



**Ambition
Institute**

Deliberate Practice in Teacher Education: A Handbook

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**KEEP
GETTING
BETTER**

Acknowledgments

This paper synthesises the words and insights of Cohort 1 of Teacher Education Fellows: Sarah Cottingham, Nina Dhillon, Alex Douglas, Gemma Edgcombe, Susie Fraser, Belinda Goodship, John Kirkman, John McIntosh, Lucy Newman, Gary Pilkington, Rachel Sewell, Venessa Sixbery and Ashley Weatherhogg.

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Summary

Teacher Education Fellows encourages teacher educators to use deliberate practice to help teachers master new principles and techniques.

This paper shares Fellows' experiences introducing and refining deliberate practice. We share it to increase the fund of usable models and provoke debate about the best methods to improve teaching.

Key findings

Teacher educators move through three phases in introducing deliberate practice.

I - Ensuring practice happens by prioritising it; Fellows learned to:

- 1) Preserve time for practice
- 2) Focus practice on one skill, selected based on teachers' needs
- 3) Balance providing time to practise and time to observe colleagues in selecting practice activities

II - Making practice shine by refining practice activities; Fellows learned to:

- 4) Choose activities, settings and groups to encourage teachers to practice
- 5) Help teachers practise by unpicking the skill they are learning through multiple models
- 6) Plan each step of a practice session: share a structure which allows time for preparation and makes roles clear
- 7) Ensure teachers receive effective feedback by offering clear success criteria and a feedback structure
- 8) Promote insight by helping teachers re-examine the impact of their existing practice

III - Ensuring practice matters by designing practice and support so that it affects teachers' classroom actions; Fellows learned to:

- 9) Make it easier for teachers to use what they learn by practising in preparation for coming lessons
- 10) Identify the impact practice is having in the classroom and adapt support accordingly

IV - Finally, this led Fellows to look beyond the design of professional development sessions, to support teachers to use their training in the classroom – and to keep using it.

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1. Introduction

A teacher educator wants to help teachers master a new questioning technique. This is challenging: teachers are changing part of a complicated procedure (managing classroom discussions) and adopting a new questioning technique may affect the classroom climate, the responses students give, and the way a lesson unfolds. Simply telling teachers about a new technique will not help them master it; discussing it may be helpful, but it will still offer only limited preparation for using it in the classroom. How can teacher educators best prepare teachers to change their practice?

Teacher educators must make three decisions in planning professional development:

- > What teaching principles and techniques to encourage teachers to use?
- > What methods help teachers to master those principles and techniques?
- > How can teachers be supported to apply those principles consistently in the classroom?

We support teacher educators to answer these questions through the Teacher Education Fellows programme, by sharing evidence and models of effective practice. We seek to learn from our Fellows' experiences of translating these ideas into reality in their schools and organisations. In 2018, we shared *The Learning Curriculum, Fellows'* responses to the first question: the principles of learning they had prioritised and what they had learned about teaching them to teachers. This handbook offers tentative answers to the second challenge, looking at methods to help teachers learn and master new teaching principles and techniques.

We have been encouraged to advocate using deliberate practice in teacher education by the programmes from which we have learned, and the evidence about skill acquisition which we have studied. Deliberate practice helps learners by offering training which:

- > **Is challenging** – outside learners' current capacity
- > **Is focused** – requiring learners' full concentration
- > **Is bitesize** – one skill at a time, well-defined, specific goals
- > **Offers feedback** – providing guidance on how to improve
- > **Is sequenced** – skills build up in a careful considered order
- > **Produces and depends on effective mental representations** (Ericsson and Peak, 2016).

We have benefited from efforts to apply these ideas to teacher education (Deans for Impact, 2016), the wisdom accumulating in universities (for example, Lampert et al., 2013) and teacher development organisations (for example, Lemov, Woolway and Yezzi, 2012). We believe that teacher educators deserve more guidance about how to put these ideas into practice in schools.

We encouraged Fellows to apply deliberate practice to their work as part of Teacher Education Fellows. Their responsibilities ranged from supporting a few teachers in one school to designing training used across schools, and from mentoring novices to supporting school leaders. We asked Fellows to describe their attempts to apply the principles of deliberate practice and what they had learned. This paper shares their thoughts on, and experiences of, testing and refining deliberate practice. We do not pretend that this is the last word on deliberate practice or teacher

education. Instead, we hope to add to the fund of credible models in teacher education, and provoke further debate about the role of deliberate practice in improving teaching.

