



www.economicnetwork.ac.uk



Do the self-evaluation skills of economics undergraduates improve as they progress from the first to the second year of their degree programme?

Jon Guest and Robert Riegler


www.economicnetwork.ac.uk



The Importance of Self-Evaluation Skills

- Importance of developing independent learning skills – enable students to take greater control of their own learning
- A necessary condition is that students acquire good self-evaluation skills
 - Sadler (1989)
- Do feedback and grades from assignments improve these self-evaluation skills?


www.economicnetwork.ac.uk



Research Aims

- Measure self-evaluation accuracy
- See if the level of accuracy changes
- Investigate whether there is any significant variation in the observed changes
- Identify any factors that might explain any of the observed variation


www.economicnetwork.ac.uk



Previous Literature

- Lew et al (2010)
 - Approx 80 SA observations/student
 - Process vs. outcome
- Boud et al (2013)
 - 2 - 4 assessments per module
- Ferraro (2010)
 - Economics students
 - 3 m/c tests in an introductory micro module


www.economicnetwork.ac.uk



Research Design

- Data collected from two pieces of coursework
 - First and second year microeconomics essay
- “What do you honestly consider would be a fair and appropriate mark for the essay you have handed in?”
- Is submission of self-evaluation data voluntary or compulsory?
- Do the estimates reflect their true beliefs of the quality of their work?
 - Difficult/test or exam vs essay/incentive
 - Impression management tool

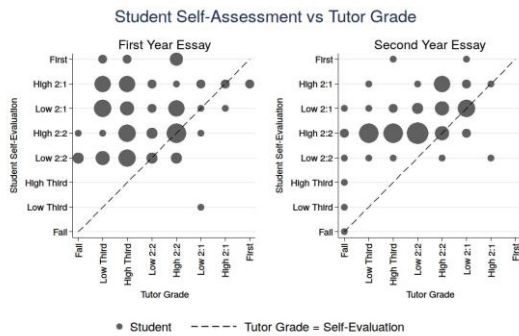
www.economicnetwork.ac.uk



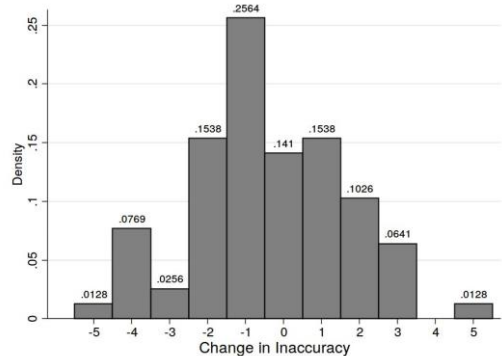
Sample

- 78 Economics UG students
- Only kept students who appeared in both years
- 81% male students
- 18% foreign students
- 63% A level economics
- 43% A level maths

Does accuracy improve over time?



Analysis of the Δ inaccuracy



Econometric model



Model 1

$$Inaccuracy_{it} = \beta_0 + \beta_1 TG_{it} + \beta_2 Inaccuracy_{it-1} + \beta_3 Ability_i + \beta_4 X_i + \varepsilon_{it}$$

Model 2

$$\Delta Inaccuracy_{it} = \beta_0 + \beta_1 TG_{it} + \beta_2 Inaccuracy_{it-1} + \beta_3 Ability_i + \beta_4 Inaccuracy_{it-1} \times Ability_i + \beta_5 X_i + \varepsilon_{it}$$

- TG_{it} : Tutor Grade on the second year essay. A measure for performance (Ability?).
- $Ability_i$: Average first year grade, UCAS points, 'A' level maths
- $Inaccuracy_{it-1}$: Grade inaccuracy in the first year.
- X_i : Home student, Gender, 'A' level Economics, Underconfidence

Model 1

Variable	(1) Grade Inacc. 2 nd year	(2) Grade Inacc. 2 nd year	(3) Grade Inacc. 2 nd year
Tutor Grade _{it}	-0.5018***	-0.4037***	-0.4155***
Grade Inaccuracy _{it-1}	-0.0189	-0.0141	-0.0161
Av. First Yr. Mark	-0.0024		
UCAS Points		-0.0022	
Maths A Levels			-0.1599
Under-confidence	-0.0461	-0.1031	-0.109
Male	-0.091	-0.1392	-0.1609
Home Student	-0.2416		
Econ. A Levels		0.1481	0.0591
Constant	4.1147***	3.9031***	3.5099***
Observations	78	62	62
R ²	0.43	0.35	0.35

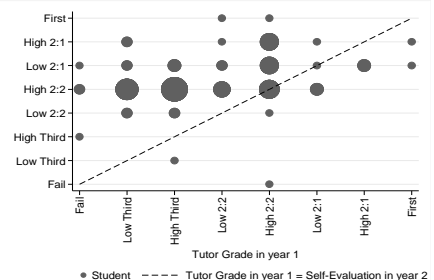
Legend: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Model 2

Variable	(1) Δ Grade Inacc.	(2) Δ Grade Inacc.	(3) Δ Grade Inacc.
Tutor Grade _{it}	-0.4904***	-0.4070***	-0.3811***
Grade Inaccuracy _{it-1}	-1.4373**	-2.1275***	-1.1410**
Av. First Yr. Mark	-0.0187		
Grade Inacc _{it-1} × Av. First Yr. Mark	0.0072		
UCAS Points		-0.0079	
Grade Inacc _{it-1} × UCAS Points		0.0039	
Maths A Levels			-0.6758
Grade Inacc _{it-1} × Maths A Levels			0.25
Under-confidence	-0.027	-0.0209	-0.1951
Male	-0.0505	-0.1175	-0.1439
Home Student	-0.2737		
Econ. A Levels		0.0535	0.1083
Constant	5.0260***	5.6012***	3.6011***
Observations	78	62	62
R ²	0.77	0.76	0.75

Legend: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Why do students pick a high 2:2?



Conclusions



- The accuracy of the self-evaluation estimates did improve.
- Two important factors appear to be
 - Inaccuracy in the first year
 - Tutor grade in the second year essay
- Other proxies for ability have no significant effect
- Are their self-evaluation skills improving or are they anchoring with optimism to what they believe is the most likely mark i.e. they still don't really know the standard.