

EARLY CAREER TEACHERS: MENTOR TRAINING

Conference 2 | Handbook



Mentor Conference 2 – session aims

To understand:

- > The importance of the second year of the Early Career Teachers Programme
- > The similarities and differences between the first and second year
- > Your role as mentor within the programme in year 2
- > How teachers build more expert mental models
- > How to adapt instructional coaching as early career teachers develop expertise

Today's session

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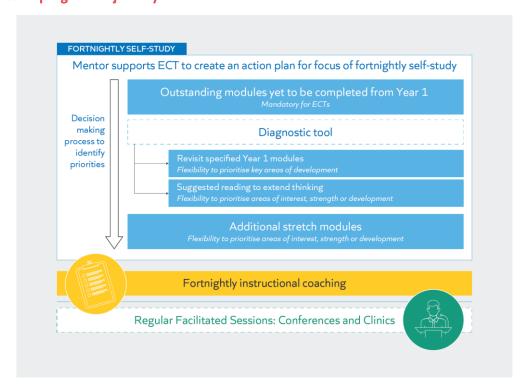
Section 1: Year 2 - what and why

Reflection

- > Share something from year 1 of the programme which you are proud of
- > Share a challenge from year 1 of the programme that you managed to overcome
- > Share the aspects of the programme that you and your early career teacher(s) found most helpful

Notes:		

ECT Year 2 programme journey



Reflection

- > Consider the three strands of the programme, or the modules within each strand. Which strand(s) or modules do you feel that your ECT(s) has developed a strong level of understanding of?
- > Which elements might they need further support or practice to master?
- > **Further:** Where might your ECT want to stretch beyond the content of the year 1 programme?

Notes:		

Check for understanding

Which of these statements about year 2 are true?

- a) Mentors have funded time to meet with their early career teacher
- b) Early career teachers have funded time to meet with their mentor
- c) Early career teachers may not need to revisit ideas from year 1 self-study
- d) Early career teachers are likely to find instructional coaching less beneficial

Section 2: Developing teacher expertise

Building expertise over time

Scenario 1 Scenario 2 Anthony has just moved into his second year on Sienna has just moved into her second year on the ECT programme. Last year, he taught year the ECT programme. She is a secondary 3; this year, he has moved to Year 4 and even science teacher. She has new classes, but is has the same class. teaching the same topics as last year. His mentor, Azalia, notices in early Her mentor, Chaim, notices that Sienna is using observations that Anthony's explanations of formative assessment tasks in and between new ideas in mathematics are often longlessons, but is not meaningfully using the data winded and complex. collected to move pupils on. Azalia is surprised by this – this was a step for Chaim considered this an area of strength for improvement last year, and Anthony Sienna last year, particularly with a class that significantly developed his practice. she had taught in her ITT year.

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Expert teacher knowledge

As teachers move from novice to expert, they develop increasingly powerful mental models in the following broad domains:

Path – Knowledge of the pathway towards mastery of a curriculum, including: the concepts and process that pupils need to know at different stages of their journeys; how these are best represented and sequenced (Hattie, 2003; Westerman, 1991); as well as common obstacles to progress (Sadler, 2016).

Pupil – Knowledge of what their pupils know and don't know, what motivates and concerns them, and how these things change over time (Berliner, 2004, Schempp, 2002). The development of pupil knowledge is produced (and limited) by teacher assessment knowledge (Christodoulou, 2017; Wiliam, 2016).

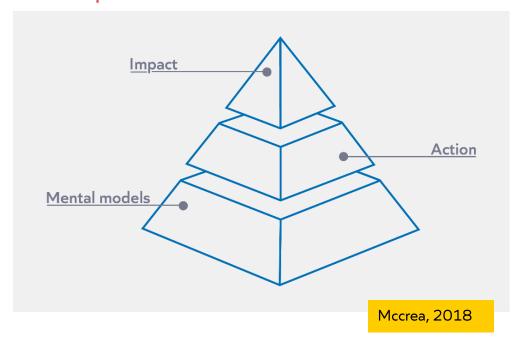
Pedagogy – Knowledge of how learning works and how to catalyse it. This area draws on fields such as cognitive and behavioural science (Deans for Impact, 2015) as well as personal experience, to help teachers build a mental model of the learner (Willingham, 2017b). It encompasses cognitive, emotional, social and cultural dimensions of learning.

Self-Regulation – Knowledge of how to analyse, evaluate and iterate their own knowledge and action towards increasing impact (Ericsson, 2015; Hattie, 2012). This includes an awareness of their own cognitive biases and how to mitigate them.

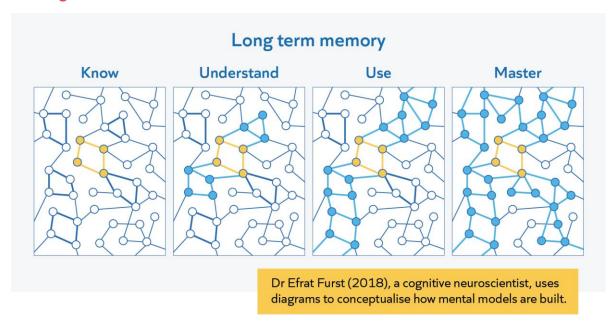
Reduce the power of any of these domains and teacher impact declines accordingly.

(Mccrea, 2018)

What is teacher expertise?



