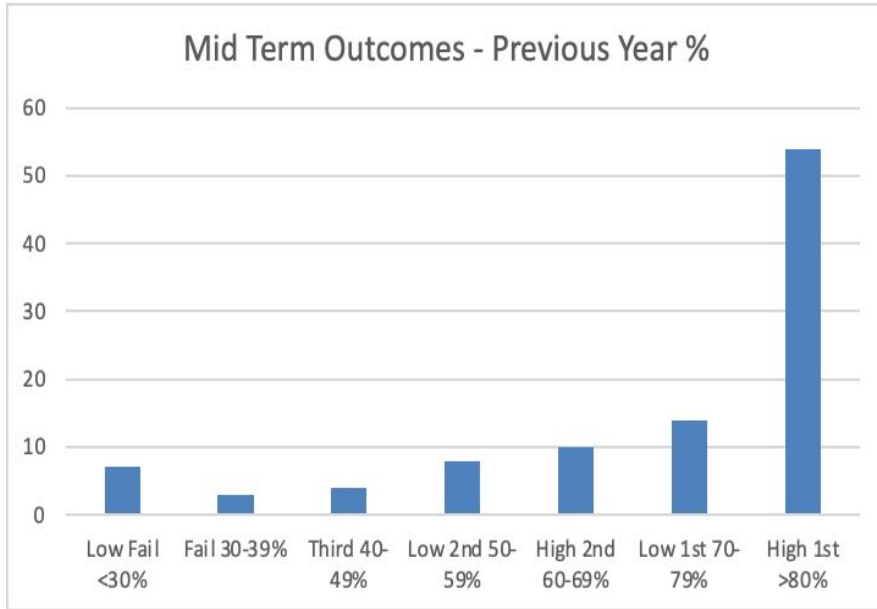
Sent to non engagers highlighting the benefits of completing the introductory test; messages were not personalised (yet).

Lecture Quizzes

Lecture quizzes provided after each lecture, testing advanced knowledge for each week, with automatic feedback indicating the source of material needed for further revision.

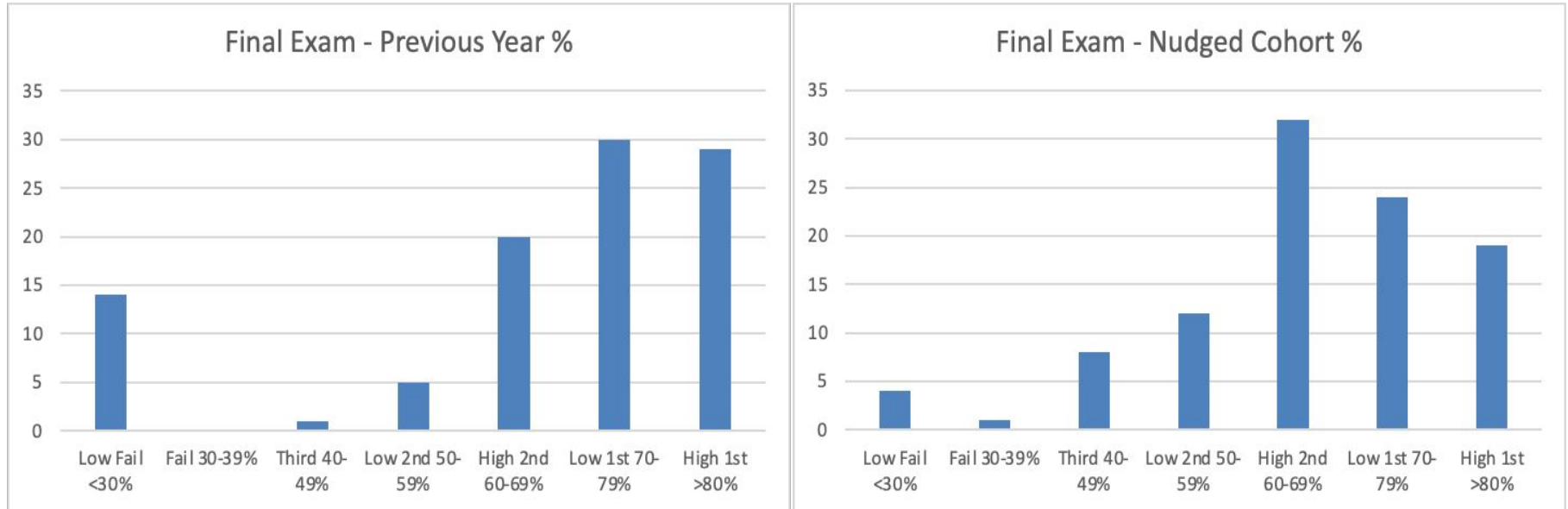
Learning Outcomes Comparison with Previous Year

