Five Key Strategies for Promoting Teaching Excellence in Higher Education

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100 years ago

Today

Difference: Color Camera

Plymouth Institute of Education works with a range of partners to offer high quality research, undergraduate and postgraduate programmes.
Availability of Research Evidence in Education

- Evidence for **what is effective** *(what works)* in school education has increased rapidly in past 30 years and is now convincing and widely available.

- The 2016 British Government White paper, entitled “Educational Excellence Everywhere”, p. 37 to 39, promotes, “**Fostering a world leading evidence-informed teaching profession**”

- **Evidence-Based Practice (EBP)** has for many years been focused on as a guide to policy and practice in medicine, engineering and the social sciences.

- The **implementation of EBPs** has been slow in schools and tertiary education *(Hornby et al., 2013)*
Terminology

• The field of education has seen some progression over time in its demands for more rigorous research evidence for the effectiveness of teaching strategies and programs, which has been reflected in changes in the terminology used.

• This proliferation of terms has led to confusion about meaning and myth that all mean much the same.

• The terms ‘research-based’ ‘research informed’ and ‘research led’ and others are widely used, for example see the following slide on use of research in teaching at University of Plymouth.
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STUDENT-FOCUSED
STUDENTS AS PARTICIPANTS

Research-tutored
Curriculum emphasises learning focused on students writing and discussing essays and papers

Research-based
Curriculum emphasises students undertaking inquiry-based learning

Research-led
Curriculum is structured around teaching current subject content

Research-oriented
Curriculum emphasises teaching processes of knowledge construction in the subject

TEACHER-FOCUSED
STUDENTS AS AUDIENCE

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Evidence-based Practice

• The term, ‘evidence-based practice’ is very different from the above used terms because it has a specific and precise definition. It is used to signify:

‘practices and programs shown by high quality research to have meaningful effects on student outcomes’ (Cook and Odom, 2013, p. 136)

This is a much more precise definition than those used previously, and is one that distinguishes it clearly from the previously used ‘research led’, ‘research-informed practice’, ‘research-based’ and others.
Sources for Evidence-Based Practices

- Research evidence for the effectiveness of education interventions can now be found in a wide range of sources: database searches for reviews, meta-analyses and syntheses of research literature, e.g. on google, google scholar, ERIC, EBSCO, Web of Science, plus:
- Teaching and Learning Toolkit (EEF, UK)
- Best Evidence Encyclopedia (Bob Slavin’s)
- What Works Clearinghouse (WWC) in the USA
- John Hattie’s (2009) synthesis of meta-analyses
Consensus across all major sources

• Reviewing the sources of EBPs noted above it became clear that there are five EBPs, relevant to higher education, that have well above average Effect Sizes in nearly all of them
• These are five EBPs that are found to have a substantial impact on learning and outcomes
• So lecturers who implement these five EBPs will have greater impact on student learning
• Therefore, these five EBPs are key to promoting excellence in university teaching by embedding them in the everyday practice of university staff
Effect size examples from Hattie’s Synthesis

1 Acceleration (speed up a year) .88
2 Feedback .73
3 Student-teacher relationships .72
4 Teaching study skills .59
5 Reading Recovery .50
6 Cooperative learning .41
7 Homework .29
8 Individualized instruction .22
9 Ability grouping .12
10 Open vs. traditional classes .01
11 Retention (hold back a year) -.16
12 Shifting schools -.34
The Five Key EBPs

- Metacognitive strategies
- Formative assessment/feedback
- Peer tutoring
- Cooperative learning
- Student/Lecturer rapport
Metacognitive strategies: Hattie, 2009; ES = .69

• Metacognitive strategy training consists of explicit teaching and coaching of students in thinking skills that will allow them to improve their own learning, for example:

• *Study skills* focus on planning, monitoring and evaluating progress, note-taking, summarising, organization, using checklists, rehearsal and mnemonics

• *Reciprocal teaching* uses the skills of summarizing text, generating questions, clarifying and predicting to ensure students understand what they are reading

• *Concept Mapping* is a strategy that builds on prior knowledge, is used in all curriculum areas to demonstrate the relationships between ideas

• **Example**: start lectures with concept map as overview
Formative Assessment: Hattie, 2009; ES = 0.73

- Information is collected on students’ work to provide frequent feedback so students can make changes or teachers adjust strategies to optimize learning
- Purpose is to motivate learners by informing them how well they have done & showing them how to improve
- Feedback should be: timely, explicit, and constructive
- Formative assessment and feedback provide direction for teachers and students as individuals or in small groups
- By assessing where students are at initially/ongoing examining the gaps in students’ knowledge, teachers can plan the most appropriate activities to facilitate learning
- Example: give assignment feedback before submission
Peer tutoring: Hattie, 2009; ES = 0.55

- Peer tutoring can be used with individuals, small groups or class-wide
- Students act as tutors to others on a one-to-one basis
- Format varies in structure and procedures used
- There are many types of peer tutors
- Used in wide range of curriculum areas
- Tutors and tutees gain academically and socially
- Improves social climate of the classroom
- Example: encourage study pairs or small groups
Cooperative learning (Hattie, 2009; ES = 0.59)

• Instructional use of small groups in which students work together to maximize their own & each other’s learning

• **Cooperative Learning** activities must involve individual accountability and positive interdependence.

• **Individual accountability** is when performance of each student is assessed & results given to group & individual

• Requires that every member of the team is accountable for completing tasks so no one can ‘hitchhike’

• **Positive interdependence** occurs when students can only reach their goals if others in their group also reach theirs

• **Example:** Timed Pair Share & Numbered Heads Together
Student/teacher Rapport: Hattie, 2009; ES = .72

- Use **listening skills** to build positive students-teacher relationships, especially *paraphrasing and active listening*
- Use **interpersonal skills** or assertion techniques, such as: *giving constructive feedback, obtaining feedback, handling criticism, conflict resolution and problem solving.*
- Use **group skills** of *reaction, interaction and action* to create caring & respectful ethos in lectures & establish positive relationships with and between students:

  Example: End each lecture asking for feedback *eg.* “What is the main thing you have got out of this session?”
Group skills

- **Reaction skills**: listening, reflecting, clarifying and summarizing
- **Interaction skills**: moderating, interpreting, linking, consensus taking
- **Action skills**: questioning, probing, tone setting, confronting, modelling

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References


Thank-You

• Any questions?

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