# Enhancing employability through authentic assessment: A Consulting in Intermediate Microeconomics

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# These Are The Skills **Bosses Say New College Grads Do Not Have**



Karsten Strauss Former Staff Franchises

#### TWEET THIS



60% of managers claim the new graduates they see taking jobs within their organizations do not have the critical thinking and problem solving skills

UK news V World news V Royals V Health Defence Science Education V Invest

♠ > Education

#### A third of employers are unhappy with graduates' attitude to work













of building material (and cost).

#### Building the intuition.

Example: Maximize the function  $f(x, y, z) := x^2 + 2y - z^2$  subject to the constraints:

$$g_1(x, y, z) := 2x - y = 0;$$
  $g_2(x, y, z) := y + z = 0.$ 

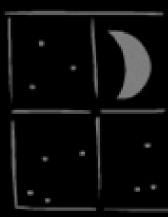
We form an 
$$L_x = 2x - 1$$
  
 $L_y = 2 + 1$   
 $L_z = -2z$ 





Essays are great to "bs" your way to 2.1







# A new Intermediate micro assessment (c. 300 students, 2<sup>nd</sup> year undergrad)

- Challenge: Design an assessment that will....
  - Teach students employability skills
    - Communication
    - Business writing
    - Commercial awareness
    - Critical thinking
    - How to use modelling to solve real world problems
    - Ensure they are aware of the skills they've learnt
  - The usual goals e.g.
    - Engage students
    - Learn micro theory content
    - Assess students' learning
- (An essay does poorly, in Intermediate Micro, on most accounts!)

# An authentic assessment: The Consulting Report

## • Brief:

"You work for an economics consulting firm. The firm has a client who is interested in the behaviour of decision-maker X. Decision maker X faces uncertainty and is potentially affected by Brexit. Write a report advising your client."

- An example of Authentic Assessment (e.g. Wiggins 1990)
  - Students do something more "realistic" or intellectually "worthy" than standard assessments
- Fook and Sidhu (2010): Such assessments are "for learning" rather than "of learning". A lot of active learning.

# Implementation: Resources I gave students

#### 1. A suggested "to-do" list

- Write a model, then analyse it, and only then do you write it up
- Must be written up in the style of a consulting report.
- Including "to-do"s only if you're going for the highest marks

### 2. Hints/common errors, for example

- If you can't solve your algebraic model, put some numbers in
- If you can't find the value of a parameter, guesstimate
- Try a binary action space if you've struggled with a continuous action space

#### 3. Assessment criteria

- The kind of things a "good pass" would do (e.g. some attempt at a comparative static)
- The kind of things a "high pass" would do (e.g. some attempt at checking the robustness of a result)

# Implementation: Resources I gave students

- 4. A complete example report: "Driving over Uber"
- 5. A padlet where students discussed online live on screen during a lecture the pros and cons of the example report
- 6. A workshop where I created very simple models that would begin to satisfy the brief
- 7. Office hours
- 8. A survey where they could use to give me feedback, but also vent/congratulate themselves etc

# What worked well...

- Students were extremely engaged
  - Queues outside my own and my 6 seminar leaders' doors
  - Working for weeks on end as they picked what they were interested in
- Students learned more economics
  - I did not sacrifice on formalism. In fact, there was more micro theory in this assignment than an essay.
  - They learned EUT much better than an essay on the topic, but also more important things
  - Appreciating the value of a comparative static
  - Understanding how to infer from model to real world
  - Seeing the difference small modelling choices can make (e.g. discrete versus continuous)
- Instilling confidence
  - Theoretical modelling is hard. They developed the confidence to try, and improve, and try again.
- Students spotted employability skills they developed
  - Communication: Writing to flag importance, clear & simple
  - Commercial awareness: Understanding clients' interests
  - Careers: Some started thinking about, researching particular industries they wanted to work in

# What needs improvement...

#### Time investments by me

- Start up time costs to design such an assessment
- Students need a lot of support at critical phases in modelling
- "Fire fighting" costs: Given the open ended nature of the coursework, modelling choices and pitfalls can occur that you have to fix during the course.

