What Makes Great Teaching?

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What makes a great teacher?

One who is willing to do what it takes to be demonstrably more effective next year than this
My argument

• Understanding the research helps to
  • Inform better decisions
  • Develop better theory of teaching and learning
  • Make adaptations that are likely to be optimal

• But knowing the research can’t really tell you
  • What to do
  • How to do it
  • Whether it is actually working for you

• So you still need to monitor and evaluate

• Becoming “demonstrably more effective” is mostly about learning
  • Make sure you learn to do something that will actually make a difference
  • For this you need coaching, feedback, practice …
Quiz on Research-Based Pedagogy
Class size

1. Reductions in class size (eg 30→20) generate
   a) Substantial increases in students’ learning
   b) Small increases in students’ learning
   c) No change in students’ learning

2. The greatest benefit of smaller classes is
   a) Less stress for teachers enhances their quality of life
   b) Better feedback for learners promotes more learning
   c) More individual attention for students boosts motivation and confidence
3. ICT enhances learning if it
   a) motivates and engages students
   b) reduces teacher workload
   c) promotes activities that are aligned with subject content
   d) gives students more control over their learning

4. Which of these approaches is best supported by evidence of promoting learning
   a) Giving all students iPads
   b) Using an interactive whiteboard
   c) Using technology for short bursts of focused activity
Testing

5. Which of these are good times to test students' understanding of a topic? (Select all that apply)
   a) Never: testing creates anxiety that undermines learning
   b) Before they have learnt it: find out what they already know and cue important material
   c) Immediately after teaching it: force them to retrieve the learning while it is fresh in memory
   d) A few weeks after teaching it: build in a delay to allow forgetting

6. After studying and learning a topic, students remember most if they then spend an equivalent amount of time
   a) Studying it again in a single session
   b) Studying it again in shorter, multiple sessions
   c) Studying it again, and then being tested on it
   d) Repeatedly being tested on it, with no further study
Learning style

7. A person’s learning style determines
   a) which part of the brain the individual uses during a learning task
   b) how well they can learn information presented in different modalities (visual, auditory, kinesthetic)
   c) nothing about their performance on learning tasks

8. Research shows that
   a) People learn best when instruction matches their individual learning style, e.g., auditory learners are taught using an auditory mode of instruction
   b) People learn best when instruction forces learners to use learning styles different from their preferred style, e.g., auditory learners are taught using a visual mode of instruction
   c) There is no connection between learning style and how well people learn

From Cerbin, 2010
Praise

9. For students who lack confidence, reassuring them that they are clever is most likely to
   a) Make them think they are capable
   b) Make them think being clever matters
   c) Help them to learn more

10. The response to a poor piece of work that is most likely to result in improvement is
    a) Sympathy, support and encouragement
    b) Frustration or irritation, suggesting the student needs to do better
    c) Attributing their failure to lack of effort or poor strategy
Some relevant research
EEF Toolkit: Impact vs cost

Most promising for raising attainment

- Meta-cognitive
- Mastery
- Homework (Secondary)
- Peer tutoring
- Reading comprehension
- Collaborative
- Phonics
- Small group tuition
- Social
- Individualised learning
- Homework (Primary)
- Ability grouping
- Performance pay
- Behaviour
- Parental involvement
- Summer schools
- Mentoring
- Classroom TA
- Aspirations
- 1-1 tuition
- Pre-school
- After school
- Smaller classes
- Small effects / high cost

Effect Size (months gain)

Cost per pupil

May be worth it

www.educationendowmentfoundation.org.uk/toolkit
Principles of Instruction (Rosenshine, 2010)

- Begin a lesson with a short review of previous learning
- Present new material in small steps, with student practice after each step
- Ask a large number of questions and check the responses of all students
- Provide models for problem solving and worked examples
- Guide student practice and rehearsal
- Check for student understanding
- Obtain a high success rate (80%)
- Provide scaffolds for difficult tasks
- Require and monitor independent practice
- Engage students in weekly and monthly review
What makes great teaching?
Review of the underpinning research

Robert Coe, Gitee Alexei, Steve Higgins and Lee Elliot Major
October 2014
1. We do that already (don’t we?)

- Reviewing previous learning
- Setting high expectations
- Using higher-order questions
- Giving feedback to learners
- Having deep subject knowledge
- Understanding student misconceptions
- Managing time and resources
- Building relationships of trust and challenge
- Dealing with disruption
2. Do we always do that?

- Challenging students to identify the reason why an activity is taking place in the lesson
- Asking a large number of questions and checking the responses of all students
- Raising different types of questions (i.e., process and product) at appropriate difficulty level
- Giving time for students to respond to questions
- Spacing-out study or practice on a given topic, with gaps in between for forgetting
- Making students take tests or generate answers, even before they have been taught the material
- Engaging students in weekly and monthly review
3. We don’t do that (hopefully)

• Use praise lavishly
• Allow learners to discover key ideas for themselves
• Group learners by ability
• Encourage re-reading and highlighting to memorise key ideas
• Address issues of confidence and low aspirations before you try to teach content
• Present information to learners in their preferred learning style
• Ensure learners are always active, rather than listening passively, if you want them to remember
What works?

