

EARLY CAREER TEACHERS: CONFERENCE 2

Workbook

**KEEP
GETTING
BETTER**

Adaptive Teaching

Welcome to the Early Career Teachers Training Programme Conference 2 workbook. This workbook will accompany the facilitated session and help you build on your learning from the previous conference and Clinic 1, as well as compliment the study modules which you will be completing online via Steplab.

Session aims

To revisit:

- > Key information about the Early Career Teachers Programme
- > How the Early Career Teachers programme will support you to develop your expertise
- > Key principles from the science of learning

To understand:

- > How we can teach responsively and adapt to the emerging needs of pupils
- > How we can select and use assessment tools appropriately to support adaptive teaching

Today's session

Contents

Introduction	3
What is adaptive teaching?	3
Making assessment meaningful	6
What does adaptive teaching look like in practice?	21
How can we respond?	29
Action planning	32
Reflection	35
Appendix	36
Appendix 1: References and further reading from Heitink et al (2016).....	36
Appendix 2: Worked example of adaptive teaching planning proforma	42
Appendix 3: responsive teaching planning proforma blank.....	45
Bibliography	47

Introduction

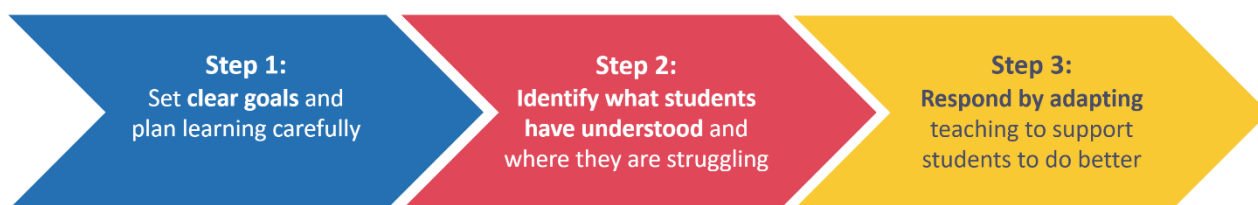
Session outcomes

- > Understand the definition of adaptive teaching
- > Know that adaptive teaching is supported by formative assessment strategies
- > Reflecting on which aspects of your current practice support adaptive teaching
- > Engage with examples of teaching practice and discussions that aim to further develop your understanding of being an adaptive teacher
- > Consider how you might implement adaptive teaching in your classroom and teaching practice

What is adaptive teaching?

“responsive teaching blends planning and teaching, based on an understanding of how students learn from cognitive science with formative assessment to identify what students have learned and adapt accordingly.”

Fletcher-Wood (2018)

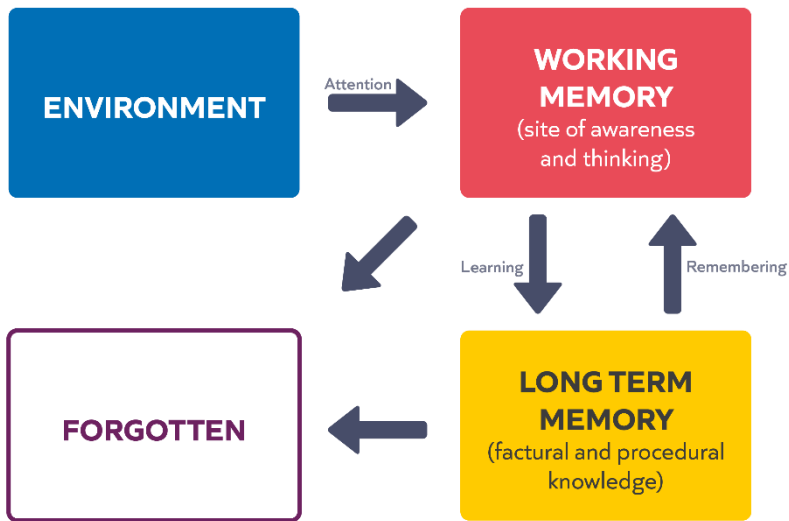


Task:

Of the three steps needed for adaptive teaching, which do you think is the most challenging for teachers in practice? Why?

Notes:

Adaptive teaching and the science of learning:



Adapted from Willingham, 2009

Retrieval Task:

Define the following terms:

- Formative assessment
- Summative assessment

How confident are you in giving an example of each?

Notes:

Assessment: definitions and examples

Formative Assessment	Summative Assessment
<p>Happens on a day-to-day basis during teaching and learning.</p> <p>Allows teachers to assess attainment and progress more frequently through consistent review and feedback.</p>	<p>Assesses pupil performance at the end of a period of time.</p> <p>There may be an assessment at the end of a unit, at the end of a term, at the end of a year or, as in the case of the national curriculum tests, at the end of a key stage.</p>

Formative Assessment	Summative Assessment
<p>Questions (written and verbal)</p> <p>Lesson tasks</p> <p>May not always be recorded</p> <p>Peer/Self Evaluation</p> <p>Using tools such as whiteboards</p> <p>Homework</p> <p>Exit tickets (Lemov, 2010)</p>	<p>Standardised Tests e.g. GCSEs</p> <p>Written test</p> <p>Practical test</p> <p>Coursework/Projects</p> <p>End of unit task</p> <p>Observation</p>

Assessment strategies vs adaptive teaching

Assessment strategies	How these strategies look when used in adaptive teaching
Using mini-whiteboards	Using mini-whiteboards as a way to identify what students are thinking, then adapting your lesson(s) accordingly.
Asking questions	Using focussed questions to elicit pupils thinking and address misconceptions before a task.
Showing and live-marking a piece of pupil work	Using a model of pupil work, ask pupils questions to draw out what makes it successful, adapting this to pupils needs.

