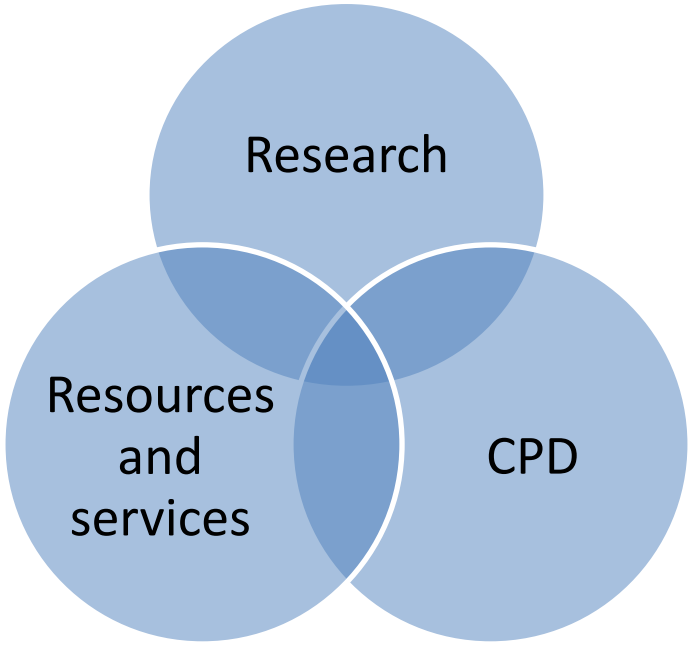
Designing challenge into your curriculum

Lisa Bradbury

Centre for the Use of Research and Evidence in Education *(CUREE)*

Centre for the ***Use*** of Research and Evidence in Education

Promoting and supporting the ***use*** of evidence by building bridges between academic research and professional practice:



Aims of the Morning

By the end of the morning you will have:

- Understood the wider evidence about planning and teaching for appropriate levels of challenge
- Connected strategies highlighted by the wider evidence base with their own and colleagues' approaches in school
- Developed a framework for evaluating approaches for particular contexts as part of analysing and interpreting the evidence
- Identified a range of sources of further evidence and evidence based resources

Expectations of the day

- Are there any particular issues around challenge facing you at the moment?
- How could colleagues contribute this morning?
- What are your expectations of the facilitator?

Starter Session

By the end of this session you will have:

- explored your own and others understanding of what challenge means and the issues around providing challenge
- surfaced some expectations of the issues regarding challenge

To get us started...

- Identify an area where you feel you are not normally strong and achieved something well beyond what you would have normally expected
  - What spurred you to rise to the challenge?
  - How did someone ensure you rose successfully to the challenge (or might someone have)?
  - What might have prevented you from trying?

Session One

By the end of this session you will have:

- understood international evidence about how teachers construct challenge in the curriculum
- considered which strategies shown to work internationally can make a difference in your context

Exploring planning and teaching for challenge – examples from teacher research

- In your groups identify an ‘A’, ‘B’, and ‘C’
- Read the article that corresponds to your letter
- What is it about that practice that provides appropriate levels of challenge?
- Return to your original group and tell your colleagues about the practice
- From your discussion, identify one thing the teachers in the articles did and write it on the board at the front

The evidence base

Review based on filtering from 3000+ studies resulting in a synthesis of 43 studies of curriculum interventions which encompassed the following definition of challenge:

"Irrespective of prior attainment, challenging young People in curriculum terms means designing teaching and learning to elicit from students their best efforts (i.e. challenge needs to be motivating) and to enable them to think and act in ways that are transferable and/or discipline-specific; and which are progressively more complex, critical, creative and independent"

Why does challenge matter?

- Over the three years of our work in monitoring the implementation of the National Curriculum for QCDA
- A stubborn 20% of (circa 8,300) pupils, of all abilities, genders and social groups consistently reported that whilst they felt positive about their teachers they did not feel challenged by the curriculum (or, very often, their parents)
- By contrast there was a 19% increase over the three years in students reporting their teachers were good at finding out what they know already and using that to plan lessons…
- Are teachers stepping pupils through the curriculum too gradually? What is missing?
- Would the pattern be different in your school/ department/ phase/ class?

