

## Iain Embrey

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### An anonymous comment collected during a sixth form feedback exercise:

“ Very enthusiastic; Great way of getting the work across; Happy and makes you want to learn; Great at explaining work; Motivative; Great passion for maths which encourages you to work; Brilliant!!!! ”

### Academic qualifications:

2017-2019: PhD in Economics – Lancaster University (submitted 21 September 2019);  
2016: MSc Economics (with Distinction) – Lancaster University (award pending; integrated with PhD);  
2012: Master of Education (with Distinction) – The University of Birmingham;  
2010: PGCE (conferring qualified teacher status) – The University of Birmingham;  
2009: Master of Mathematics (1st Class Honours) – The University of Warwick.

### Teaching experience:

**2010-2015: Teacher of Mathematics, Swanshurst School, Birmingham** (full time; ages 11-19yrs)

- Head of sixth form maths
- Head of year 10 maths
- Duke of Edinburgh award coordinator
- Whole school enrichment coordinator
- Whole school end-of-year activity days coordinator
- Formal appraisal of colleagues
- Mentoring of newly qualified colleagues

Key achievements:

GCSE Mathematics teaching: *Across the school, 11% of yr 10 pupils achieved their forecast and 50% achieved within one grade of it; of these my middle set achieved 40% on forecast, and 88% within one grade of it.*

A-Level Mathematics teaching: *I took over the underperforming D1 module, and within two years the module average points score had risen from 50.5 to 115.6 [1 AS grade  $\equiv$  15pts].*

GCSE Mathematics leadership: *As Yr 10 Maths coordinator: 0/297 pupils graded U on both Yr10 mock GCSE exams (cf. 18 in the previous year), despite 9 failing to achieve a SATS level 2 by January of their year 9 (cf. one in the previous year).*

A-Level Mathematics leadership: *AS overall average point score up from 69.6 to 82.2; A2 overall average point score up from 185.5 to 210.*

### 2016-2019: Workshop Teacher, Lancaster University

- c.3 weekly workshops of 20-40 first-year students for 25 weeks of: *principles of economics*
- Exam checking
- Mark-scheme creation
- Invigilation
- Assessment
- Faculty research ethics committee member
- Seminar series coordinator

Official student evaluation results:

Gives clear explanations: 4.4/5      Makes subject interesting: 4.3/5      Readily contactable: 4.5/5

Unsolicited message from Head of Department:

“ I just received the aggregate evaluations for Econ102 Macro and several comments mention how good your tutorial sessions were. ”

**Academic papers under review:**

*The Education Trap: Could a grades-focused educational system be perpetuating poverty in advanced economies?*

*Re-estimating the Technology of Cognitive and Noncognitive Skill formation*

*On the Benefits of Normalization in Production Functions*

*A Review of Dual-self Modeling*

*Modeling Advanced Persistent Threat Campaigns.* Joint with Kim Kaivanto.

*States of Nature and States of Mind: A generalized theory of decision-making* – [Published 2019](#): Theory and Decision

**Additional achievements:**

I have competed for Scotland at kayaking and for GB at orienteering; I was twice named Warwick University sportsman of the year; I was presented with an outstanding service award at my orienteering club; I completed the Bob Graham Round (106km and 27,000ft ascent) in 22hrs 51mins; and my additional qualifications include: Lv4 Orienteering Coach; UKCC Lv2 Paddlesport Coach; Mountain Leader; Expedition Leader; 5\* white water kayak leader; Coach Educator and Assessor (CTS and IAPS qualifications resp.); DofE Supervisor, Assessor, and Manager; 16hr outdoor First Aid; Full D1 minibus licence.

**Teaching references may be sought from:**

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