Building mental models



(Adapted from Furst, 2018. Available at: https://sites.google.com/view/efratfurst/learning-in-the-brain)

Notes:		

Flexible and inflexible knowledge

- > Inflexible knowledge is meaningful, but narrow; it's narrow in that it is tied to the concept's surface structure
- > Knowledge is flexible when it can be accessed out of the context in which it was learned and applied in new contexts

(Willingham, 2002)

Scenario Inflexible knowledge Flexible knowledge Kamara has learnt about Kamara is regularly successful Kamara is regularly successful at questioning to check for at planning check for planning check for understanding understanding in 'I10: understanding questions for questions across subjects, at Questioning'. the end of lessons, particularly important points during a lesson, In his mentoring meeting, in science lessons. and using a variety of tools. he practices writing some However, his mentor notices: This is because Kamara end of lesson questions He does not use check for understands the following to check for understanding questions principles: All subjects have important understanding for his in other subjects, such as upcoming year 2 science **English and history** knowledge, and teachers should check pupils have lesson. In the following He does not use check for lesson, he implements understanding questions understood this this successfully using Teachers should consider what at other points in the mini whiteboards. lesson knowledge is key in a lesson, He always uses miniand check this before moving whiteboards to check for Teachers should aim to collect understanding a wide sample of answers, but the way this is done might vary

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Reflection

Think about one of the ECTs you have worked with over the past year.

- > What contextual changes might your ECT be experiencing this year? E.g. change of classes, year group, subject or topic.
- > To what extent has your ECT appeared to develop their practice in one context, but have found this more challenging to apply it to other contexts?

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Reading Activity

Carbonell, K. B., Stalmeijer, R. E., Könings, K. D., Segers, M., & van Merriënboer, J. J. (2014). How experts deal with novel situations: A review of adaptive expertise. Educational research review, 12, 14-29.

Extract 1

1. Introduction

Today's work environments are characterized by increasing complexity due to higher levels of required knowledge and task volatility (Howard, 1995; Molloy & Noe, 2009; Tannenbaum, 2001). It is no longer sufficient to be an expert in one domain, but employees need to be able to combine different specializations (Pink, 2006), adapt to changes in their domain (Smith, Ford, & Kozlowski, 1996), and develop their expertise and become proficient in other domains (van der Heijden, 2002). In short, they must be able to deal effectively with novel situations and problems. Therefore, flexibility at the workplace becomes a critical ingredient for career success (van der Heijden, 2002). While some people quickly overcome changes in work requirements by inventing new procedures and using their expert knowledge in novel ways (Hatano & Inagaki, 1986; Holyoak, 1991), others do not possess this ability and find themselves thrown back performing as a novice. This ability to quickly get accustomed to change has been called adaptive expertise (Hatano & Inagaki, 1986).

Adaptive expertise is generally seen as important, but its characteristics and development are ill understood. Achieving a better understanding of the concept of adaptive expertise is necessary to design learning activities that contribute to its development. Therefore, the aim of this systematic review is to establish what the characteristics of adaptive expertise are and with which training and task characteristics it flourishes. By analyzing the characteristics that distinguish adaptive expertise from routine expertise, it will become possible to deduct what learning activities lead to it.

Hatano and Inagaki (1986) first coined the term adaptive expertise and contrast it with routine expertise. They conceptualize that both types of expertise comprise the same extent of domain knowledge and the ability to perform flawless in familiar situations. However, the difference becomes apparent once confronted with an unfamiliar situation: A situation in which the task, method or desired results are not known in advance (Ellström, 2001). While individuals with routine expertise struggle with the new demands, adaptive expertise allows for easily overcoming the novelty and quickly regaining a high level of performance thanks to a knowledge representation which allows for flexibility (Schwartz, Bransford, & Sears, 2005). In contrast to routine expertise, individuals with adaptive expertise possess the knowledge of why and under which conditions certain methods have to be used or new methods have to be devised.

Various authors studying adaptive expertise have provided numerous descriptions with features that fall apart in three groups. First, adaptive expertise entails all the basic components of routine expertise (e.g., Fisher & Peterson, 2001; Hatano & Oura, 2003; Martin, Rivale, & Diller, 2007; Mylopoulos & Woods, 2009; Varpio, Schryer, & Lingard, 2009). Second, adaptive expertise is marked by better developed meta-cognitive skills than routine expertise (e.g., Crawford, Schlager, Toyama, Riel, & Vahey, 2005; Martin, Petrosino, Rivale, & Diller, 2006). Third, adaptive expertise is set apart through abilities such as flexibility, ability to innovate, continuous learning, seeking out challenges, and creativity (e.g., Barnett & Koslowski, 2002; Crawford et al., 2005; Hatano & Oura,

2003; Martin et al., 2006, 2007; Mylopoulos & Scardamalia, 2008; Varpio et al., 2009). These characteristics point to two important facets of adaptive expertise. Firstly, it develops out of routine expertise. This is based on the first characteristic and implies that both forms of expertise are observable through accurate and efficient performance on domain-relevant and familiar tasks. It is postulated that individuals with routine expertise maintain their performance but halt their learning (Chi, 2011) and thus do not further develop into the stage of adaptive expertise. Secondly, Hatano and Inagaki (1986) suggest that adaptive expertise is after all domain-dependent because it is through accumulated experiences that adaptive expertise develops. In line with this conceptualization, researchers typically define the situation in which adaptive expertise is beneficial over routine expertise as changes in work and/or job task requirements (Allworth & Hesketh, 1999; Blickle et al., 2011; Griffin & Hesketh, 2003), changes in the complexity of situations (Chen, Thomas, & Wallace, 2005), changes from usual to unusual situations (Joung, Hesketh, & Neal, 2006), or changes from common to exceptional situations (Neal et al., 2006).