A systematic review
of research evidence about curricula that offer effective challenge

- How much do we understand about how teachers construct the idea of 'challenging' young people in curriculum terms?
- What are the key judgements teachers make that affect the level of challenge within their curriculum offers?
- What do teachers see as the most challenging learning terrain and learning processes?

Key research findings

- Constructing challenge related to both curriculum content and to its enactment in the classroom
- Planning for content alone does not secure effective challenge. It's essential to plan processes for enacting content with specific regard to challenge from the start
- Challenge, via combinations of content and process, is important for ALL learners
- Challenge is geared to not only raising achievement and to motivation – e.g. for tackling the risk of disengagement, such as underachieving gifted and talented students, and low achievers and vulnerable learners – cf Lamb
- What does this mean for acceleration vs enrichment?

An example of challenge at work

- Enquiry and coaching for infusing thinking skills
- Lesson on causes of the plague
- Groups of 4-5 elicit key causes from a picture via team process
- 1 person per team - 30 secs to look at the source - 2 mins to communicate it to team without words – all 4 in turn
- Teacher debriefs strategies
- Answers pooled in plenary
- Questions to rectify omissions & learning strategies debriefed

Key processes

- Many studies of effective challenge highlight involving students in developing collaborative critical thinking and analysis to develop meta-cognition through:
  - collaborative inquiry (via associated open ended tasks)
  - cognitive conflict/ideas in tensions with each other (to trigger deeper analysis)
  - experience of failure/mistakes (with chance to learn from and overcome them/see them as part of learning)
  - problem solving (emphasis on application for different contexts and so a need for underpinning principles) and
  - guided interaction between these things

Key processes

Planning lessons, schemes of work and for specific curriculum values involved planning for

- identifying and revisiting starting points iteratively – sometimes in bigger jumps that risk failure
- judging when to step back and move into facilitator role – clarity re what you need to know to make this judgement at planning stage
- mixing support with challenge and risk of failure
- involving pupils in designing learning tasks

such as Opening Minds, Building Learning Power or the Creative Curriculum

Impact when challenge is effective

The impacts *on students* include:

- Showing greater interest in work
- Gaining higher grades
- Developing a broad range of learning skills coupled with understanding of the underpinning rationale about how they can be used
- A shift amongst students from a receptor model of learning to an investigative, proactive one
- Pupils perceive lessons as useful and authentic

A particular impact *for teachers*:

- A shift from targeting fluency in recalling information/ facts, processes – to – interpretation of concepts and development of strategies for problem solving

When challenge is ineffective

- When the curriculum isn't challenging for a particular group of, or all students, they see it as:
  - restricted in what it offers
  - restricted in what it values as achievement
  - isolating them from the content and each other
  - intentionally inaccessible to some

An activity

- Rank each of the impacts in order of importance for managing challenge in your context
- Take 3 impacts and identify one way in which you or your school/ context deliberately tries to promote these outcomes
- Write this on a pink post it
- Now write on a green post it note who it worked best for and for whom it might not work well

Reality check

- Many teachers know this in theory - but obviously aren't doing it consistently in practice
- *What gets in the way?*
- In your context – note down two potential obstacles
- *What helps? How do you offer challenge to your colleagues? What can you give up to make space?*
- In your context – note down two things that might help/ could make space
- In the next session we'll look at the answers to these questions for teachers from across England and in your schools

Session Two

By the end of this session you will have:

- developed your understanding of teachers' experiences of 3 key difficulties in challenging students and the support they would like in overcoming these
- explored how the findings and suggested strategies can be used in your own context

Finding out about teachers' experiences of challenge

- CUREE worked with teachers to find out about their experiences of challenge
- To give an insight into a range of settings 6 focus groups were held
- A primary and a secondary focus group was run in each of the core subjects (maths, English and science)
- Each focus group had 8 experienced teachers with curriculum associated responsibilities

The focus group activities

- Each focus group used 3 activities. These explore key areas which are known to be important for challenge but which the evidence shows teachers find difficult. These are:
  - identifying students' starting points
  - knowing when to step back and assume a more facilitative role; and
  - overcoming the perceived risks of over-challenge
- The activities run in similar ways. We'll do 1 together and then you can choose to experiment with one of the 2 others. We'll then draw together to explore your results and those from the study.

The focus group activities: understanding anxieties about over-challenge

The review found that teachers are more concerned about over-challenging than under-challenging students.