Less winners and less losers as distribution flattens from 2019 - 2020



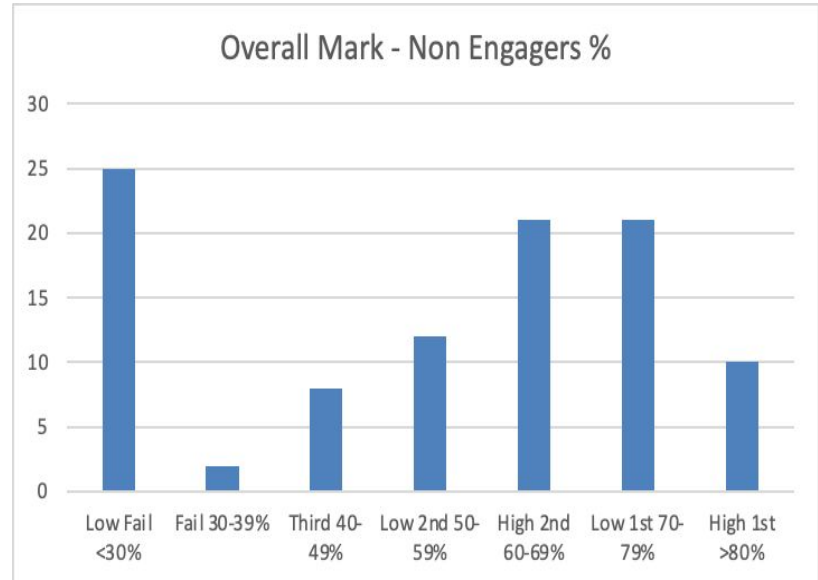
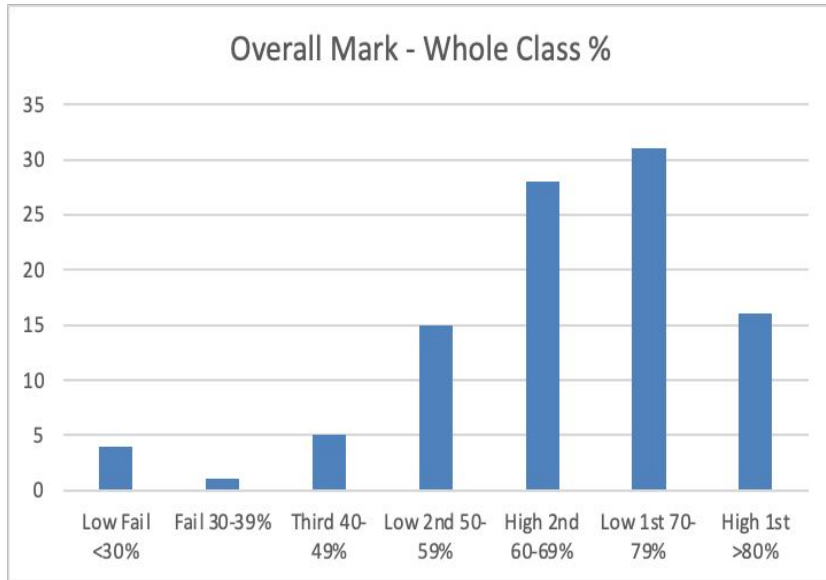
Learning Outcomes Comparison with Previous Year

Less winners and less losers as distribution flattens from 2019 - 2020



Learning Outcomes - Engagers v Whole Class

Non engagers lose across the whole distribution: failures jump from 5 to 27%



Summing Up

We have introduced a number of changes to a 1st year course, aimed at increasing student interactions, during a period where engagement has become more important than ever.

Our data suggests that we have been successful to some extent, though it has not been possible to control for other effects as part of our research, and so we must be careful about the conclusions drawn.

Other benefits have emerged from our project, coming from the students increased awareness of the course outline and assessment arrangements earlier than usual. We are awaiting OEQ data.