Making assessment meaningful

“When assessment is formative, the aim is to reveal pupils’ weaknesses so the teacher can act on them. When assessment is summative, the aim is to give pupils a final grade [...]. Indeed, formative assessment is so different from summative assessment that William has said that he wished he had called AfL ‘responsive teaching’, rather than using the word assessment.”

Christodoulou (2017)

“I believed I was doing Assessment for Learning well: I shared objectives, but they were constructed hurriedly and uncritically. Students used mini-whiteboards, but I could not read thirty paragraphs at once: I was eliciting writing, not evidence of students’ learning. Assessment for Learning often seemed to prioritise techniques isolated from students’ learning: many teachers came to see it as a collection of gimmicks, not a group of principles.”

Fletcher-Wood (2018)

Discussion

How do we know pupils are learning/have learnt something?

Notes:

Reading activity

Task: Read the extracts from Heitink et al (2016) and make notes under the following guide questions:

Extract 1:

1. What are the key formative assessment approaches used in schools?
2. Of the 5 strategies identified on page 2, which do you think is hardest for teachers? Why?
3. What does the evidence/ literature say about formative assessment? What problems does this present?

Extract 2:

1. What are the challenges and barriers to successful implementation of assessment for learning? (what do teachers need to be able to do to implement it effectively in their classrooms?)

Extract 1 from A systematic review of prerequisites for implementing assessment for learning in classroom practice (pg 1-2)

M.C. Heitink, F.M. Van der Kleij, B.P. Veldkamp, K. Schildkamp, W.B. Kippers

Educational Research Review, Volume 17, February 2016, Pages 50-62

Background

Assessment plays a crucial role in education. A distinction is often made between formative and summative purposes of assessment. Where summative assessment primarily focuses on assessing learning outcomes, formative assessment aims to gain insights into learning processes that can be used to support learning through tailored instruction and targeted feedback.

Formative assessment has been on policy agendas internationally for decades, but implementation has proven to be challenging. Although many researchers acknowledge that formative assessment can have a positive effect on learning, the proof for this is based on limited sound scientific evidence. Moreover, the differing conceptualisations of formative assessment have led to a wide variety of practices, and it is unclear which factors facilitate or hinder its implementation.

The purpose of this review was to get a sense of the prerequisites needed for the implementation of ongoing formative assessment practice that has the potential to support learning in the classroom. This study focuses specifically on a formative assessment approach called 'Assessment for Learning' (AfL), in order to gather information from studies that look at relatively consistent underlying principles and intentions that shape formative assessment uses.

The literature includes a wide range of definitions of formative assessment, each having different strategies for using evidence from assessment to enhance learning and with differing emphases on social dimensions.

For example, a phrase often used in formative assessment literature is the use of assessment evidence to provide feedback to "close the gap" between students' current performance and the goal. Definitions of formative assessment differ with respect to, for example, the specific roles of not only teacher but also the student in this process as receivers, users and providers of feedback.

Three distinct approaches have evolved over time, namely: 'data-based decision-making' (DBDM), 'diagnostic testing' (DT), and 'assessment for learning'. DBDM involves the systematic collection and analysis of data to inform decisions that focus on improvement of teaching, curricula and (school) performance. DT concerns the mapping out of individual learners' task response patterns to reveal their (possibly inadequate) solution strategies and using this as an indication of each learner's developmental stage. AfL is an approach to formative assessment that occurs as part of ongoing classroom practices, that is viewed as a social and contextual event and that focuses on the quality of the learning process. Feedback is continually incorporated in this process to guide future learning, and is aimed at the class or individual level. Students play a vital role in AfL and are expected to engage in assessing their own and their peer's learning. A major long-term goal of AfL is to foster student autonomy by helping students learn how to learn.

The publications of Black and Wiliam in 1998 on formative classroom assessment were followed by a boost in research on formative assessment, especially work on AfL, with researchers reporting effects of AfL implementation in many countries. Much of this research has been centred around the five key strategies for implementing AfL identified in Black and Wiliam's and William and Thompson's (2007) work:

1. Clarifying and sharing learning intentions or goals and success criteria;
2. Generating opportunities to effectively gather evidence of student learning through informal and formal assessment, e.g., through classroom discussions, questioning or learning tasks;
3. Providing formative feedback to students to support their learning;
4. Supporting students in acting as instructional partners through discussion and peer assessment; and
5. Activating students as agents in their own learning through self-assessment and self-regulation.

These five key strategies are based on the central notion of using assessment evidence to inform learning.

Numerous researchers have emphasised the need for deep engagement with these principles in order to achieve the ultimate goals of AfL; promote deep learning and learner autonomy.