- In pairs or threes think about what could go wrong (the risks) if students are over-challenged. Record each idea on a post-it.
- Look at examples. Can they be grouped?
- What could be done to overcome the risks?

The focus group findings: the risks of over challenging students

The teachers thought that over challenge could result in the students:

- losing confidence and self-esteem
- becoming disinterested
- behaving disruptively
- developing misconceptions particularly in mathematics and science

The focus group findings: the risks of over-challenging students Quotes from confident specialists

"We feel under pressure to over-challenge, but we need to exercise our professional judgement about what individual children need in terms of challenge" (Primary mathematics specialists)

"We feel it's important to support students out of their comfort zone, but we probably under-challenge at times" (Primary science specialists)

"We're worried about overloading them and about misconceptions creeping in" (Secondary science specialists)

"We're not afraid to challenge – we constantly raise the bar even in low attaining groups" (Secondary mathematics teachers)

"There is no such thing as over-challenge" (Primary English specialists)

The focus group findings: strategies for overcoming the risk of over-challenge

The teachers suggested a number of strategies which could help reduce the risks of over-challenge.

These included:

- developing an ethos where it is ‘okay’ to be stuck or ‘fail’ at a task initially
- building up a relationship of trust by being upfront about the nature of the challenge
- stepping the challenge so that it gets progressively more difficult

Further focus groups activities: your choice

- There are two further activities focusing on:
  - knowing when to step back and assume a more facilitative role; and
  - Identifying students' starting points
- Choose an activity and then be ready to feedback to the other group about what you did and your responses.

The focus group activities: identifying students' starting points

- What difficulties do teachers experience in diagnosing individual students' starting points and how can they be overcome?
- Work in groups of 3 or 4 to identify from the statements your top 5 in order of difficulty. You can add your own statements if you wish.
- Explain the 'story' of your grid to the other group giving reasons /examples.

The focus group findings: identifying students' starting points

- The teachers thought that identifying students' starting points could be difficult because of:
  - a lack of time to listen to students' explanations in depth because their were many students in their classes and they needed to impart information which meant that they did most of the talking
  - a lack of time to observe students carrying out activities because there were too many students to observe and their students lacked the ability to work independently; and
  - students' limited ability to communicate their thinking properly

The focus group findings: strategies for overcoming the challenges for identifying starting points

Strategies for overcoming the lack of time to listen to students included:

- observing specific groups in rotation and asking e.g. 'What are you thinking now?'
- using structured written approaches which require students to say what they already know or what they are thinking

Strategies for overcoming the lack of time to observe included:

- asking teaching assistants to feedback their observations
- developing students' skills to work independently whilst the teacher carries out an observation

The focus group findings: strategies for overcoming the challenges for identifying starting points-2

Strategies for overcoming the challenge of poor communication skills included:

- using a think-pair-share approach to encourage more extended answers
- asking students to write an explanation suitable for younger students

The focus group activities: knowing when to step back and let students work things out for themselves

- There is evidence that it can be difficult for teachers to know when to step back and assume a more facilitative role.
- Place ‘your bet’ about how problematic knowing when to step back is. You will need to stay committed to this view for the activity.
- Why do you think this?

The focus group findings: stepping back

- The teachers thought that knowing when to step-back could be difficult because:
  - it was hard to let go
  - there was a lack of time to help students develop the independent learning skills that they needed
  - the students might develop misconceptions

The focus group findings: identifying students' starting points
Quotes from confident specialists

"By their nature teachers want to be helpful and teach"

"It can be difficult for teachers to stop talking!"

"You feel guilty – you don't like to see them struggle"

"Their ability to read is limited – this is a barrier to them working on their own"

"We are so drilled into thinking all students must make progress in every lesson, so you try to move them on"

We can't let students wander down an irrelevant path – we don't want to have to correct them later"

"You fear lessons going wrong and deteriorating behaviour if you let go – the teacher needs to be on top of the class"

The focus group findings: strategies for stepping back

- These included:
  - helping students develop independent learning skills
  - explaining to students that they were expected to work things out for themselves
  - structuring tasks so that the learning was scaffolded and students were not completely left to their own devices in the early stages