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Starting from our preliminary description of adaptive expertise and how research on adaptive expertise differs from expert performance research, a systematic literature review was conducted to detail characteristics of adaptive expertise and the environments in which individuals with a high level of adaptive expertise excel. We aim to answer four research questions. To create a well-founded conceptual understanding of adaptive expertise, the aim of the first two questions is to pinpoint which learning and personality-related factors are characteristic for adaptive expertise and not for routine expertise:

- 1. What learner characteristics (knowledge, skills, regulation processes, and past experience) influence adaptive expertise?
- 2. What personality factors influence adaptive expertise?

The goal of the latter questions is to discover which environmental factors benefit behaviors indicating adaptive expertise:

- 3. What task and training characteristics (e.g., instruction, task complexity) influence adaptive expertise?
- 4. What characteristics of the learning climate (e.g., tolerance of mistakes, supervision) influence adaptive expertise?

Extract 1 questions:

1. How is adaptive expertise defined, and how is it different to routine expertise?

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2. Why is adaptive expertise likely to be important for teachers to increasingly develop?

Extract 2

3.2. What learner characteristics influence adaptive expertise?

The learner characteristics identified in the reviewed articles refer to four categories: domain knowledge, skills, regulation processes, and past experience [...].

3.2.1. Domain specific knowledge and skills

Domain knowledge refers to declarative knowledge (knowing that), procedural knowledge (knowing how) and conditional knowledge (knowing when and where) individuals need to possess in order to perform in a specific domain (Alexander, 1992). Experts and novices have different knowledge representation (extent, organization, abstraction, and consolidation) which influence how they retrieve information (Chi, 2006) and thus solve problems (Schwartz et al., 2005).

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The following conclusions regarding domain specific knowledge and skills can be made: Firstly, knowledge extent is important for adaptive expertise. Secondly, the manner in which this body of knowledge is organized plays an even greater role for adaptive expertise. Adaptive expertise results in the organization of knowledge, which makes it easy to be applied to various situations. Thus, the knowledge representation, in terms of organization, abstraction, and consolidation, is decontextualization, weakening the link between situation and solution. Through this, it is easier for individuals to apply a known solution to a new situation. Therefore, declarative knowledge has a stronger impact on adaptive expertise than contextual knowledge.

3.2.2. Domain-independent skills

Several studies report on domain-independent skills such as cognitive flexibility and analogical problem solving.

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The findings presented in the above section supports the hypothesis that analogical problem solving skills and abstract reasoning skills positive relate to adaptive expertise. The ability to represent problems in such a way that analogies between domains can be made makes it possible to find solutions for novel problems.

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3.2.3. Regulation processes

Regulation encompasses cognitive, affective and behavioral processes through which learners monitor their learning processes and the progress they make (Cannon-Bowers & Bowers, 2009). The investigated regulation processes in the context of adaptive expertise are self-efficacy, goal-setting and goal achievement, and regulation of emotions.

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The reviewed studies provide evidence that a number of regulation processes are important for adaptive expertise. Self efficacy for the task as well as goal-setting and achievement seem to have a positive impact on the ability to deal with novel problems. Emotional regulation needs to be further researched before the results can be generalized.

3.2.4. Past experience

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The results regarding past experience indicate that unpredictable situations and experience with learning activities are beneficial for adaptive expertise, whereas experience with other people do not influence adaptive expertise. Other forms of experiences have not been sufficiently studied to draw conclusions.

Extract 2 question:

3. What factors seem to have a positive impact on learners developing adaptive expertise? What are the implications of these for supporting ECTs?

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Extract 3

4. Discussion

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The original conceptualization of adaptive expertise can be refined in the following point, addressed by the first two research questions: Adaptive expertise has similar, but not the same, basic components than routine expertise. They share the same extent of domain knowledge and skills, but differ in their knowledge representation. These representational differences have been shown to lie within the organization and abstraction of knowledge. Only partial support could be found for the other two points, higher meta-cognitive skills and specific abilities, mentioned in the definition of adaptive expertise: Some regulative processes have been addressed, but apart from self-efficacy to perform a task, no other factors has shown consistent result or researched often enough to allow

generalization. Regarding specific abilities, the review has shown that general cognitive abilities and analogical problem solving are important elements of adaptive expertise. New characteristics of adaptive expertise not mentioned previously are the importance of being confronted with novel situations and learning new tasks. Past experience related to dealing with other people and their viewpoints does not relate to adaptive expertise.

Research questions 3 and 4 dealt with task, training, and environmental factors relevant for adaptive expertise. The review provides clear evidence that adaptive expertise is related to asking individuals to develop their own solution strategy. This may take the form of unguided exploration or other forms of active learning styles. In such learning formats the possibilities for making errors is great, which further benefits adaptive expertise if a link is made between the errors and the to-be-learned knowledge. Establishing this link leads to deeper understanding of the domain, resulting in a knowledge representation beneficial for adaptive expertise. Lastly, the findings indicate that adaptive expertise is related to supportive supervisors.

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While analyzing the studies, it became clear that adaptive and routine expertise should be related to different knowledge representations. These differences in representation result in the superior performance in novel situations. Routine expertise is limited by its lack of awareness of the context-specificity of its knowledge. In addition, they may lack cognitive and/or analogical problem solving abilities. This results in individuals with routine expertise not knowing how to deal with novel situations. This assumption is supported by the evidence presented in the third research question on task and training characteristics. Activities should stimulate learners to explore the topic and encourages errors. This allows individuals to try out different solution methods and thus gain a better understanding of the domain (Hatano & Inagaki, 1986). Variety in practice aids the creation of a flexible knowledge base and is thus related to adaptive expertise (Hatano & Inagaki, 1986; Van Merriënboer, Jelsma, & Paas, 1992). In the same manner, a work environment which provides a variety of tasks also leads to a flexible knowledge base.