AfL can be approached from a measurement perspective or an inquiry perspective. When approached from a measurement perspective, AfL is characterized by the use of formally gathered (quantitative) evidence about student learning to formulate feedback and to inform decisions, based on assessment activities that aim to determine whether, or to what extent, a pre-set level of performance has been achieved.

Approaching AfL from an inquiry perspective results in the use of primarily qualitative information (e.g., observations, demonstrations and conversations) to generate feedback, in a process of discovery, reflection and review. This perspective acknowledges the power of social interaction and student autonomy in enhancing student learning. Researchers have emphasised that quality implementation of AfL requires adopting an inquiry approach and an in-depth engagement with the five key strategies by both teachers and students, as an integral aspect of daily classroom practice.

Although there is evidence that AfL can help students learn, a number of studies show no to little effects on student learning. This is likely due to the ineffective implementation of formative assessment approaches, such as AfL. Engaging deeply with the underlying ideas of AfL has proven to be challenging for many teachers, for example as a consequence of constraints imposed by the particular policy context through, for instance, testing and accountability pressure.

No systematic analysis has been conducted on evidence gathered from studies of AfL and identifying factors that contribute to or hinder implementation has not been a primary focus of any review study published so far. Therefore, this review study focused on identifying relevant prerequisites for effective AfL implementation. In order to systematically gather these data from selected studies, four categories often distinguished in school evaluation literature were used: the teacher, the student, assessment and the context.

AfL literature emphasises the crucial roles of both the teacher and student in teaching, learning and assessment. The category assessment includes the means by which evidence is gathered about student learning, this covers both assessment instruments (e.g., a test or learning task) and processes (e.g. questioning and classroom discussion). The category context includes both factors internal to the school (e.g., leadership) and factors external to the school (e.g., educational policy). In practice, a sound implementation of AfL would require a balance among factors in these interrelated categories. This review was guided by the following research question:

Which prerequisites regarding the teacher, student, assessment and context need to be considered when implementing AfL in the classroom?

Extract 1 questions:

1. What are the key formative assessment approaches used in schools?

Notes:

2. Of the 5 strategies identified on page 2, which do you think is hardest for teachers? Why?

Notes:

3. What does the evidence/ literature say about formative assessment? What problems does this present?

Notes:

Extract 2 from A systematic review of prerequisites for implementing assessment for learning in classroom practice (pg 4-5)

Teacher knowledge and skills

Seventeen studies reported results regarding teachers' knowledge and skills related to AfL. Although only four studies explicitly used the term 'assessment literacy', many studies referred to assessment literacy in general; that is, the knowledge and skills teachers need to collect, analyse and interpret evidence from assessment and adapt instruments accordingly.

Results of multiple studies indicated that teachers need the ability to integrate AfL with pedagogical content knowledge (PCK) to be able to cater for their students' learning needs and provide useful feedback. Results further suggest that teachers' pedagogical knowledge (PK) and content knowledge (CK) impact their ability to provide students with useful feedback. Without understanding a concept or without knowing common misconceptions related to a subject, teachers were not able to provide accurate and complete feedback.

Teachers need to be able to create educational situations in which AfL strategies can be employed and should know the roles of students, peers and teachers in the various AfL practices. Eliciting students' thinking to reveal their learning process and common misconceptions is an important guiding strategy that teachers should master. Aschbacher and Alonzo (2006) found that using questions or directions that provide conceptual focus were most effective for eliciting students' thinking and fostering learning. This was especially true compared to overly prescriptive guidance strategies.

Other studies specifically found that 'discussion' is a pedagogy often used in AfL. Teachers should be able to foster the participation of students in discussions about their answers, expertise or feedback. Discussion can give teachers valuable insight into students' thinking, difficulties and understanding. This information can be used in adjusting instruction and providing feedback. Because AfL takes place in everyday classroom practice, such as during discussions, it was also noted that teachers need the ability to interpret information about student learning on the spot.

Moreover, teachers need knowledge and skills to develop assessments that achieve the desired purpose. This includes the ability to construct questions (used in daily classroom practice) that elicit evidence about student learning and to critically evaluate assessment instruments.

The need for teachers to have knowledge and skills regarding the use of hardware and software related to computer-based assessment has also been reported as vital. This is not specific to AfL, but is important for formative assessment in general now that ICT and assessment have become more integrated. An example specific to AfL is when teachers use computer response systems (CRS) for immediately gathering students' responses to short questions. Students discuss a question presented by the teacher with peers or think about it individually, and then report their answer using a CRS. After a histogram of responses is displayed, whole class discussion can take place. Teachers use the responses collected with the CRS and the classroom discussion for adjusting their teaching plan on the spot or revisit them for later use.

Teachers' assessment experience and confidence in their professional judgment were also identified as a feature that leads to successful implementation. Experience with AfL activities helps teachers gain a deep understanding of AfL and fosters their confidence in their instructional decisions.

Extract 2 question:

1. What are the challenges and barriers to successful implementation of assessment for learning? (what do teachers need to be able to do to implement it effectively in their classrooms?)