The focus group findings: some quotes about strategies for stepping back

"I do not accept 'I can't do it' as an excuse. I ask them to explain what it is that they can't do and this seems to help them figure things out for themselves"

"I get students to explain the activity to each other"

"I provide groups with a handout that explains the task then let groups work out the task for themselves"

"I put a list of key words on the board and ask students to highlight the words in the text. I find it helps them gain a better understanding than just reading the text does"

Session Three

By the end of this session you will:

Explored how the findings and suggested strategies could be used in your own context by examining some research tasters which provide

- a focus for experimentation
- show how you can collect student data to assess their current practice
- show how you can use this information to plan changes to practice

Exploring challenge: going further

- As well as running the focus groups you may wish to explore this further with your colleagues. The following resources may be useful in this:
  - co-coaching ‘nutshell’
  - challenge ‘tasters’
- In pairs or threes discuss how you might use one or both of these to move forwards practice in your school

Research Tasters

Key features of research tasters:

- nuggets of evidence taken from research summaries
- micro- enquiry activities based on the evidence
- next steps suggested
- where to find out more

- http://www.trlp.org/pa/
- http://www.gtce.org.uk

Other CUREE products

- A range of research summaries to help access specialist knowledge e.g. 2.5 minute “bites” – power points, web digests, major summaries of cornerstone academic studies – hot linked to teachers’ studies
- Challenge resources – guided pathways
- Coaching based CPD programmes
- Personalised route maps
- On-line surveys for staff, students, parents
- Self Evaluation Tools and benchmarks
- SKEIN service

Session Four

By the end of this session you will have:

- Reflected on your own priorities
- Used some co-coaching skills to create a meaningful and challenging plan for improving the approach to planning for all students across the curriculum

Action planning – identifying your own priorities

- Identify the strengths of approaches to challenge to build and priorities for development pack in school
- Brainstorm specific activities for challenge which can be easily infused (think-pair share) and identify what you need to know to refine these

Co-coaching for an action plan

Why Co–coaching?

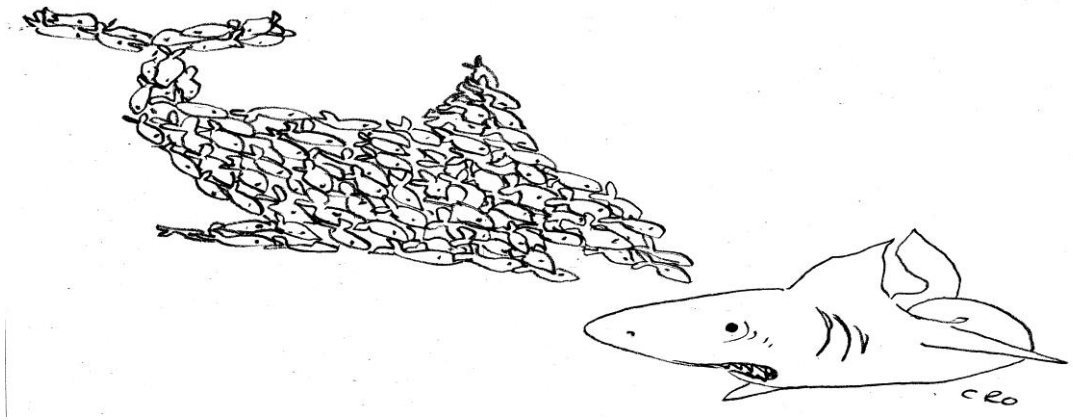
- Modelling active learning to one another
- Support each other in embedding knowledge, skills and resources
- Helps make sense of new approaches
- Build on what you know and can do already
- Test out possibilities and plan next steps to take your practice forward

Action planning – co-coaching

- Choose one of the opportunities and use a partner to help you think about how you are going to tackle some of the obstacles we've identified and expand on strengths
- Co –coach each other to develop your next steps using the thinking framework

Your Next Steps – letter to me

- What will success look like in 6 weeks time?
- How do I get there?
- Complete the ‘letter to me’ celebrating your successes in 6 weeks time



Feedback

- Please complete and return the evaluation forms and ...

Thank you for all your hard work and commitment

Contact Details

lisa.bradbury@curee.co.uk

www.curee.co.uk

Centre for the Use of Research and Evidence in Education

4 Copthall House

Station Square

Coventry CV1 2FL

024 7652 4036