Extract 3 question:

4. What tasks or activities seem to positively influence adaptive expertise?

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Check for understanding

Which of the following statements are true?

- a) Teachers who have been initially introduced to a new idea will be able to easily use it in a variety of contexts
- b) Once an idea is understood in long-term memory, it can be easily drawn on in a variety of contexts
- c) Teachers who have built expertise in one context will be able to apply it in other contexts
- d) Practicing using knowledge or skills in different contexts can make it easier to use in other contexts

Reflection

Think again about one of the ECTs you have worked with over the past year.

Which areas are priorities for further developing their mental models in year 2? You could consider:

- > Areas where they appear to have more limited mental models
- > Areas where they appear to have developed some expertise in a particular context but struggle to apply it to other contexts
- > Areas where they appear to demonstrate expertise in a range of contexts

Notes:		

Section 3: Adapting the coaching model

Success criteria

- > Consider prior knowledge
- > Be intentional about purpose
- > Draw attention to deep structures
- > Ensure multiple rounds of practice and feedback

Notes	

Increasing variation

- Visible symptom: an ECT is struggling to apply their knowledge across different contexts, such as to a different class, subject, topic or lesson moment.
 Their understanding is perhaps closely tied to the context through which they first learnt this knowledge.
- > Variation of context is where ECTs are supported to practice in a range of contexts, in order to 'decontextualise' their understanding from the context it was first introduced in.

Varying the conditions of practice

Example 1

Chynia is a history teacher in her second year. As it is the start of the year, her mentor decides to set her a step on how she diagnoses and responds to pupil emotions as they enter the classroom. Her mentor asks her to focus on her year 10 class, who sometimes appear stressed. Chynia had strong entry routines last year, and so, during practice, meets the step success criteria quickly. Chynia appears unsure about how she could adapt this step though, so her mentor asks her to practise this step with her year 8 class, who are more boisterous. Her mentor focuses Chynia's attention on the success criteria for the step, and gets her to practise until she is repeatedly successful in this context too.

Example 2

Wade is in his second year on the programme. He is relatively confident at modelling for pupils during practical lessons such as PE, does not always apply this knowledge in other lessons. His mentor wants Wade to develop his knowledge of this step further. During practice, his mentor asks Wade to plan how he will model in an upcoming art lesson

how he will model in an upcoming art lesson where pupils will be drawing a still life, using the success criteria attached to the step. He is successful with this, so his mentor then asks him to plan a model for an upcoming English lesson, where pupils will be writing a letter. Wade's mentor reminds him of the success criteria attached to the step, and after a first draft, gets him to re-draft part of his model to meet one of these criteria.

Success criteria	Notes
Consider prior	
knowledge	
Be intentional	
about purpose	
about purpose	
Draw attention	
to deep	
structures	
Ensure multiple	
rounds of	
practice and	
feedback	

Adding complexity

- > Visible symptom: an ECT is regularly successful with a step, both in practice, and in the classroom.
 - However, an ECT seems to struggle to successfully implement this step when events in the classroom do not mirror practice (for example, if pupils do not respond in the expected way) or when they are focused on practicing and implementing a different step.
- > Adding complexity can be understood as intentionally increasing the difficulty of practice in order to support ECTs to consider how they might respond or adapt their approach.

Planning for unpredictability

Example Non-example Dante is effectively practising a step on using Sumeya is practising a step on using anonymous reminders to address low-level clear signals to get pupils' attention and is repeatedly meeting the success criteria. For disruption, and still needs to focus on some of the next round of practice, Dante's mentor asks the attached success criteria. For the next him to prepare his next steps if some pupils do round of practice, Sumeya's mentor decides to not act on this signal immediately. Dante's role-play a pupil who is persistently disruptive. mentor chooses this variation as he knows this Sumeya's mentor chooses this variation to see is a common challenge that teachers face in if Sumeya can think beyond the step too. relation to this step. In the practice, Sumeya struggles to meet he In the practice, Dante is able to respond success criteria or respond to the effectively. His mentor asks him to reflect on unpredictability. This is also something the adaptions he made to his practice, but also Sumeya's mentor notices when she observes how he met the success criteria. They agree her lesson the following week. that Dante could strengthen his use of one of the success criteria, and so do another round of practice.

Success criteria	Notes
Consider prior knowledge	
Be intentional about purpose	

Draw attention to deep structures	
Ensure multiple rounds of practice and feedback	

Use of questioning

> Visible symptom: an ECT is improving their practice, or is able to demonstrate effective practice with a step.

However, it is unclear whether they have a secure understanding of the purpose that sits behind the step, which would inform their understanding of how they might use or apply the step in a range of contexts.

Questioning is an important part of instructional coaching. The types of questions that mentors ask can support ECTs to reflect on the purpose of a step, and how it might be used or adapted for an identified outcome.

Questioning

- > Encourage ECTs to reflect on their current and target practice
 - I noticed that... what can you tell me about it? What impact did this have on pupil learning?
 - What is the difference between my model and your current practice?
 - O Why do you think pupils responded in this way?
 - o Can you use the criteria to explain what was effective about my model?
- > Encourage ECTs to make connections in their knowledge
 - How did your practice help you to meet the success criteria of the step?
 - O Where and when else might you use this step?
 - When might this step not be appropriate to use?