Notes:

Challenges and barriers to formative assessment (summarised from Heitink et al, 2016)

1. Without understanding a concept or without knowing common misconceptions related to a subject, teachers aren't able to provide accurate and complete feedback
2. Eliciting students' thinking to reveal their learning process and common misconceptions is an important guiding strategy teachers should master
3. Teachers need the ability to interpret information about student learning on the spot
4. Teachers need the knowledge and skills to develop assessments that achieve desired purpose
5. Teachers need the ability to construct questions that elicit evidence about student learning and to critically evaluate assessment instruments

Recap: learning vs performance

Learning is a persistent change in our long term memory. Learning goes on inside our minds and we cannot see this.

Performance is immediate behaviour or knowledge that can be observed and measured during and immediately after acquisition (Soderstrum and Bjork, 2015)

Poor proxies for learning (Coe, 2013)

'Easily observed, but not really about learning'

1. Students are busy: lots of work is done (especially written work)
2. Students are engaged, interested and motivated
3. Students are getting attention: feedback, explanations
4. Classroom is ordered, calm and under control
5. Curriculum has been 'covered' (i.e. presented to students in some form)
6. (At least some) students have supplied correct answers (whether or not they really understood them, could reproduce them independently or knew them already).

"Questioning is an essential part of helping students to make progress but only if it causes thinking or elicits evidence that informs our teaching."

Didau (2012)

Hinge questions: definition

Hinge questions are pre-planned questions used at key points in the lesson to diagnose if students are ready to move on.

Success criteria for planning hinge questions

When to use: at a point in lesson before pupils move on to a new concept/task

- > **What to assess:**
 - pupil understanding of key learning
 - **likely misconceptions**
- > **How to design:**
 - sufficient structure to provide a clear response
 - accessible to all pupils
 - swift to answer and quick to review
- > **How to use:**
 - to inform next steps in teaching
 - to identify individuals who require more support

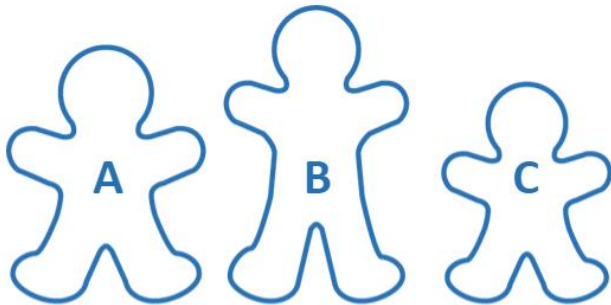
Success criteria for delivery of a hinge question

1. Provide statements using economy of language.
2. Provide a count down if appropriate.
3. Ask pupils to show/represent the answer to the hinge question.
4. Pupils to present their answer(s) in unison.

Model: delivering a hinge question (Option A: EYFS example)

Learning outcome:

To know that people grow at different rates



Jack says that person (b) is the oldest because he is the tallest. Is Jack correct (right)?

Model: delivering a hinge question (Option B: KS3 mathematics example)

Learning outcome:

To know how to accurately express ratios as fractions

A forest contains only oak trees and birch trees, in the ratio 3:5.

What fraction of the trees are oak trees?

3/5

c) 5/8

3/8

d) 5/3

[For either option]

Task: As the facilitator models, note down where and how they address the four criteria

Notes:

Task: For each of these four criteria, why is it important to plan and deliver a hinge question in this way?

Worked example

1. Provide statements using economy of language.



- Reduces pupil cognitive load
- Increases clarity
- Reduces reading/interpretation time of the question



This matters because we are increasing the likelihood that we are gathering the information that we intend to gather as pupils understand and can quickly respond to our question.

Notes:

Task: For each of these four criteria, why is it important to plan and deliver a hinge question in this way?

- > Provide a count-down if appropriate.

Notes:

- > Ask pupils to show/represent the answer to the hinge question.

Notes:

- > Pupils to present their work in unison.

Notes:

Delivering hinge questions

Hand Signals	Whiteboards
<ul style="list-style-type: none">> Teacher gives specific cue> Pupils hold up digits in unison to represent their answer	<ul style="list-style-type: none">> Teacher gives specific cue> Pupils complete their work at desk and hold up to show answer in unison

Non-example

“By predicting and pre-empting possible wrong answers, hinge questions offer the rich information an individual interview would offer from the whole class.”

Bart et al. (1994) cited in Fletcher Wood (2018)

Context: KS2 Science

Potential misconception: plants make their own energy, this isn't the case, they make their own food by converting energy from sunlight, this is called photosynthesis.

Task: Edit the following hinge question to make it more effective. You can edit any part of the question/answers.

Which of the following would be the right thing to put in the gap to make the sentence correct. Plants make their own _____.

- a. Sunlight
- b. Crafts
- c. Photosynthesis
- d. Fun

Limitations of Hinge Questions

- > Designing questions that accurately measure pupil understanding is not always trivial or quick.
- > We want assessment questions that are both valid (measure what we say they are measuring) and reliable (consistent) - achieving both is hard:
 - Narrower, closed questions increase the confidence we can have about the validity of assessments but narrow the amount of content covered.
 - Broader, open questions can be used to cover more content, but are likely to be less valid as a result.