A framework for deliberate practice in teacher education

We have found the framework developed by Teacher Squared useful in thinking about the stages of implementing and improving deliberate practice in teacher education.

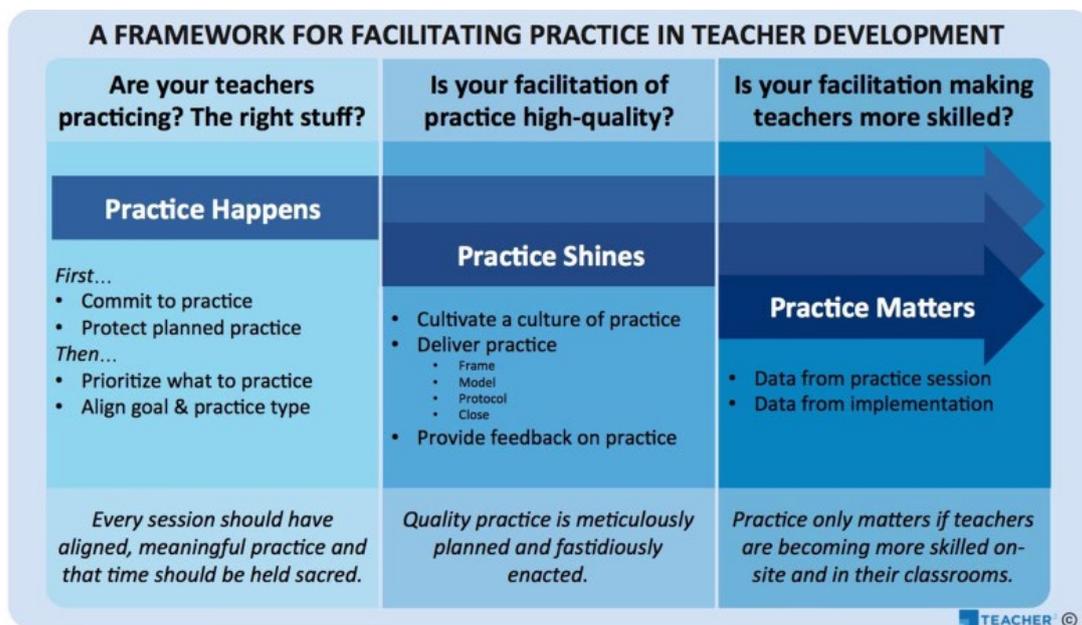


Image: Teacher Squared at Relay Graduate School of Education

1. Practice happens

Initially, teacher educators introduce practice to sessions, reducing the time spent discussing and describing problems and solutions and increasing the time spent helping teachers trial, practise and refine changes to their teaching. Success at this stage demands making – and preserving – time to practise; it also means selecting the most important actions to practise and suitable activities with which to master them.

2. Practice shines

Once teachers are practising regularly, teacher educators can refine their approach to increase its effectiveness. A culture of practice increases teachers’ comfort and enthusiasm in practising; models, protocols and feedback make practice activities more effective, demonstrating what success looks like and supporting participants to achieve it.

3. Practice matters

Practice should change what teachers do in the classroom. Having refined professional development sessions, teacher educators can focus on the effect this has on teachers’ actions – both in training sessions and in the classroom.

This framework offers a model of progression for teacher educators to introduce deliberate practice in their schools and organisations; we have used it to organise Fellows' contributions into usable guidance for teacher educators.

2. Making practice happen

At this stage, teacher educators ensure teachers practise the skills they are learning or refining. Challenges include:

- > The timing and structure of teacher education sessions
- > Selecting the most valuable learning goals
- > Identifying the most effective practice activities to achieve those goals

How can we protect planned practice?

Fellows struggled to make time for practice. Ashley Weatherhogg found that he: “Tried to do too much in two hours; thus only leaving 15 minutes to practice and complete the evaluation forms.” He resolved to “leave time for the practice. Less is more with most things and is certainly true when it comes to deliberate practice”. Rachel Sewell faced a similar barrier:

“Running out of time meant there was only time for one round of practice from one person, and a bit of rushed feedback. For me, the most effective part of deliberate practice is the feedback and repeat model; it makes you think really hard about very precise parts of your practice and work to refine them”.