#### Expectations management

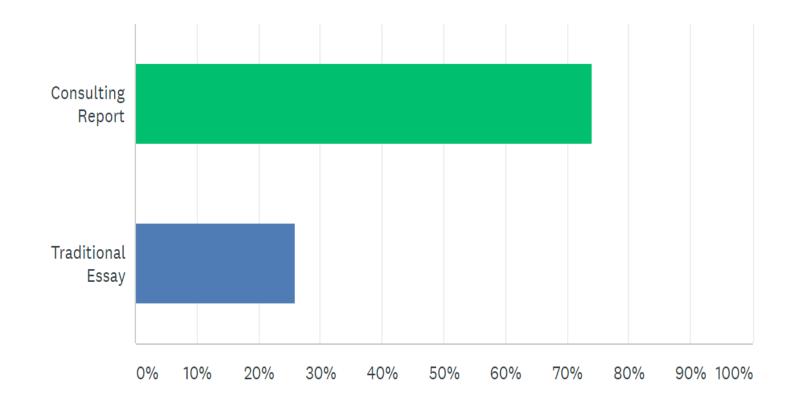
- Important to ask students (politely) not to bite off more than they can chew (I tried, but alas, some still do... leading to anxiety/stress etc)
- Talk about risk-reward throughout, the need to work well before the deadline

#### Plagiarising the example

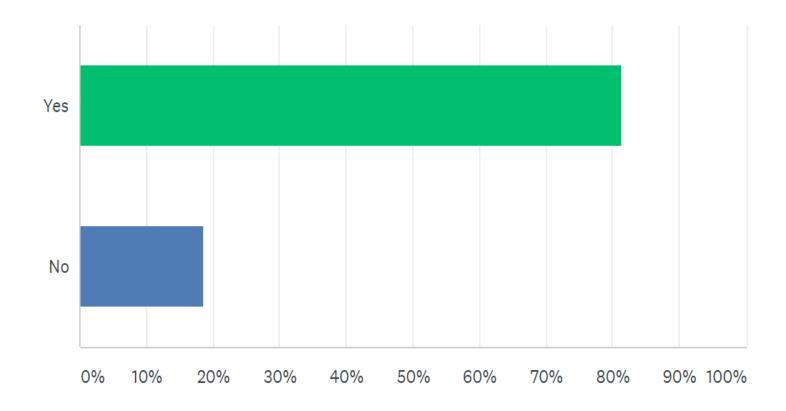
• This is a hard/new form of assessment, several students found themselves plagiarising the example.

# Survey results....(81 respondents)

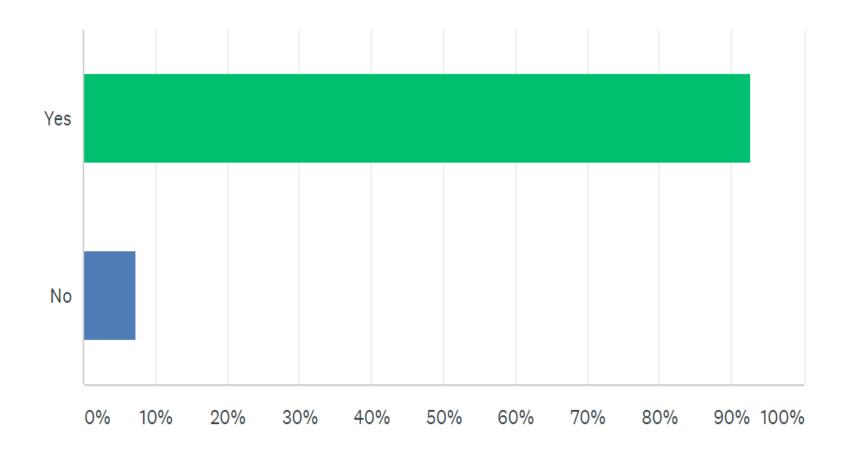
Would you prefer a Consulting Report or a Traditional Essay as coursework?



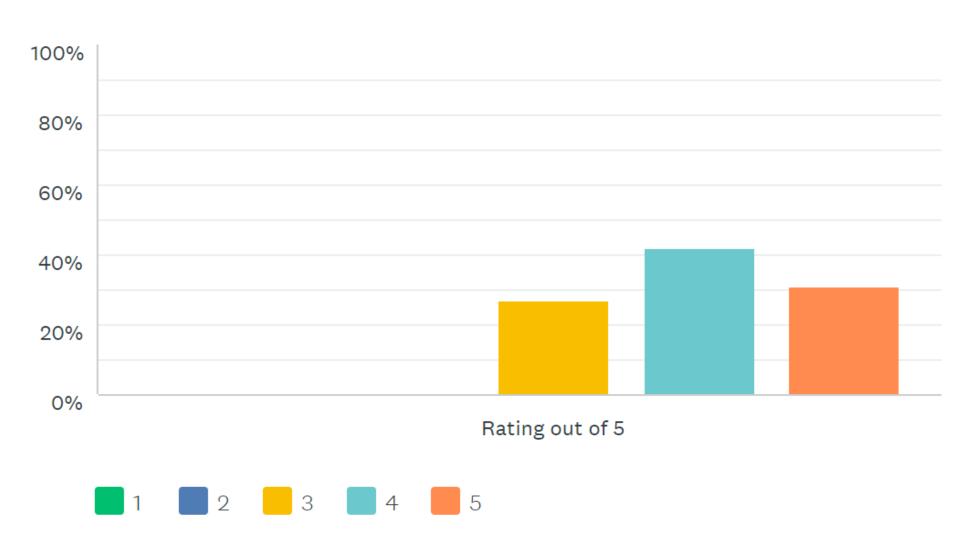
# Do you feel you learnt more from this form of assessment than a Traditional Essay?