Hinge questions in your context

Task: Practice writing your own hinge question for a lesson you will teach or have taught. Think about the misconceptions that may arise and possible answers that pupils may give.

Notes:

“Whatever a student chooses, I will know what they were thinking, that they can only have been thinking that, and that there’s nothing else they might have thought of that I’ve missed.”

Fletcher-Wood (2018)

Reflection

How might the use of hinge questions allow us to know what pupils are thinking?

How might hinge questions allow us to adapt our teaching?

Notes:

What does adaptive teaching look like in practice?

Underlying features of adaptive teaching

Underlying feature	Description
Set clear learning goals	Teachers break down longer term learning goals to plan backwards and determine steps pupils need to take to be successful. This ensures a clear focus for each learning moment and makes pupil success visible.
Identify and anticipate potential misconceptions	Teachers develop a clear understanding of what meeting the learning goal looks like and how pupils can demonstrate this as well as what specific misconceptions might occur and how these look in practice.
Plan and use assessment tools that achieves desired purpose	Teachers select appropriate assessment tools that will elicit the highest leverage information from pupils that will reveal misconception and extent of pupil understanding.
Interpret information about student learning in a timely manner	Teachers identify patterns in information elicited during assessment and make timely decisions about the best path forward for pupil learning.
Adapt teaching to respond to pupil learning and address gaps/ misconceptions	Teachers are flexible in next learning steps and have the tools to deviate from planned next steps to respond to information elicited from pupils during assessment. This is done quickly to reduce errors and misunderstanding from influencing further understanding and knowledge.

I do

Part 1: lesson context

Year 9 are part way through a unit on Arthur Miller's *The Crucible*, at the end of this unit the pupils will be performing an extract from the play. Ms. Weber knows that she needs to break the key content down to support pupils to master each of the techniques needed individually before putting them together at the end of the unit. In today's lesson Ms. Weber's pupils are learning how to use facial expression in their practical work to develop how they react to other characters in the scene. She needs them to demonstrate they understand the impact this has on the audience's engagement and understanding of wider plot.

Pupils are already aware of the plot and context of the whole play and have seen this performance technique in other units of work before. Ms. Weber started the lesson with a quiz about these two areas of knowledge. It was peer marked and she used raised hands to establish which questions pupils got correct. One question that at least half of her pupils answered incorrectly was about the consequences of being accused of being a witch in Salem in the late 1600s. Before she moves on to the practical element of the lesson, Ms. Weber clearly corrects this misconception and asks pupils further questions to ensure this correction has been understood.

Ms. Weber is aware that pupils often don't consider how they perform moments of a play with the wider context of the whole scene and plot in mind, pupils also tend to focus only on their own lines and don't respond to other characters' lines with the facial expressions that are the focus of today's lesson. The teacher knows that in today's scene where the following misconceptions are likely to occur:

1. A performer only performs when they have lines.
2. A performer only plans how to react to a given moment, without considering how it links to the rest of the play.

Questions

a) Where can you see the underlying features in this part of the scenario? Be aware they may not all be present in this section.

- Set clear learning goals
- Anticipate potential misconceptions
- Plan and use assessment tools
- Interpret information
- Adapt teaching to respond

b) What do you think could be the best tool to assess pupil understanding within the context of this learning moment? What assessment tools have already been used?

Underlying feature	Notes
Set clear learning goals	
Identify and anticipate potential misconceptions	
Plan and use assessment tools that achieves desired purpose	
Interpret information about student learning in a timely manner	
Adapt teaching to respond to pupil learning and address gaps/ misconceptions	

We do

<i>Time</i>	<i>Task</i>	<i>Details</i>
4 mins	Read and independently analyse	Read the relevant underlying features and part two of the scenario
6 mins	Analyse in pairs	Discuss and compare your thoughts with your partner.
4 mins	Share with the group	Share your collective thinking.
5 mins	Questions and reflections	Ask any questions and highlight key takeaways

Part 2: pupil practice and assessment

Ms. Weber shares the success criteria for the performances before they practise:

“Today we are going to practise a part of a scene from the play where Reverend Hale implies that Elizabeth Proctor is a witch. No matter which character you are playing you will need to consider your reaction to other characters’ lines, I am looking for your use of facial expression. Same groups as last week, I will direct you to the space I want your group to practise in, you will have 7 minutes, off you go.”

As the pupils begin to practise Ms. Weber circulates the room but keeps some distance that allows her to observe without interfering. She does this for 3 minutes and notices that the reaction of Elizabeth and the other characters in the scene when Reverend Hale implies that Elizabeth is a witch is missing in 6 of the 8 groups. Ms. Weber watches for 2 more minutes to see if there is any further development in pupil understanding and notices in Group 4 the pupil playing Elizabeth uses the technique well to demonstrate the gravity of Reverend Hale’s accusation that she is a witch. She speaks to one of the pupils in this group and asks them to explain their performance choice, the pupil’s answer reflects their good understanding of the impact of facial expression on the audience, and how their reaction links to their understanding of the scene as a whole. She asks them to perform for the class, as they often do in her lessons and is supported to do this by the culture she has built in her classroom.

Questions

a) Where can you see the underlying features in this part of the scenario? Be aware they may not all be present in this section.