Success criteria	Notes
Consider prior	
knowledge	
knowledge	

Be intentional	
about purpose	
D '' ''	
Draw attention	
to deep	
structures	
Ensure multiple	
rounds of	
practice and	
feedback	
D (1 - 4)	
Reflection	
> Can you thi	nk of examples in your existing mentoring when you have already adapted the
coaching m	
coaciiiig ii	loue!:
> Think abou	t one of the ECTs you have worked with over the past year. How might you adapt
the coachir	ng model for your ECT in year 2?
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Notes:	

Section 4: Adapting the coaching model – in practice

Instructional coaching quiz

1.	Which	of the following are key features of instructional coaching?
	a)	Roleplay
	b)	Bite-sized steps for improvement
	c)	A regular routine
	d)	Low-stakes practice & feedback
2.	What a	re the key elements of deliberate practice?
3.	Explair	how instructional coaching helps build teachers' mental models.

Case study 1

Nick is coaching Leah, a teacher at the start of her second year of induction. Leah has made strong progress during her first induction year. Having completed her ITT in the same school she also has considerable knowledge of the school procedures and culture. Although Leah built effective routines for behaviour last year, Nick has decided to revisit the behaviour strand for at least the first half term of the second year. This will provide Leah with support in transferring and adapting her routines to her new class(es), as well as the opportunity to practise some of the skills in modules that were not covered in year 1. Coaching Leah on the same area for a period of time will help Leah to build her sense of self-efficacy in this area; the sense of success will also build her confidence.

So far this term, informed by Leah's diagnostic, Leah and Nick have worked on re-establishing routines (B2) and directing pupils' attention during modelling (B7). Leah's most recent self-study was B10: Independent practice, which she hadn't studied in year 1. From talking to Leah and watching her teach this term, Nick had already thought that she might benefit from some support with setting up independent practice. He decided to observe a segment of the lesson where Leah was moving from modelling to independent practice; this would give him a good opportunity to identify whether Leah really did need to work on setting up independent practice next.

In the lesson, Nick noticed that when Leah set pupils going on an independent task, some of them got stuck quickly and couldn't resolve their problems without Leah's help. Leah's instructions for the task and her explanation beforehand were both clear – she was achieving her previous action step of directing pupils' attention to the key aspects of her model. Leah also checked for understanding using a multiple-choice question. Nick noticed that the pupils who were able to get on with the task were using the worked example on the board and looking back through their notes for support. He decided to look at the development area "Establishing clear expectations for independent practice" and narrows his focus to "Teacher gives pupils strategies to tackle the work if they think they are stuck before resorting to asking the teacher". He decides to start with the most straightforward step as he knows he can always add challenge into the practice. Nick chooses the step: "Before pupils do independent work, give them one strategy they should use before asking you for help with tackling the content of the task, e.g. refer to the example on the board."

The success criteria for the action step are:

- > Concrete: 'Look at the example on the board.' NOT 'Think about what I just taught you.'
- > Applicable: teacher gives a strategy that will be helpful for pupils across tasks.

Case Study 1: 'Introduce' and 'Model'

Step	Success criteria	Met? (Y/N)
Sharing the	The mentor shares the new action step with the teacher and	
step	links it to the module.	
Delivering the	Demonstration: The mentor provides a demonstration of the	
model	technique/strategy.	
	Authentic: The mentor models as though delivering to the class,	
	without 'breaking out' of role.	
	Exposes thinking: The mentor uses a 'whole-part-whole'	
	structure: first sharing the whole model, then breaking it down	
	to show the success criteria, then modelling whole action step.	
The model	All criteria: The model exemplifies all the success criteria for the	
itself	action step (below).	
	Nothing extra: The model does not contain unnecessary	
	additional information.	
	Concrete: 'Look at the example on the board.' NOT 'Think	
	about what I just taught you.'	
	Applicable: teacher gives a strategy that will be helpful for	
	pupils across tasks.	
Adapting the	Consider prior knowledge: The mentor considers ECTs' prior	
coaching	knowledge before making any adaptations. This might include	
model	reflecting on ECTs' practice, or asking questions to build a	
	picture of their current understanding	
	Be intentional about purpose: The mentor identifies the	
	purpose for any adaptations to the coaching model, and	
	communicates this to their ECT	
	Draw attention to deep structures: The mentor draws their	
	ECT's attention to the success criteria of a step during any	
	adaptation of practice	

Adaptation: use of questioning

- > What questions did the mentor ask to provide stretch?
- > What made them effective? (Consider the success criteria for adaptations)
- > What was the impact on the ECT?

Case study 2

We will use a similar case study to practise, but with a different action step. This time we will consider Shifa who is mentoring Frank, an ECT. Their context is similar to that of Leah and Nick from earlier.

Shifa is coaching Frank, a teacher at the start of his second year of induction. Frank has made strong progress during his first induction year. Having completed his ITT in the same school he also has considerable knowledge of the school procedures and culture. Although Frank built effective routines for behaviour last year, Frank's diagnostic quiz highlighted that Frank struggled to recall some of the core ideas from this strand. Shifa has decided to revisit the behaviour strand for at least the first half term of the second year. This will provide Frank with support in recalling key ideas, as well as transferring and adapting his routines to his new class(es), and the opportunity to practise some of the skills in modules that were not covered in year 1. Coaching Frank on the same area of teaching for a period of time will help Frank to build his sense of self-efficacy in this area; the sense of success will also build his confidence.

Frank has discussed with Shifa that although he feels that he is successful at getting pupils to follow his instructions, he'd like to get them to do this more quickly, to make better use of the lesson time. This helped Shifa focus on a particular aspect of Frank's practice when she watched his lesson.