Alex Douglas ensured he had enough time by ensuring “that at least 1/3 of the session involved the practice of this skill and ensured there are two rounds of practice”.

Key Finding 1: Preserve time for practice

How can we prioritise what to practise?

Deliberate practice can be used to practise almost any aspect of teaching, but limited time forced Fellows to prioritise. They used deliberate practice to develop a range of skills: some focused on questioning and classroom management; Alex Douglas noted that practice “does not have to mean standing up and ‘live’ teaching... scripting and planning can be practised too”, while John McIntosh used it to encourage district leaders to be more candid about their shortcomings.

Fellows prioritised based on their understanding of their teachers’ needs. Susie Fraser asked her colleagues to practise monitoring students’ behaviour, ‘being seen looking’, looking at the speaker and questioning, “in response to learning walks and observations that identified that low level behaviour and engagement of students.” Rachel Sewell chose to focus on a practice which is “evolving naturally across the school”, Pose, Pause, Pounce, Bounce questioning, “because whole school observation data suggested that whole class engagement during questioning was an issue, and because both our maths and science departments had been looking at this in departmental CPD sessions.” Belinda Goodship chose techniques which were “important for the foundation of behaviour at my school – STAR and Do It Again.” Sarah Cottingham chose a broader goal, based on

her trainees' struggles managing behaviour: "they felt the school systems rendered their sanctions impotent and they could not improve when the behaviour strategies they had been taught were not working." She designed a session which offered help with problems they faced and included a section on deliberate practice, so that all trainees "understood what deliberate practice was, the benefits of it, had a go and committed to weekly deliberate practice thereafter."

Many Fellows found that pursuing deliberate practice led them to focus on increasingly specific goals. Venessa Sixbery had used lesson observations to identify "several actions and areas of development"; instead, she tried "to limit the actions and areas of development to allow for the participant to really focus on one aspect to practise" such as planning an activity in which all students write to prepare for discussion. Belinda Goodship reached similar conclusions, practising on just two techniques to avoid "possible misconceptions or confusion." Belinda's concluded that "Professional learning sessions should focus on primarily one, if not two, techniques, to allow time for efficient and effective deliberate practice to take place."

Key Finding 2: Choose one skill to practise, based on teachers' needs

How can we align goal and practice type?

Many Fellows refined their session plans to align the practice activity with the goal. Ashley Weatherhogg noted that the activity he had designed – in which teachers planned a starter activity for a lesson – required "time to think through the topic, content and type of questions they were setting". Rachel Sewell highlighted the value of selecting approaches which can be practised in the time available:

"The lesson I keep learning again and again with running CPD is that simplicity is key and this is particularly true with deliberate practice. As revisiting 'The Deans for Impact Practice with Purpose' article reminded me, it needs to be broken down into 'constituent parts', and 'goals should be sequenced, starting with basic skills and progressing to more sophisticated ones'. Pose Pause Pounce Bounce is, in hindsight, a very complicated process to use when staff are still becoming comfortable with using deliberate practice".

Alex Douglas designed his training around "discrete, decomposed planning skills", focusing on "small elements of planning (writing objectives, matching tasks to objectives and creating learning check points in lessons)."

Choosing practice activities also means balancing the advantages and disadvantages of working in large and small groups. Belinda Goodship found small groups “particularly effective” when working with the whole staff:

“Everyone can spend a little longer practicing. Furthermore, our staff have suggested they feel more comfortable practicing with fewer people in the first instance. The disadvantage would be that it is a less authentic environment when practicing to just one or two people”.

Equally, she found value in inviting a few volunteers to practise in front of the whole group; this meant that not everyone got the chance to practise, but the modelling and feedback seemed to benefit all teachers. Another challenge is balancing personally-relevant practice with the group’s needs: Rachel Sewell invites teachers to reflect on their current practice and review a Personalised Learning Checklist to set three targets for themselves, allowing colleagues with a range of experience “to set themselves specific goals.” Conversely, individual goals make it harder to assess progress; joint goals might also make feedback tighter, “because we could have done this as a whole group, and refined our approaches.”