- Set clear learning goals
- Anticipate potential misconceptions
- Plan and use assessment tools
- Interpret information
- Adapt teaching to respond

b) What assessment tools does Ms. Weber use? What information does she have now to use to determine pupil next steps?

Underlying feature	Notes
Set clear learning goals	
Identify and anticipate potential misconceptions	
Plan and use assessment tools that achieves desired purpose	
Interpret information about student learning in a timely manner	
Adapt teaching to respond to pupil learning and address gaps/ misconceptions	

Part 3: adaptive teaching

Ms. Weber gains pupils' attention as per her classroom routine and brings them back together around the board. "It is so great to see you getting straight into practising so quickly and making the most of the time you were given, I have stopped us a little bit early as want to show you something that will help improve our performances. We are going to watch Group 4- while we are watching we need to identify where and how they are using our four criteria on the board and the impact this has on our ability to understand the plot of the play."

After Group 4's performance Ms. Weber uses cold call to ask pupils to identify at which moments the pupils in the model used facial expression and reaction to other characters' lines and its impact. She emphasises that the reaction of Elizabeth is vital in this scene, then asks the pupil who played Elizabeth in Group 4: "What was the impact of your reaction to Reverend Hale's accusation that you are a witch on the audience? What are they more likely to understand about the plot, and your character as a result?"

The pupil responds: "I guess I make it obvious that what he said is a big deal, that he is saying something really bad about my character."

Ms. Weber: "But why is it so bad that he is accusing your character of being a witch? Think about the context of the setting of the play"

Pupil: "Well, in Salem if you were a witch, they killed you. So, my character knows if other people believe that too then it could mean that she is killed."

Ms. Weber: "Fantastic, thank you. We need to remember that in this moment the audience needs to realise the impact Reverend Hale's accusation could have on Elizabeth's life, using facial expression to react to Hale's line allows our audience to understand this aspect of the plot."

"You have 5 more minutes; I really want to see you using facial expression to emphasise this moment in the scene. Group 4, I am going to work with you on applying this technique across the wider scene. We are going to transfer your thinking to other moments in the scene."

Questions

a) Where can you see the underlying features in this part of the scenario? Be aware they may not all be present in this section.

- Set clear learning goals
- Anticipate potential misconceptions
- Plan and use assessment tools
- Interpret information
- Adapt teaching to respond

b) How does the teacher adapt teaching to correct the misconception? What impact do you think this adaptation makes on pupil understanding?

Underlying feature	Notes
Set clear learning goals	
Identify and anticipate potential misconceptions	
Plan and use assessment tools that achieves desired purpose	
Interpret information about student learning in a timely manner	
Adapt teaching to respond to pupil learning and address gaps/ misconceptions	

Reflection questions:

- a) How does the teacher ensure that all pupils are able to be successful in reaching the learning goal of the lesson? Including those who do not have the misconception that the rest of the group have?
- b) How could the teacher assess whether the adaptation she made to her practice has been effective in correcting pupils misconceptions and developing their understanding?

Notes:

“Adapting teaching in a responsive way is likely to increase pupil success.”

Early Career Framework (2019)

How can we respond?

Task: with your partner, discuss the following questions:

1. What kinds of adaptations could we use to respond to our understanding of pupil learning (from formative assessment)?
2. What might influence which of the approaches you suggested for Question 1 we choose?

Notes:

Adaptations to consider

1. Removing unnecessary expositions/adapting instructions
2. Use new examples
3. Include non-examples
4. Break modelling task into even smaller steps
5. Building in additional practice time
6. Adding further scaffolds
7. Breaking out into smaller group(s), may include use of a teaching assistant
8. Flexible groupings

“An alternative approach might be to allocate pupils to groups flexibly based on the individual needs that they currently share with other pupils. Such groups can be formed for an explicit purpose and disbanded when that purpose is met.”

EEF (2018)

Benefits of flexible grouping

- > Responsive, happens either in lesson or next lesson.
- > Gathers data, e.g. ongoing formative assessment.
- > Shared practise with others.
- > More targeted, broken down instruction.
- > Less negative impact long-term as groups should change regularly.