In the lesson, Shifa noticed that when Frank gives instructions, he gets pupils' attention successfully and is positioned so he can check they follow his instructions. Shifa agreed with Frank that some pupils are taking longer than they need to, and thinks that module B4: Directing Attention might contain some techniques that Frank might find effective. She thinks that he can utilise the norms he has set in the classroom to push them to do this. She decided to look at the development area "Using positive reinforcement and social norms" and narrows her focus to "Teacher encourages pupils to quickly follow their instructions using repeated positive reinforcement and time limits". She decides to start with the most complex action step as Frank is already using some positive reinforcement. Shifa chooses the step: "Encourage pupils to follow your instructions quickly by using a time limit in your instructions and quickening the pace of your voice as you reinforce the behaviours you see."

The success criteria for the step are:

- > Timed: the instructions state the specific actions pupils need to take in an ambitious but achievable time limit.
- > Build reinforcement: teacher calls out the behaviour and continues highlighting more and more pupils doing it, e.g. "Jamie has his sheet stuck in... now the front row all do...'
- > Quick-fire: the pace of reinforcement quickens as more pupils do the behaviour, highlighting that following instructions is the social norm.
- > Measured: teacher shows appreciation for positive behaviour but does not treat it as an accomplishment when it is not, e.g. 'Front row have their pens moving.' NOT 'Fantastic! It is great to see the front row with their pens moving.'

Case Study 2: 'Introduce' & 'Model'

Step

Encourage pupils to follow your instructions

Planning the 'Introduce' and 'Model' section

You have up to 5 minutes to plan your model to deliver to your partner and plan the questions you will ask them to support them to analyse the difference between the model and their practise.

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Success criteria for your model:

Space to plan your model:

In general:

- > **Demonstration**: The mentor provides a demonstration of the technique/strategy.
- > **Authentic**: The mentor models as though delivering to the class, without 'breaking out' of role.
- > **Exposes thinking**: The mentor uses a 'whole-part-whole' structure: first sharing the whole model, then breaking it down to show the success criteria, then modelling whole action step.
- > **All criteria**: The model exemplifies all the success criteria for the action step (below).
- > **Nothing extra**: The model does not contain unnecessary additional information.

For this model in particular:

- > **Timed**: the instructions state the specific actions pupils need to take in an ambitious but achievable time limit.
- > **Build reinforcement**: teacher calls out the behaviour and continues highlighting more and more pupils doing it, e.g. "Jamie has his sheet stuck in... now the front row all do...'
- > **Quick-fire**: the pace of reinforcement quickens as more pupils do the behaviour, highlighting that following instructions is the social norm.
- > **Measured**: teacher shows appreciation for positive behaviour but does not treat it as an accomplishment when it is not, e.g. 'Front row have their pens moving.' NOT 'Fantastic! It is great to see the front row with their pens moving.'

The practice tasks on Steplab are:

- > Access the resources for an upcoming lesson.
- > Script a set of instructions you will need to deliver that lesson and include a time limit, e.g. 'When I say go, you will pack your equipment in your bags and stand behind your desks silently. Let's see if we can get it down to 15 seconds.'
- > Select a behaviour you expect some pupils will do immediately and others will need some support remembering to do.
- > Script statements you will say that would show pupils more and more of them are following your instructions quickly, e.g. 'Karen and Jason have tucked their chairs under neatly... So has everyone on the front table...'
- > Stand up in role to practise delivering the instruction, scanning the class and delivering the quick, positive reinforcement as if the pupils were present.

Space to plan questions you might choose to ask in the meeting, and why:

Default prompts:					
I noticed that what can you tell me about it? What impact did this have on pupil learning?					
What is the difference between my model and your current practice?					

Note to person acting as the teacher, use the case study to guide your answers to the questions.

Practising the 'Introduce' and 'Model' section

Timing: 10 minutes per round

- > **5 minutes**: Person one as the mentor shares the action step and the model and leads the analyse conversation with person two as the teacher
- > **2 minutes**: Person two provides feedback to person one based on the success criteria
- > **3 minutes:** Person one re-practises the relevant section based on the feedback to improve
- > Swap roles

Step Sharing the action step	Success criteria You share the new action step with the teacher and link it to the module	Put a tick in this box if the success criteria have been met and a cross if it has not	
		Round 1	Round 2
Delivering the model	Demonstration: You provide a demonstration of the technique/strategy		
Delivering the model	Authentic: You model as though delivering to the class, without 'breaking out' of role		
	Exposes thinking: You use a 'whole-part-whole' structure: first you share the whole model, then break it down to show the success criteria, then model the whole action step.		
The model itself	All criteria: The model exemplifies all the success criteria for the action step (below)		
	Nothing extra: The model does not contain unnecessary additional information		
	Timed : the instructions state the specific actions pupils need to take in an ambitious but achievable time limit.		
	Build reinforcement: teacher calls out the behaviour and continues highlighting more and more pupils doing it, e.g. "Jamie has his sheet stuck in now the front row all do'		
	Quick-fire: the pace of reinforcement quickens as more pupils do the behaviour, highlighting that following instructions is the social norm.		

	Measured: teacher shows appreciation for positive behaviour but does not treat it as an accomplishment when it is not, e.g. 'Front row have their pens moving.' NOT 'Fantastic! It is great to see the	
	front row with their pens moving.'	
Adapting the coaching model	Consider prior knowledge: You consider ECTs' prior knowledge before making any adaptations. This might include reflecting on ECTs' practice, or asking questions to build a picture of their current understanding	
	Be intentional about purpose: You identify the purpose for any adaptations to the coaching model, and, where possible, communicate this to your ECT	
	Draw attention to deep structures: You intentionally draw your ECT's attention to the success criteria of a step during any adaptation of practice	
What went well –		
Next time try –		
14ext time try =		

Case Study 1: 'Practise Step'