Key Finding 3: Balance providing time to practise and time to observe colleagues in selecting practice activities

3. Making practice shine

Not all practice is deliberate practice. Alex Douglas noted that some training which is described as practice constitutes “rehearsal rather than practice” as it does not include two rounds, success criteria or expert feedback. Designing effective deliberate practice made specific demands of Fellows.

How can we create a culture of practice?

For many teachers, practice is unfamiliar, and potentially threatening, particularly when deliberate practice is new to a school. Gary Pilkington mentioned his colleagues’ enthusiasm for teacher drop-ins and sharing practice, but the “considerable resistance” and “initiative suspicion” towards deliberate practice, especially among more experienced teachers. Susie Fraser described the “idea of getting up and practising an element of pedagogy in an artificial setting and receiving feedback from a peer” as having “really pushed experienced colleagues out of their comfort zone. This was less the case for less-experienced members of staff but equally will have felt quite exposing”. She suggested that the goal of her training had alienated “the more experienced teachers who perhaps thought this was too novice or were slightly disgruntled about being in the same training as three NQTs and a teacher who is receiving more targeted support”. Ashley Weatherhogg noted the need for teachers to “get used to” practise, and the challenge of doing so with teachers from across a trust who did not know one another. Many teachers practised, but some wanted to “wrap up the session and get back to their own school as quickly as possible”. Teacher educators can address this by creating a culture in which teachers are willing to practise and receive feedback.

Many Fellows sought to demonstrate the value of practice. Ashley described needing “to sell the benefits of the practice more. I did mention this briefly but with mixed success.” Sarah Cottingham introduced the concept, rationale and benefits of practice to help her trainees “understand the bridging of the knowing-doing gap” as some felt frustrated “that they were getting the same feedback time and again.” John McIntosh wanted to help the teams he worked with self-evaluate more candidly: he began by “offering a clear a rationale” and linking this to “mission and the importance of being as honest as possible about where we are in order to reach where we are going.” Alex Douglas concluded that “the appetite for practice is there if teachers are given good reason and time. The NQTs especially are embracing the concept and see the utility if it aligned to their planning/teaching goals.”

Fellows designed sessions and routines to increase teachers’ comfort in practising. Ashley decided to work on planning, “as strangers were not likely to want to stand up and practise in front of each other”. Lucy Newman noted the value of modelling the improvement process and the value of mistakes:

“When I was modelling the strategies, I modelled one wrong and then acknowledged it was wrong, then did it again. I also narrated that my error was not on purpose, but that I am in bad habits and need to practise too. Whether they were just being nice, a few people said that they liked the honesty and it set them at ease during the practise”.

John McIntosh introduced “recognition and celebration”, by “drawing attention to examples of where this had been done effectively in the practise sessions.” Lucy noted that practice is easier to organise for a whole-school training session than for individual teachers’ needs; in response, the school focused individual practice on planning. Alex Douglas created a consistent culture of practice with NQTs: “They expect this to be part of the routine.”

Fellows also encouraged practise by focusing on the social dynamics among teachers. Susie Fraser arranged feedback groups “within existing collaborative planning groups.” John Kirkman observed that “there is no ‘perfect’ way of pairing teachers” for coaching, particularly in a small school with one-person departments. Pairing new teachers with first-time coaches risks “perpetuating misconceptions” rather than ensuring teachers’ change. He emphasised the value of consulting carefully with line managers and “focusing our expert teachers on our more novice teachers.” Rachel Sewell invited a “very well-liked” colleague “to model how he’s been using [Pose Pause Pounce Bounce] to keep all students thinking in his lessons. He shared his rationale for exploring it, and the positive impact it had had on students’ learning”.

Ultimately, Jen Calvert noted, “culture takes time, we cannot possibly expect this to be something that everyone will do immediately. As teacher educators we must be patient and consistent with new and possibly unfamiliar approaches for our teachers.” She notes that a “one size fits all” model of deliberate practice may not work: “Spend time focusing on how it will work within your specific domain and if needs be what can be flexible and what cannot.”

Key finding 4: Choose activity, setting and group to encourage teachers to practice

How can we structure practice?

Model:

Fellows used models to share the goals of practice with their colleagues. Belinda Goodship used several forms of model to ensure teachers understood the approach they were being invited to adopt:

- > Sharing “the key elements of the technique”
- > Showing a video and asking teachers to analyse their approach
- > Offering a live model herself, having scripted what she was going to say: “I modelled non-verbal cues and verbal cues and some ‘be seen looking’ techniques. I asked them to then analyse my model and give me feedback based on the key elements I issued them at the start.”

