

Learning Gain Legacy: Learning Gain, what's next?

# What Makes Sense with Learning Gain?

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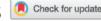
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ARTICLE

**3** OPEN ACCESS



#### Making sense of learning gain in higher education

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#### ABSTRACT

Internationally, the political appetite for educational measurement capable of capturing a metric of value for money and effectiveness has momentum. While most would agree with the need to assess costs relevant to quality to help support better governmental policy decisions about public spending, poorly understood measurement comes with unintended consequences. This article provides a comprehensive overview of the development of measures of learning gain in higher education, exploring political contexts, methodological challenges, and the multiple purposes and potential of learning gain metrics for quality assurance, accountability and enhancement, and most importantly, we argue, the enhancement of learning and teaching. Learning gain approaches should be integral to curriculum design and delivery and not extraneous to it. Enhancing shared understandings of concepts, measures, and instruments, transparency in reporting and investment in developing pedagogical research literacy, including effective use of data are essential in the pursuit of meaningful approaches to measuring learning gain within higher education.

#### ARTICLE HISTORY

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#### KEYWORDS

Learning gain; higher education; post-secondary, pedagogy; research methodology

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## The 'Holy Grail' of pedagogical research: the quest to measure learning gain

October 11, 2018 by SRHE News Blog | 1 Comment

by Camille Kandiko Howson, Corony Edwards, Alex Forsythe and Carol Evans









Edwards, C., Evans, C., Forsythe, A., & Kandiko-Howson, C., & (2018). Learning gain still has potential. WONKHE.

https://wonkhe.com/blogs/something-ventured-something-gained/



PROFESSIONAL JOBS SUMMITS RA

#### Learning gain: political expedient or meaningful measurement?

The political craving for simple measures of learning gain is neither pedagogic informed nor sufficiently nuanced. Alex Forsythe, Carol Evans, Camille Kandik Howson and Corony Edwards argue that only by changing focus will the conce become useful

Forsythe, A., Evans, C., Kandiko-Howson, C., & Edwards, C. (2018).

https://www.timeshighereducation.com/features/learning-gain-political-expedient-or-meaningful-measurement



## The Pedagogical Imperative

That there is no silver bullet for learning gain is not the issue; how we can gain valuable insights into the learning process is.

How is resource best used to focus on what matters? What constitute meaningful measures of learning gain?



#### **Overview**

- Pedagogical potential versus implementation issues.
- Limitations of outcomes focused approaches.

- Methodologically need to be mindful of garbage in garbage out (GIGO).
- Ethics just because we can, should we?

## Gaps

Leadership gaps

 Higher education skills gap in Pedagogical Research Literacy

Inadequacy of assessment

 grades as inadequate measures of learning gain

## Learning Gain Approaches

Use of specific measures to test understanding

**Student satisfaction** 

Use of data analytics

Individual and group learning trajectories

Role of individual difference variables on learning

Impact of specific learning behaviours on learning

Impact of pedagogical interventions

Balance of methodological rigour, high quality pedagogy, and feasibility

### **Process**

Emphasis needs to be on process.

Allows examination of structural issues impacting students' differential learning outcomes, and over time...

Focuses on students' learning transitions – the vital first six weeks require attention.

### Measurement

- Need to be clearer about what we want to measure, why, and how.
- What are meaningful measures?
- Spotlights 'assessment adequacy'.
- LG needs to be embedded within the curriculum.

## **Research Literacy**

Pedagogical Research Literacy – developing and valuing Integrated Academics.

Collaboration – Agreeing protocols and standards if we are to be able to replicate studies across fields and institutions in relation to specific variables.

# Investing in Quality

Investment in Quality Professional

Development – research- and practiceinformed pedagogy drawing on disciplinary
expertise

Integrated Leadership

Integrated Assessment (Evans, EAT, 2016)

## **Assessing Assessment**

Authenticity, relevance, and validity of assessment.....

Does assessment accurately measure learning outcomes?

Are we measuring things that matter?

Relevance and value of test outcomes?

Issues – qualities of a good test – challenge.

What is meaningful engagement?

