The value and values of learning gain data: Evidence, ethics and enhancement

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Overview

• Student engagement
• Evidencing learning gain
• Using learning gain data
• Learning gain and enhancement
• Ethics and engagement
Student engagement (UK)

The participation of students in quality enhancement and quality assurance processes, resulting in the improvement of their educational experience

(QAA Quality Code, Chapter B5)
Student engagement (US)

“the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities”

(Kuh, 2009: 683)
Seven Principles of Good Practice in Undergraduate Education

1. encourages contact between students and faculty,
2. develops reciprocity and cooperation among students,
3. encourages active learning,
4. gives prompt feedback,
5. emphasizes time on task,
6. communicates high expectations, and
7. respects diverse talents and ways of learning.

(Chickering & Gamson, 1987)
Marketisation

• Competition = Quality (?)
• Student as (rational) consumer
• Performance and accountability
• Value for Money
  …quantification of learning
Evidencing Learning Gain
Learning Gain: Challenges

• Student engagement with tests and surveys
• Motivating students to invest in tests that don’t contribute to assessment
• Liberal arts versus subject specific degrees
• Discipline bias in standardised tests
• Comparability of some entry and exit measures
• Reliability of student self-reports
• Data protection, data sharing, research ethics

   • But closest current proxies for learning are satisfaction surveys and graduate salaries…
HEFCE/OfS Learning Gain Programme

- 13 mixed method projects involving 70 institutions over three years, using:
  - Learner analytics/Grades
  - Self-report surveys
  - Standardised tests
  - Multiple measures of a specific theme

- National Mixed Methodology Learning Gain Project (NMMLGP)
- Higher Education Learning Gain Analysis (HELGA)
What to measure

What is the purpose of higher education?

What is valued?

What are student expectations of higher education?

What should graduates know and be able to do?

Access, retention, progression, attainment, intensification → Widen access but not lower standards
Input measures
Affective measures

- Transition experience
- Self efficacy
- Well-being
- Disposition to learning
- Confidence
- Resilience
- Satisfaction
Behavourial measures

- Student engagement
- Placements/ work-based learning
- Employability experiences
- Co-curricular activities
- Skills self-assessment
- VLE engagement
- Learner analytics
Cognitive measures

- General cognitive gain
- Disciplinary cognitive gain
- Critical Reasoning Skills
- Situational judgement
- Research methods
Outcome measures

What have your students gained?

• Grades, progression
• ‘Work readiness’, Employability skills (Affective, Behavioural, Cognitive)
• Other outcome measures

Back to purposes…

• Is it critical thinking, generic graduate skills, disciplinary mastery, developing employability or something more holistic? Or job, salary level?
Into policy and practice

Balance between methodological precision and practical collection and application of data
Using Learning Gain Data
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What is ‘success’ in higher education?

- Levelling playing field?
- Degree outcome?
- Effort put in?
- Employment? Salary?
- Return on Investment (RoI)

Students / Staff / Senior Management / Government

What do YOU value in higher education?
Support student learning

Personalised learning data and dashboards

Instruments that are reflective pedagogical tools (UKES)
Evaluate classroom interventions

Innovative pedagogies (University of East Anglia)

Embedding research in teaching (Plymouth University)
Enhance course experience

From ‘module-mania’ to larger curriculum focus

Learning analytics

• Bottlenecks and pinch points
• Pathways of success or failure (Open University)
Target institutional initiatives

Measure and track attainment gaps (University of Reading; Open University)

Careers services interventions (Careers Group; LEGACY project)
Start with the end: What are you trying to achieve?

- Start with purpose, then devise metrics and other forms of evidence to facilitate evaluation of the purpose
- Need to work **WITH** students at every level
What does doing this well look like?
What does doing this well look like?

• “By carrying out evaluation of our interventions and support mechanisms and generating carefully considered, fit for purpose evidence that addresses our evaluation questions”

• “I've found time and again that the explanations of NSS data by students can differ greatly from the explanations departments give. Putting those alongside each other creates rich insights”

When you get the same positive story from all corners of the institution, and students actually reference data and outcomes
Ethics
Triangle of Doom

Data Protection

GDPR

Data Sharing

Research Ethics
Ethics

- Research *about* students
  - Students as data points or data sources
- Research *with* students
  - Student engagement; co-design; co-creation; students as partners; SoTL
- Research *for* students
  - Information, advice and guidance; learner analytics; nudge behaviours
- Research *on* students
  - Randomised controlled trials (RCTs); students manipulative; universities as a petri dish
Student engagement (-)

- Challenges of getting students to complete tests, surveys, etc
- Students making sense of and acting on data
- ‘Pact of disengagement’
- What students ‘want’ versus ‘what is good for them’
Student engagement (+)

Opportunities for students to be part of:

• Evaluation planning
• Data gathering
• Data analysis
• Data sharing
• Actioning data
• Enhancement
• Feedback and follow-up
Engage students!

- Challenge students
- Support students
- Inform students
- Seek, ask and report on feedback
- Provide opportunities for students
- Hold students responsible
- Work WITH not FOR students
“Students at the heart of the system”
Thank you!

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www.officeforstudents.org.uk/advice-and-guidance/teaching/learning-gain/