Similarly, John McIntosh offered concrete examples of effective coaching meetings, discussing what made the models successful, and how leaders might use this approach in their work. He did this:

“Before sharing my thoughts on the success criteria, as I felt that providing them in advance would likely be met with uncritical acceptance without participants thinking deeply about why the model was successful.”

Finally, he tried to encourage leaders to share effective practice, “by both narrating where I had seen parts of the success criteria being used successfully and encouraging others to do the same.” John tried to show himself using this approach, modelling candid self-evaluation of his own performance during the session and offering “personal examples of my own areas for development.” John Kirkman noted the importance of models in a context which is familiar for teachers: he plans to film coaching conversations to provide them.

Fellows also identified potential pitfalls of models. Rachel Sewell invited a colleague to teach a ‘lesson’ to teachers:

“Staff responded brilliantly to this – they avidly took notes during his explanations (reflecting later that they felt under pressure to understand and not be caught out), and responding positively when he corrected them and questioned them further... most cited this as their favourite part of the session, explaining how helpful it was to see it in action and to be in a student’s shoes”.

However, Rachel wondered whether a ‘lesson’ on ovulation was too complicated and it would have been better to teach staff a single word:

“Staff made lots of errors in response to his questions, and whilst Pose, Pause, Pounce, Bounce worked to an extent to correct these misconceptions, the teacher modelling arguably should have stopped the questioning and re-taught the content. However, I think using this approximation of practice helped staff to visualise what PPPB looked like, and how it kept the whole room engaged and under pressure.”

John McIntosh suspected that his model had encouraged those he was working with to “take the path of least resistance” by copying it; instead, he argues that teacher educators need to find the “sweet spot between clarity and challenge”, with a “model that is similar to, but slightly different from, the activity that we ask participants to engage in.”

Key finding 5: Help teachers practise by unpicking the skill they are learning through multiple models

Protocol:

Fellows used protocols to ensure practice proved productive. After sharing models, Belinda Goodship gave staff five minutes to “script their own way of establishing their expectations of STAR [posture and attentiveness] in their own classrooms”, then provided time for practice and feedback in pairs. Similarly, Rachel Sewell:

“Reminded staff to consider their own targets, shared models of the scripts I had written myself when refining this strategy in my own teaching, and asked them to begin scripting how they would use the approach to teach a keyword or concept in a lesson tomorrow”.

Susie Fraser noted the importance of a clear protocol for what is to be practised. Many of her colleagues “fell into their comfort zone”, debating the best answers to the questions they were posing, rather than practising the questioning technique itself. She suggested that a clearer protocol which set out both the questions and responses teachers would practise would have helped them focus on the activity’s goal. She also noted the practical difficulties of designing practice which replicates the classroom; to allow teachers to use a space which resembled their classroom, she let teachers:

“Practise in different classrooms with me floating between them. Where possible, I think it would be better to have them in one space, or have more facilitators to monitor to ensure that the process was being followed as intended”.

Rachel made practice more productive by specifying roles, asking “one person on each group (groups of four) to practise, with two members as students and one as an observer who would feedback on their selected target”. John Kirkman noted that clear protocols are a way to avoid practice “becoming a burden on time which people give up. The observation and feedback are both 15 minutes long to minimise this, carefully timed in the agenda at the top of the protocol”.

Sarah Cottingham developed a six-step model for a successful deliberate practice activity:

- **Contract** – explain what’s going to happen
- **One specific goal** – practise one key skill at a time
- **Make it authentic** – practise in the classroom
- **Name the steps** – plan and script what you will do
- **Call the shots** – describe how the practice should run
- **Practise, feedback, and re-practise**

Practice The steps to take



Contract



One specific goal



Make it authentic



Name the steps



Call the shots



Practise, feedback, re-practise

Image: Sarah Cottingham's six step practice framework

She wanted to ensure teachers did not miss key steps: “for example, contracting is important as the practice pair are about to engage in something where normal social norms will not apply, i.e. the feedback person may interrupt the teacher and they may need to feedback on something quite personal like tone of voice or posture”. Sarah noted the particular importance of naming the steps: “Even the (apparently) simplest teaching technique involves multiple steps. Naming and displaying them as success criteria reduces burden on working memory and aids specific feedback”.