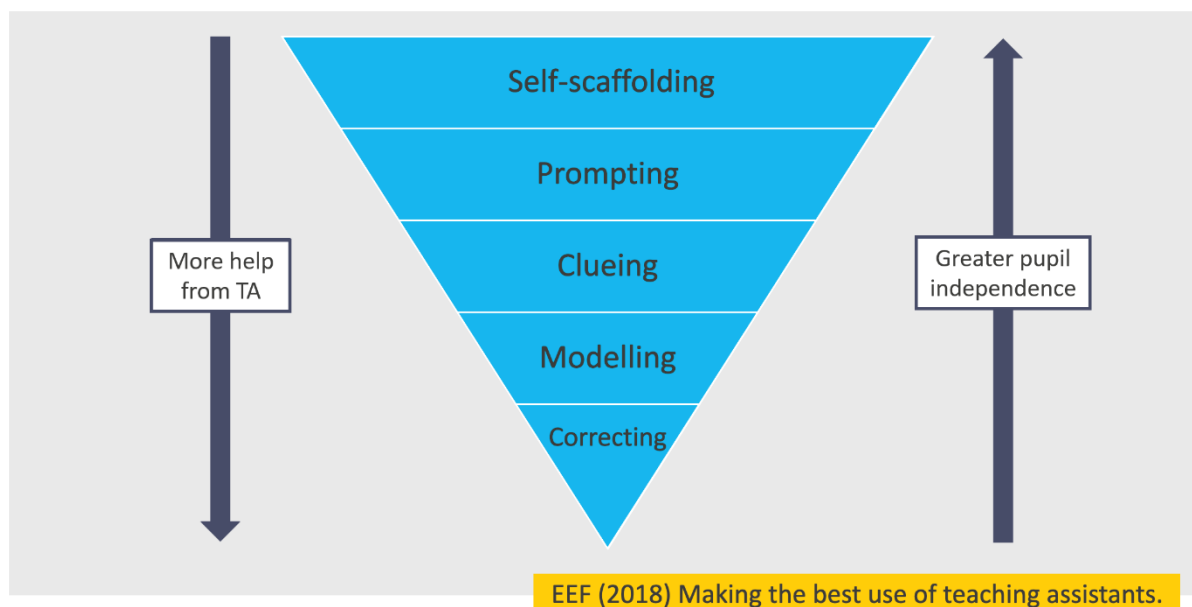
“The typical deployment and use of TAs, under everyday conditions, is not leading to improvements in academic outcomes.”

EEF (2018)

Working with teaching assistants, recommendations for TA deployment

1. Not used as a teaching resource for lower attaining pupils
2. Add value to teachers but not replace them
3. Make sure they are fully prepared for their role in the classroom
4. Use TAs to help pupils develop independent learning skills and manage own learning

Suggested tool	Example
Rotating roles	Teacher works with one group, TA works with another and other groups work independently or collaboratively. This then rotates each day so pupils receive equal support.
Visibility	Make TA’s visible by asking them to demonstrate using equipment, writing on the whiteboard during the ‘we’ part of a lesson.
Teacher-triage	Teaching assistant moves around the classroom, identifying pupils who need further support and flags this to the teacher.
Flexible group support	Similar to rotating roles. These groups should change regularly based on end of lesson assessment.
Interventions	Sometimes TAs can be used for interventions for pupils who require more support. They must be trained in the area of support that they are providing e.g. phonics or a speech and language intervention.



Task

You have asked a hinge question and used hands up to see how many of your pupils have answered the question correctly. For each of the outcomes of your formative assessment...

1. What might be the best solution for responding by adapting teaching? Justify your suggestion.
2. What else might you need to know to make this decision?

Outcome of formative assessment	How might you respond? Why?
Outcome 1: All pupils answered correctly	1. 2.
Outcome 2: All pupils answered incorrectly	1. 2.
Outcome 3: Some pupils answered correctly, others incorrectly	1. 2.

Action planning

Task: Use your workbook to action plan how you teach responsively in an upcoming lesson

1. Re-read the underlying features
2. Completed the adaptive teaching planning proforma
3. Use the worked example to support you if needed (find in appendix)

Underlying feature	Description
Set clear learning goals	Teachers break down longer term learning goals to plan backwards and determine steps pupils need to take to be successful. This ensures a clear focus for each learning moment and makes pupil success visible.
Identify and anticipate potential misconceptions	Teachers develop a clear understanding of what meeting the learning goal looks like and how pupils can demonstrate this as well as what specific misconceptions might occur and how these look in practice.
Plan and use assessment tools that achieves desired purpose	Teachers select appropriate assessment tools that will elicit the highest leverage information from pupils that will reveal misconception and extent of pupil understanding.
Interpret information about student learning in a timely manner	Teachers identify patterns in information elicited during assessment and make timely decisions about the best path forward for pupil learning.
Adapt teaching to respond to pupil learning and address gaps/ misconceptions	Teachers are flexible in next learning steps and have the tools to deviate from planned next steps to respond to information elicited from pupils during assessment. This is done quickly to reduce errors and misunderstanding from influencing further understanding and knowledge.

Responsive teaching planning proforma:

Underlying feature	Prompt questions	Planning and notes
Set clear learning goals	<ol style="list-style-type: none"> 1. What is the overarching learning goal? 2. What are the broken-down learning goals that you will focus on in this lesson/learning moment? 	
Identify and anticipate potential misconceptions	<ol style="list-style-type: none"> 3. What potential misconceptions could occur whilst pupils are working toward this/these learning goals(s)? 4. What could these misconceptions 'look like' in the context of this lesson? 	
Plan and use assessment tools that achieves desired purpose	<ol style="list-style-type: none"> 5. What are the best assessment tools to use in this lesson? (e.g. hinge questions, quizzes, observation, verbal questioning, pupil practice, reading written work etc.) 6. What information are you hoping to get from each? 7. At which moments are best to use each of these assessment tools? 8. You may want to script questions in this space also. 	
Interpret information about student learning in a timely manner	<ol style="list-style-type: none"> 9. What are you looking for that will tell you pupils know/understand what you need them to? 	
Adapt teaching to respond to pupil learning and address gaps/ misconceptions	<ol style="list-style-type: none"> 10. How could you respond in each of the below scenarios? Consider how you can adapt your lesson to ensure the understanding of all pupils is taken into account. <ol style="list-style-type: none"> a. Nearly all pupils perform well on your formative assessment b. Around half of pupils perform well on your formative assessment 	

	c. Only a few of your pupils perform well on your formative assessment	
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Reflection