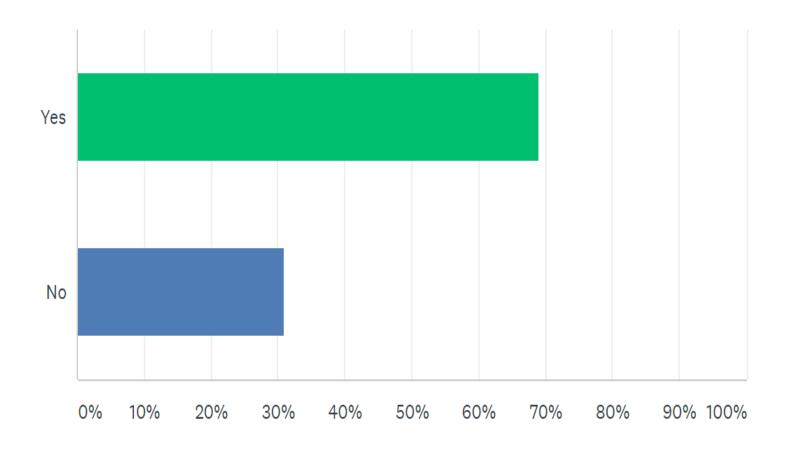
# Do you feel this coursework developed any skills useful for your future career?



# How useful was the support and guidance you received?



# Would you like other modules in ECO to adopt similar forms of assessment?



# Student comments....

- "Reports are practical, realistic and require students to use knowledge, not just regurgitate it"
- "More fun, I was more willing to research about it as it was less boring"
- "It was more **difficult to start** the writing process as we **first had to think** up a model and basically create a problem ourselves, it was more **challenging** but at the same time more interesting."
- "A more transferable skill on the job market."
- "I like producing work that involves real world research and has some relevance after leaving education. Studying topics knowing their relevance helps take a little bit of worry for leaving university and starting a career."
- "A report is much more individual and therefore I became more passionate about what I was writing and had fun."
- "It feels like we're doing something for a purpose, not just for the sake of understanding a topic. It also means we have some pieces we can submit to employers as evidence of competency."
- "Essays end up just writing X words on a particular topic, whereas a consulting report made me actually think about the theory in a real world situation so was **better in terms of learning**."

# Student comments...

- "Interest makes us think more, not just finish an assignment"
- "It is more related to lectures, whereas an **essay I can easily b.s.** my way through it. With this form of assessment I have to research and understand the lectures in order to do well"
- "I learnt new skills, wasn't too sure of how to write a report rather than an essay."
- "I have had an internship before and my workload is similar to coursework like this."
- "It showed us the type of work you would have to do at an economics consultancy, which is very useful."
- "I think the model, although very hard, was a good way to develop our skill. It was good to tie problem solving and evaluating together."
- "It has helped me to develop an **ability to give advice**, which would be helpful if I end up working as an economist or consultant."
- "I would like to work in a bank and therefore did my report on banking very relevant and useful."
- "Time organisation, different ways of presenting data, presentation as a whole for the report, and in general project management."
- "Learnt how to write a report that hopefully satisfies the 'consumers'."
- "Using my own research and knowledge to give advice, I will use this skill again."
- "My career path is undecided so in a way it prepares me for any eventuality."
- "I am interested in consultancy and this has given me an idea of what may be required."

# Student comments...

- "More interesting than a bog standard essay."
- "Please give us more."
- "I really enjoyed this piece of work."
- "Thank you. It was a great idea and should be used as a model even in other schools."
- "Overall happy with the assessment, good job Amrish!"
- "It was a really enjoyable piece of work once I figure out my focus."
- "The detailed assessment sheet, sample essay and workshop helped. It was all very new to me, so every single tip, no matter how tiny, really helped. Thanks!"
- "The sample report and advice given was a great deal of help, especially in getting started."

# Thanks for listening!

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