Key finding 6: Plan each step of a practice session: share a structure which allows time for preparation and makes roles clear

How can we ensure teachers receive effective feedback?

Ensuring that all teachers receive and respond to feedback was another challenge for Fellows. Susie Fraser offered her teachers “clear success criteria on which to frame their feedback.” With a large group he did not know, Ashley Weatherhogg suggested teachers found a colleague teaching the same subject to “get feedback on their starter activity and to have to justify their thinking”. Everyone would be expected to offer at least one suggestion for improvement, with time then given to re-draft the starter activity”. Alex Douglas questioned whether NQTs could give expert feedback. While he interjected where he thought feedback was inexpert, he found success criteria “invaluable, providing a guide for anyone giving feedback”; with a focus on “decomposed elements of planning”, he concluded that “almost anyone can give useful feedback.” John Kirkman sought to ensure that feedback was effective by developing “a protocol for feedback conversations” for all mentors to use, which offers “an agenda to follow at the top with approximate timings and then a

rationale, bank of prompts to support scripting and a model for each stage of the feedback.” Likewise, Nina Dhillon provided a range of supports to ensure her colleagues received high quality feedback, including immediate peer feedback supported by feedback starter sentences and ‘batch feedback’ from facilitators to the whole group after each round of practice. She then provided time for her colleagues to practise again using the feedback they had received.

Key finding 7: Ensure teachers receive effective feedback by offering clear success criteria and a feedback structure

How can we promote teachers’ insight?

Fellows encouraged insights, ‘Aha!’ moments which cause teachers to re-examine and reinterpret familiar events, changing how they “interpret classroom situations in the moment and thus, how they respond to them (Kennedy, 2016, p.12).” Belinda Goodship has found giving non-examples particularly helpful, allowing staff to “question why a technique may *not* work”. Rachel Sewell shared the rationale for her session by emphasising the importance of students transferring new learning to their long-term memories, and how questioning supports this. She concluded that:

“Rather than succeeding in generating an ‘aha moment’ for all staff, instead I largely shared my own insight, but some staff echoed the ideas in their exit tickets, suggesting it had resonated with them in part. I think ‘sharing the why’ also helps me to get buy in from experienced staff, and those who are more interested in the theoretical side of developing their practice”.

Gemma Edgcombe encouraged an insight for a teacher who frequently ran out of time to use planned whole-class assessments. She hoped he would see how they could make his teaching more efficient by allowing him to respond to misconceptions immediately. Gemma used questioning to scaffold this insight:

“For example, I asked him what the cold-calling had told him about pupil understanding, and to what extent he thought this might apply/or not apply to other pupils in the class. This was illuminating as the teacher reflected on the fact that he didn’t know what lots of pupils in his class were thinking”.

She highlighted the teacher’s rapid examination of students’ work: “Just a quick look had told him quite a lot, but he hadn’t planned to do this and therefore did not have time to respond”. Gemma explained how a whole-class response strategy would allow him time to act on what he learned. On her next visit, the teacher used a whole-class assessment strategy: “I don’t know if this was a direct impact of focusing on ‘insight’ and ‘the why’, but I do think that it engendered a better understanding of the rationale and therefore increased the teacher’s commitment to planning and using whole-class response techniques”. Gemma concluded that clarifying the insight she hoped the teacher would gain helped her to:

“Formulate, and scaffold the probe questions; this in turn led to more effective self-reflection from the teacher which made the internalisation of the planned insight more likely. It also increased my confidence in the choice of development area, improving my delivery of the practice. a more helpful goal for the ‘probing’ part of the coaching model and supported me to formulate more effective questions under time pressure.”

She suggested that this made the rationale for the technique “more meaningful and attractive” leading to a “palpable sense of enthusiasm and commitment to the action steps from the teacher”. Ultimately, there is a big difference between being “told ‘the why’” and internalising it:

“Reaching the insight through their own thought processes means that that quality of their understanding of ‘the why’ is significantly better, this not only increases their commitment to the specified action steps but their ability to apply them successfully and potentially more flexibly. Whilst it is critical for novice teachers to know what to do to improve, I’ve become more convinced of how important it is to still have a strong focus on planning for the rationale and the insight as a key way for developing their mental model of expertise.”