What you do may matter less than how, why and when you do it.
Professional reading
http://cem.org/blog/what-is-worth-reading-for-teachers-interested-in-research

• Reports (online & free)
  • Effective pedagogy (6)
  • Impact of interventions (3)
  • How learning happens (8)
  • Teachers’ PD (2)
  • School improvement and leadership (3)

• Books (8)
• Blogs (10)

And two new books:
Starter pack: 50 pages
EEF Guidance reports

https://educationendowmentfoundation.org.uk/tools/guidance-reports/
Has it worked?
The #1 fact about ‘what works’:

It doesn’t always work
Even if you follow the evidence, it may not work, so

• Monitor
  • Routine, on-going, real-time collection of high quality assessment
  • Analysis and evaluation to see what seems to be working
  • Feedback into processes

• Evaluate
  • For interventions, changes, investments
  • Is the impact worth the cost?
Lesson Observation

1. Two teachers observe the same lesson, one rates it ‘Inadequate’. What is the probability the other will agree?
   a) 10%  
   b) 40%  
   c) 60%  
   d) 80%

2. An observer judges a lesson ‘Outstanding’. What is the probability that pupils are really making sustained, outstanding progress?
   a) 5%  
   b) 30%  
   c) 50%  
   d) 70%
Lesson observation: It’s harder than you think

http://www.cem.org/blog/414/

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Classroom observation: it’s harder than you think

Professor Robert Coe

We’ve all done it: observed another teacher’s lesson and made a judgement about how effective the teaching was. Instinctively it feels valid. I am a good teacher; I’ll know a good lesson when I see one. We’ve all experienced it from the other side – being observed – but this time the feeling may be more mixed. Sometimes you get real insight from someone who sees what you don’t, questions what you take for granted and makes you think differently. Sometimes they just tell you what they would have done, or focus on some trivial irrelevance.
How good do you think your assessment is?
Are they in the right set?

You have used a 1 hour end of year maths test to allocate students to six ordered teaching sets. What percentage of students will be wrongly allocated?

a) 5%
b) 10%
c) 20%
d) 40%

(Assume Cronbach alpha = 0.9)
JOIN ASSESSMENT ACADEMY

ASSESSMENT LEAD PROGRAMME

• Whole-school impact: improve assessment practice, policy and framework across departments
• c. 50 hours' sustained CPD over three terms
• Includes tools, guides and practice opportunities
• Collaboration is key – minimum two staff per school
• Ideal for current and aspiring school and college leaders

ASSESSMENT ESSENTIALS

• What every teacher needs to know about assessment
• 10-week short course
• Includes content from experts such as Dylan Williams, and teachers at the forefront of assessment practice
• Perfect for upskilling individual teachers’ practice
• Ideal for 1–100+ staff, initial teacher training, and QTLS alike
• "A great PD package for anyone"

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As well as conducting bespoke in-person training, we are also happy to advise and consult on assessment design, policy and practice. We have, for example, worked with schools to analyse and improve entrance exams, to train dozens of staff on an intensive four-day course, and run everything from two-hour webinars to one-day inset sessions for whole groups of staff.

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Learning to be more effective
The Elements of Great Teaching

1. Curriculum-related content knowledge
2. Cognitive activation
3. Classroom management
4. Classroom culture and relationships
5. Teacher knowledge about education
6. Teacher professionalism
The challenge

To develop a list of teacher abilities (skill, knowledge, competence, behaviour, attitude, etc) whose elements

a) Include everything you might want to use to evaluate or improve teaching quality (eg for recruitment, retention, performance management, professional development, etc)

b) Are supported by evidence and theory as related to learner outcomes

c) Are well-defined and observable

d) Can be learnt/improved

- Updated review this autumn
- Framework and tools for self-evaluation and progress, to follow
All good learning & teaching …

• Starts with a strong curriculum
• Takes learners from where they are at
• Is clear what success looks like
• Creates challenging expectations
• Assesses and feeds back on the gap
• Requires exposition, modelling, scaffolding and guidance from an expert
• Requires a coaching & mentoring role
• Benefits from peer support
• Requires trust: ‘OK to fail’
• Allows time for practice to reinforce, embed and secure learning
How should we design teachers’ professional learning?

You’re a teacher. You know how to help people learn hard stuff. Do that.
Summary

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  • What to do
  • How to do it
  • Whether it is actually working for you
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Workshop topics
Choose from:

1. Engaging with research evidence
2. Great Teaching Framework
3. Evaluating teaching quality
4. Evaluating the impact of interventions
5. Improving the quality of assessments
6. Models of teacher professional learning
Thank you!

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