AD4: Ensure ongoing evaluation to AL 1: Clarify what constitutes good Standard of work; recognition and application of support the development of good academic practice; student and lecturer beliefs sustainable assessment and feedback practice AL 2: Clarify how assessment elements AD 3: Ensure access and equal fit together opportunities Provision of Resources; Guidance; AL 3: Clarify student & staff entitlement **ASSESSMENT** Network Development; Choice Student/Lecturer roles and principles **LITERACY** underpinning the 'What', 'When', and 'How' of feedback **ASSESSMENT** AD 2: Promote meaningful and focused assessment **DESIGN** AL 4: Clarify the requirements of the Fit for Purpose; Relevant discipline Programme Level Assessment; Collaborative Design; Manageable Core and threshold concepts; deep approach AD 1: Ensure robust and **ASSESSMENT** AF 1: Provide accessible feedback transparent processes and **FEEDBACK** Specific, and focused on how to improve. procedures: QA literacy Encourage students to clarify their interpretation of the feedback AF 4: Promote development of students' AF 2: Provide early opportunities for students to

AF 3: Prepare students for meaningful

dialogue / peer engagement

self-evaluation skills

reflection

Self-monitoring, self-assessment, and critical

The pattern and timing of assessment, and alignment of formative to summative assessment

act on feedback

**LECTURER** 

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## **Integrated Academics**

Integrated academics are needed who can take the best of research, appraise it critically, apply it through implementing contextually appropriate pedagogies, and through good design, use outcomes from practice to inform research.

(Evans, SRHE, 11 Oct 2018- "What makes for REF-able pedagogical research?"

#### Critical Pedagogy

Evaluation of who is ad/disadvantaged? Reflection in and on actions Reflexivity –ability to step outside a situation.

#### Research Methodology Expertise

Ability to interrogate findings, and to use robust designs to explore and evaluate own teaching and research. Embedding learning gain into own approaches.

#### Disciplinary Knowledge

Depth/breadth
Core and threshold concepts
What is meaningful learning within the discipline – signature pedagogies

#### Pedagogical Expertise

Application of disciplinary knowledge informed by understanding of individual differences.

Ability to integrate theory into practice and evolve theory.

> Academic Practice in HE -Quality Assurance Literacy

#### Data Analytic Competence

Understanding of, and ability to collect, analyse, and use data appropriately, and to see potential of data to inform learning and teaching as integral part of instruction.

#### Contextual Awareness

Situation requirements
Nature and needs of students
-their varied dispositions and
starting points.

#### Integrated Academic

Research Literacy – the "ability to judiciously use, apply and develop research as an integral part of one's teaching" to address:

- Lack of understanding of pedagogy within context to be able to apply research findings effectively.
- Lack of methodological rigour impacting credibility of findings, and raising ethical issues.

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#### INTRODUCTION



#### Building teachers' research literacy: integrating practice and research

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#### ABSTRACT

Supporting early career teacher (ECT) research literacy is essential in promoting research-integrated professional practice, however it remains an area in much need of development. This article discusses the importance and process of developing ECTs' research literacy, through establishing strong collaborative links between universities and practising teachers in schools. It is located within an English policy and educational context in which the role of higher education and schools in teacher education has been substantially altered in recent times. Two programmes, the NQT and Beyond and Developing Resilience in Learning and Teaching, are used to illustrate how ECTs can actively engage in and with research as they enter the teaching profession, and thus develop their research literacy. The design principles of these projects are used to demonstrate the potential of how a research-informed pedagogical framework based on the Personal Learning Styles Pedagogy, aspects of self-regulation and resilience, can facilitate research-informed learning and teaching. In supporting ECTs' research literacy, universities, in collaboration with schools, play an important role in supporting the sustainability of research and in enabling teachers to connect their own practice with the broader body of research knowledge. Teacher and pupil ownership of research is crucial in developing research-integrated learning.

#### ARTICLE HISTORY

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#### KEYWORDS

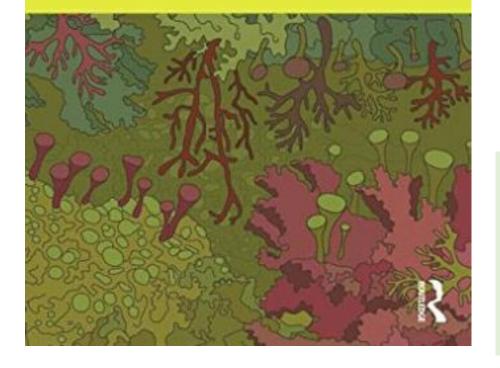
Early career teacher; research literacy; university; sustainability

https://www.tandfonline.com/doi/full/10.1080/02671522.2017.1322357

## Understanding Pedagogy

Developing a critical approach to teaching and learning

Michael Waring and Carol Evans



Waring, M., & Evans, C. (2015).

Understanding Pedagogy: Developing a Critical Approach to Teaching and Learning.

Abingdon, Oxford, United Kingdom: Routledge.

http://www.amazon.co.uk/Understand ing-Pedagogy-Developing-criticalapproach/dp/041557174X

This book provides overview of the Personal Learning Styles Pedagogy and the theories underpinning it and how you can use the core ideas in practice. It informed the development of the EAT Framework