Key finding 8: Promote insight by helping teachers re-examine the impact of their existing practice

4. Making practice matter

How can we monitor the effectiveness of practice?

Judging the effectiveness of practice through observation is challenging. Rachel Sewell noted that: “Staff were animated and enjoying teaching each other concepts from their different subjects, but they worked at differed paces, and some followed my formula and instructions exactly, whereas others paused for lengthy discussions.” Rachel’s colleagues had set individual goals: it is hard for her to judge how appropriate these goals are: “I tend to chat to our novice teachers, and focus them on the earlier and simpler skills, but for the rest of the staff it’s harder to gauge the success of this approach.” Moreover, apparent impact during a practice session may not be followed by subsequent change: while 70% of participants expressed “excitement about and understanding of the importance of using the descriptors to be more honest and accurate” after John McIntosh’s training, session, the first data which followed suggested participants had returned “considerably lower” numbers of honest self-assessments.

Some teacher educators sought to make it easier for teachers to use what they learned in future lessons. Ashley Weatherhogg gave teachers time to plan using templates and models, in order to put what they had learned into practice. He hoped that inviting them to plan a “specific lesson they would be teaching that week” would make them “more likely to put it into operation” and that going through the planning process and the thinking behind it would make teachers “more likely to do so again, especially if the activity works in their lesson.” Likewise, Belinda Goodship invited teachers to script “their own way of establishing their expectations of STAR in their own classrooms”, providing a resource which they could “take away to use in their lessons the next day.”

Key finding 9): Make it easier for teachers to use what they learn by practising in preparation for coming lessons

How can we monitor the impact of practice?

Some Fellows saw the impact of practice on teaching. Working with just one teacher, Gary saw her “confidence and teaching have improved”, he has “evidenced the teacher clearly halting the class and waiting for complete attention from all pupils before continuing.” Many Fellows used drop-in observations to monitor improvements; Susie Fraser found most teachers using the techniques they had practised and was able to offer feedback and encourage the team, “praising them for evidence of the transfer of strategies from training and to reinforce the goals and the elements of practice to focus on.” At John Kirkman’s school, teachers respond to a survey each term which gauges their feelings about the quality of support and development they have received: “The majority of teachers agree that coaching or mentoring using this approach is having an impact on their practice” although a minority do not. He concluded that:

“The action steps and deliberate practice are forcing people to have conversations about our expectations around expert teaching that they might not normally have had even if the quality the action steps or practice is not as high as it could be. I think it is important to see this year’s implementation as the first iteration of this model that we can refine and improve rather than something that doesn’t work that we just have to get rid of or swap for something else”.

Equally, while many Fellows received verbal evaluations and positive responses, they struggled to obtain reliable information about the impact of their sessions. Lucy Newman described her impressions as “skewed as I regularly drop in on a few teachers who I also mentor. My data sample is not generalisable and is skewed as I have also reinforced these strategies when I coach the teachers”. Venessa Sixbery noted that the teachers with whom she works “receive so much input from various sources that it is difficult to isolate one particular practice as a reason for their improvement. I am also limited on how often I can observe one participant. I may only see them once a term.” Lucy suggested ways she could collect data on the impact of practice in future:

- > “We could let teachers know during the session that we will be coming around the school to catch good practice in the following weeks.”
- > “We could also have exit tickets on sessions to gauge the understanding of the techniques.”

Monitoring what happens after practice sessions also led Fellows to refine their approach. Where coaches are leading practice independently, Fellows designed ways to monitor this. John Kirkman asks mentors to:

“Upload action steps that they set teachers onto a Google form. This serves two functions: the first is it gives us a view into the kind of action steps being set and the current needs of teachers at the school. But secondly – and importantly considering our desire for alignment – is that it enables us to ensure action steps are being set and provide direct feedback to mentor and coaches on their quality and how well they are linked to the repertoire [of teaching habits promoted by the school”.