Section	Success Criteria	Put a tick in this box if the success criteria has been met and a cross if it has not
Setting up the	The mentor explains how the practice will run.	
practice	The mentor provides the success criteria that	
	they will provide feedback on the basis of.	
During the	The mentor scaffolds the practice, firstly by	
practice	asking the teacher to script and read out the	
	script and then asking the teacher to stand up and practise.	
	The mentor provides feedback related to the	
	success criteria and asks the teacher to re-	
	practise.	
	Concrete: 'Look at the example on the board.'	
	NOT 'Think about what I just taught you.'	
	Applicable: teacher gives a strategy that will be	
	helpful for pupils across tasks.	
Adapting the	Consider prior knowledge: The mentor	
coaching model	considers ECTs' prior knowledge before making	
	any adaptations. This might include reflecting on	
	ECTs' practice, or asking questions to build a	
	picture of their current understanding	
	Be intentional about purpose: The mentor	
	identifies the purpose for any adaptations to the	
	coaching model, and communicates this to their	
	ECT	
	Draw attention to deep structures: The mentor	
	draws their ECT's attention to the success	
	criteria of a step during any adaptation of	
	practice	
	Ensure multiple rounds of practice and	
	feedback: the mentor ensures that ECTs have	
	time to practise, receive feedback, and re-	
	practise	

Adaptation: adding unpredictability

- > How did the mentor add unpredictability to the practice?
- > What made this effective? (Consider the success criteria for adaptations)
- > What was the impact on the ECT?

Case Study 2: 'Practise Step'

Firstly, you are going to script your instructions. After that I will ask you to read through them and check them against the success criteria. Then I will ask you to deliver them in role as a teacher.

I will then give you feedback based on the success criteria and you will re-practise based on the feedback.

The success criteria are:

- > **Timed**: the instructions state the specific actions pupils need to take in an ambitious but achievable time limit.
- > **Build reinforcement**: teacher calls out the behaviour and continues highlighting more and more pupils doing it, e.g. "Jamie has his sheet stuck in... now the front row all do...'
- > **Quick-fire**: the pace of reinforcement quickens as more pupils do the behaviour, highlighting that following instructions is the social norm.
- > **Measured**: teacher shows appreciation for positive behaviour but does not treat it as an accomplishment when it is not, e.g. 'Front row have their pens moving.' NOT 'Fantastic! It is great to see the front row with their pens moving.'

Frank's instructions (to be played by the person being the teacher)

When I say go, I want you to pass the sheets backwards down your row. Let's see if we can get this done in under 15 seconds.

- 1. Person nearest the window takes one sheet, passes the rest to their partner.
- 2. Partner takes one sheet and passes the rest behind them.
- 3. Repeat until everyone has a sheet.
- 4. Keep any spare sheets at the back.
- 5. Go!

Frank	kwili	l use a	countd	lown c	and	provid	e rein	forcemer	nt af	ter d	aivino	the	instri.	ıctions
, , a, ,,		use u	Counta	CVVIII	aria	pioria	CICIII	O'CCITICI	ic G	CCI	<i>g.v</i> 9	CITC	1115614	100113

Space for any edits you wish to the practice				

How will you practise?

Tell your partner whether it is most useful for you to focus on stretching a high-performing ECT – if it is then they will attempt to practise to a high standard straight away, if not then they will plan to make mistakes.

Timing: 10 minutes per round

- > **6 minutes:** Person one will run the practise. For the purpose of the practise when asked by the mentor to write down your instructions, as the teacher, please just say completed, in order to save time (as you will be using the instructions on the previous page).
- > 1 minute: Person two will provide feedback based on the success criteria
- > **3 minutes:** person one will re-practise a relevant section based on the feedback
- > Swap roles

Success criteria

Section	Success Criteria	Put a tick in this box if the success criteria has been met and a cross if it has not			iteria has
		Round 1	Round 2	Round 3	Round 4
Setting up the practice	The mentor explains how the practice will run				
	The mentor provides the success criteria that they will provide feedback on the basis of				
During the practice	The mentor scaffolds the practice, firstly by asking the teacher to script and read out the script and then asking the teacher to stand up and practise				
	The mentor provides feedback related to the success criteria and asks the teacher to re-practise				
	Timed : the instructions state the specific actions pupils need to take in an ambitious but achievable time limit.				

	Build reinforcement: teacher calls out the behaviour and continues highlighting more and more pupils doing it, e.g. "Jamie has his sheet stuck in now the front row all do' Quick-fire: the pace of reinforcement quickens as more pupils do the behaviour, highlighting that following instructions is the social norm.		
	Measured: teacher shows appreciation for positive behaviour but does not treat it as an accomplishment when it is not, e.g. 'Front row have their pens moving.' NOT 'Fantastic! It is great to see the front row with their pens moving.'		
Adapting the	Consider prior knowledge:		
coaching model	You consider ECTs' prior		
(if relevant)	knowledge before making any adaptations. This might include reflecting on ECTs' practice, or asking questions to build a picture of their current understanding		
	Be intentional about purpose: You identify the purpose for any adaptations to the coaching model, and, where possible, communicate this to your ECT		
	Draw attention to deep structures: You intentionally draw your ECT's attention to the success criteria of a step		

	during any adaptation of practice		
	Ensure multiple rounds of practice and feedback: You ensure that ECTs have time to practise, receive feedback, and re-practise		
What went well –			
Next time try –			

Section 5: Implementation

Preparing for year 2

Do	os:	Don'ts:
>	Do make sure that you and your ECT(s) have timetabled time to meet. Remember that the funding covers a 5% reduction in timetable for early career teachers, and time for mentors to meet with teachers.	> Don't cram in additional self-study or coaching sessions in the summer term this academic year. There is no need to 'finish' the content in Year 1. In fact, this is likely to be actively unhelpful. All the content will continue to be available in Year 2.
>	Do spend time reflecting on the first year of the programme, individually and together. What went well? Did you effectively build habits? What would you do differently?	Don't spend time 'collecting evidence' for the content within the ECF. The ECF is an entitlement to support and is not linked to assessment for passing induction.