Sarah Cottingham designed an activity which would enable trainees to practise autonomously and develop themselves. Her subsequent observation demonstrated that, while teachers were practising, they were not using success criteria “and therefore feedback was not specific. The feedback was not detrimental to their practice but it could have been”. She refined the structure for her trainees:

“I asked the triad to let me know one day ahead of the session what area they would practise. Next week they told me they wanted to practise clear explanations of new material. I emailed them a success criteria, a voice clip of me modelling doing it wrong, getting feedback based on the success criteria and re-practising as well as the steps to take in the practice session. I asked them to film their practice and feedback. I watched these clips and the jump in quality of feedback and therefore practice was phenomenal. The final practised explanations of all three trainees were as near to perfect as it would have been with an expert.”

Sarah plans to keep evaluating the value of practice by attending sessions, “watching their filmed practice and taking feedback from the trainees”, and although the “overall impact on teaching quality remains to be seen” she hopes to assess this in observations.

Key finding 10: Identify the impact practice is having in the classroom and adapt support accordingly

5. Making professional development work in practice

Many Fellows highlighted other factors influencing professional development, beyond the design of sessions. Several mentioned the timing and duration of their training sessions, and suggested promising alternatives. Rachel Sewell is trying to “cram all the different parts of an effective session into 45 minutes” and wondered about sharing theory before the session, “providing staff with more time to digest it, and then touch on it briefly before devoting the majority of our sessions to practice itself”. Alex Douglas made a similar observation about half hour sessions: “I feel that the theory behind the session takes up some time that could be used for practice”. As well as pre-reading, or cutting the number of ideas shared, he wondered about “alternating between theory one week and practice the next”: nonetheless, there is a tension between “what I want them to know and what I want them to do.” Nina Dhillon mentioned that it is hard to maintain a culture of practice if mentors are not consistently using it.

Fellows also noted that training was the trigger for learning, not its cause – some teacher educators sought to exploit this. Susie Fraser concluded that the bulk of the impact comes from “the activities that follow up the session, no matter the quality of the session itself”. Similarly, John McIntosh reflected that “It seemed from the session that people had really ‘got it’”; but while learning may not have been sufficiently consolidated, it is more likely participants were:

“Slipping back into old habits and cultural norms. Practice is not just about consolidating learning, but building habits. The assumption that ‘they get it, so they’ll do it’ is flawed. This is something I am trying to bear in mind when planning out training over time”.

Nina Dhillon highlighted that support from mentors is “crucial in embedding practice and ensuring its sustained efficacy”. Sarah Cottingham’s challenge was asking trainees to practise independently, without expert guidance. She could not find experts to support them within the school, but resolved that “the people who were willing to do deliberate practice weekly were in that room” and designed a structure to support this, asking her trainees to form pairs or triads and commit to meeting weekly to practise key actions they wanted to improve; she plans to “produce a bank of success criteria, voice clips and steps for the practice.”

Some Fellows suggested the need for broader changes to make professional development more effective. Belinda Goodship concluded, with other Fellows, that her session included too much for one hour: “Unfortunately, neither the length of the session nor the content could be changed, as this was something our senior leadership team had asked us to deliver in this way”. Likewise, Ashley Weatherhogg struggled with a “one off, two-hour session” – a series of sessions which taught teachers key ideas, then used deliberate practice, would have been preferable. John Kirkman wondered about preserving more time for expert teachers to coach novices. Some schools have teachers whose job it is to coach other teachers: “I think this has benefits and drawbacks but I think it would be interesting to compare staff reaction to deliberate practice in a less collegiate model.” Gary plans to make engagement in deliberate practice a clear part of job descriptions when hiring new teachers and plans to train mentors to use this approach.

**Next step: Support teachers to use their training
in the classroom – and to keep using it**

6. Conclusion

Several Fellows highlighted the power and potential of deliberate practice. Sarah Cottingham had never considered that deliberate practice could “empower teachers, but that is the effect it has had.” Belinda Goodship concluded it is “a fundamental step in developing teachers’ classroom practice of a particular technique.” Alex Douglas observed that “what was previously abstract (the ideas/theory/lecture) becomes more concrete and applied to a lesson they are about to teach”. He also highlighted the importance of designing sessions “to build upon each other, which also means that the practice is useful by the participants”. Gary Pilkington concluded that:

“Deliberate practice is a powerful tool. Working closely with an early-career teacher and investing time into it has convinced me of its place in programmatic redesign of CPD at our school. The impact it has had upon my NQT’s teaching, my coaching and the quality of our discussions is testament to its effectiveness. It works for early career teachers, loosening knots of poor practice before they become too entangled to untie”.

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