Enabling conditions

- > Mentor/teacher relationship
- > Time
- > Leadership support
- > School culture
- > ECT subject/phase knowledge
- > Effective habits and routines for coaching (and ECT study)

Enabling conditions: review

What might your next steps be in order to ensure that the enabling conditions are in place in school?

	Definitely in place?	If not, action needed?
Has time been protected for		
you and your ECT to meet at		
least fortnightly?		
Is this on both your timetables?		
Is support for ECTs prioritised		
by school leadership?		
Is regular coaching already a		
well-developed habit? If not,		
what are your next steps		
towards embedding it as a		
habit? For you? For your ECT?		
Are you aware of any additional		
support your ECT is likely to		
need, such as additional subject		
knowledge support?		

Any other reflections:	
How did you overcome any challenges around enabling conditions in year 1?	
Constant	
Space for notes:	

(Re-)contracting

- > Did you use the contracting process to set up your ways of working in September? Did you recontract at any point during the year?
- > How did addressing the contracting questions (below) in advance set the relationship up effectively?
 - > What do you want from this relationship?
 - > Where might you need help?
 - > Consider a good working relationship you've had previously. What did this look like?
 - > When things go wrong, what does that look like on your end? How do you behave?
 - > When things go wrong as they inevitably will- how shall we manage that?
- > If you didn't make use of the contracting structure, what did you do to successfully build a relationship with your teacher?
- > Whether you used the contracting structure or not, is there anything you would do differently, or plan to address at the start of the second year?

Discussion

- > What areas of classroom practice is your ECT likely to be able to take greater ownership of in year 2?
- > What areas are they still likely to need a greater degree of scaffolding and support?

The tring the free tries and the start fear a trial and the tries to access the	focus to start year 2 that allows them to f	eel successtul':
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Action-planning for year 2

- > When and where will you meet for coaching?
 - o If you can't decide this yet, when will you decide?
- Where do you think your ECT is demonstrating some expertise? Or where do you think your ECT might be struggling?
 - What might your focus be in September?
- > What will you do to re-contract with your ECT? When will you do this?

What	When	Where	Notes
Example:	Wednesday 3:30pm	Sean	
Fortnightly coaching	(will use timetabled	(ECT)'s	
meeting	reduction for other tasks)	classroom	
Example:	Half-term 1	N/A	Sean needs to re-
Revisit routines, consistency			establish himself with
and instructions			new pupils

>	•	What are your key takeaways from today's session?

Frequently Asked Questions - Step Selection

Q: Can I choose any step for my ECT to work in in their second year?

A: Steps need to build on ECTs' prior knowledge. If they don't, we run the risk that ECTs will misapply the step as they don't understand its purpose. The weekly self-study content that ECTs engage with is a good proxy for the prior knowledge they are likely to have. If an ECT has engaged with the corresponding self-study, then yes, they may also benefit from a step set from this area.

Q: Do I need to move onto a new step or module every fortnight?

A: No, it is a misconception to think that we must move on to a new step or area each coaching cycle, or that there is no room for improvement when a step has been achieved. We can revisit previously achieved steps, or maintain a continued focus on a step or area over a period of time. Doing so can support ECTs to recall key ideas, and build self-efficacy. We can also set multiple steps in one area over a number of weeks, or adapt the coaching model to respond to ECTs' growing expertise. In short, there is lots of flexibility in which steps you set, when you choose to set them, if you choose to revisit or stick with a step, and how you build in additional support and challenge.

Q: How do I know what the highest-leverage step will be to support my ECT to improve?

A: It is a misconception to think there is only one 'correct' step for improvement. It is actually unlikely to be this clear-cut. Instead, there will be a number of different steps that are likely to be useful for an ECT at any given point. As mentors, we should use our professional judgement, knowledge of our ECT and our context to choose a step that is likely to support them to improve their practice. We can also use the diagnostic tool to identify areas where ECTs have built a significant amount of knowledge, or where they might have gaps and misconceptions. This might inform what we choose to focus on or revisit as part of the fortnightly coaching cycle.

Q: What is the process of selection for a step in year 2? There is so much choice!

A: We advise that, at the start of your ECT's second year, they complete the diagnostic and have a meeting with you to discuss their self-study priorities for the year. This is also a great opportunity to consider what you might want to focus on as part of coaching. As the person who knows your ECT's development best, when choosing steps, you will need to make some decisions about what is likely to be most beneficial for your ECT. As a general principle, it can beneficial to align the fortnightly step with the self-study that your ECT is engaging with – whether this is completing unfinished modules, revisiting modules as per the results of the diagnostic tool, or completing stretch modules (at the end of each of the stretch modules, steps are outlined which correspond to the content of the module). It can also be beneficial to sustain a focus over a period of time (such as on the steps in a module or strand). However, you might identify gaps, misconceptions or areas of development as part of your observation that are likely to need to be addressed – you can flex to this. You might also identify that your ECT seems to be struggling to apply steps they were relatively confident with last year or in a previous practice – again, you can flex to this. Finally, it might be that your ECT is relatively confident in many aspects of their practice. In this case, you may want to understand their areas of focus in and beyond the programme, and consider how you can support them to develop their expertise and adaptive practice to set them up for success in the long-term.

For more information about the process of setting steps or adding challenge to the coaching cycle, visiting the Mentoring and Coaching Development Area.

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