“Phew! Exhausting isn’t it! Of course there’s infinite variations to all of these elements. The point here is to get beyond the whole ‘teaching is all a bit of an art’ thing... to explore the specific components that build up to create that impression. I find that where teachers are able to isolate specific aspects of their craft to review and refine and then seek to implement them with some real intentional fidelity to what they understand as an effective form of the techniques ..it works. The teaching is better; the learning is more secure. Of course the optimal sequence and blend of techniques is subtle, complex.. fluid. But it’s not magic. A logical approach informed by an understanding of the learning model and group dynamics helps to craft lessons with a flow and responsiveness that allows schema-building to flourish.. not just for the lucky few, but for everyone.”

Tom Sherrington (Teacherhead), 2022

<https://teacherhead.com/2022/09/21/responsive-teaching-in-action-an-idealised-sequence/>

Reflect on what you have learnt today/in this section. Consider the following:

- > What impact will this have on your teaching?
- > What impact will this have on your pupils?
- > What is your main takeaway from today’s session?

Notes:

Key takeaways:

Notes:

Appendix

Appendix 1: References and further reading from Heitink et al (2016)

Full paper found here: <https://doi.org/10.1016/j.edurev.2015.12.002>

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Appendix 2: Worked example of adaptive teaching planning proforma

Underlying feature	Prompt questions	Planning and notes (worked example)
Set clear learning goals	<ol style="list-style-type: none"> 1. What is the overarching learning goal? 2. What are the broken-down learning goals that you will focus on in this lesson/learning moment? 	<ol style="list-style-type: none"> 1. End of unit assessment is to perform an extract from <i>The Crucible</i> 2. Using facial expression in their practical work to react to other characters in the scene, to understand the impact of facial expression/reaction to other character on audience engagement and their understanding of wider plot
Identify and anticipate potential misconceptions	<ol style="list-style-type: none"> 3. What potential misconceptions could occur whilst pupils are working toward this/these learning goal(s)? 4. What could these misconceptions ‘look like’ in the context of this lesson? 	<ol style="list-style-type: none"> 3. <ul style="list-style-type: none"> • A performer only performs when they have lines. • A performer only plans how to react to a given moment, without considering how it links to the rest of the play. 4. Pupils will not react to the lines of other actors in the scene with them, moments in the scene being practiced in this lesson that are vulnerable to this misconception are: <ul style="list-style-type: none"> • When Reverend Hale implies Elizabeth is a witch • When Reverend Hale questions Elizabeth’s Christian values/ morality
Plan and use assessment tools that achieves desired purpose	<ol style="list-style-type: none"> 5. What are the best assessment tools to use in this lesson? (e.g. hinge questions, quizzes, observation, verbal questioning, pupil practice, reading written work etc.) 6. What information are you hoping to get from each? 	<p>Assessment tool 1:</p> <ol style="list-style-type: none"> 5. Short answer quiz 6. To know whether prior learning that will be relevant to today’s lesson e.g. historical context of the play has been retained and understood by pupils 7. Start of the lesson <p>Assessment tool 2:</p> <ol style="list-style-type: none"> 5. Observation of pupil practice 6. Whether pupils are incorporating facial expressions appropriately into their practice

	<p>7. At which moments are best to use each of these assessment tools?</p> <p>8. You may want to script questions in this space also.</p>	<p>7. during pupil independent practice</p> <p>Assessment tool 3:</p> <p>5. verbal questioning, cold call, targeted</p> <p>6. whether pupils understand the role of facial expression on audience understanding and engagement</p> <p>7. various moments, to expose pupil thinking when they are using the technique in their practice, and to build mental models when unpicking a pupil model of good use of facial expression.</p>
<p>Interpret information about student learning in a timely manner</p>	<p>9. What are you looking for that will tell you pupils know/understand what you need them to?</p>	<p>9.</p> <ul style="list-style-type: none"> • For pupil playing Elizabeth and other characters (aside from Reverend Hale) to appear shocked and offended by Reverend Hale’s line which implies Elizabeth is a witch • Pupil responses that show appreciation for the consequences of the accusation for Elizabeth at the time of the Salem Witch Trials (the play’s context) • Pupil responses to link the use of facial expression in the scene to how the audience will feel (e.g. suspense, concern, anticipation) and their understanding of the wider context of the play
<p>Adapt teaching to respond to pupil learning and address gaps/ misconceptions</p>	<p>10. How could you respond in each of the below scenarios? Consider how you can adapt your lesson to ensure the understanding of all pupils is taken into account.</p> <ol style="list-style-type: none"> a. Nearly all pupils perform well on your formative assessment b. Around half of pupils perform well on your formative assessment c. Only a few of your pupils perform well on your formative assessment 	<p>10. Responses to information from observing pupil practice</p> <ol style="list-style-type: none"> a. To continue to practice with emphasis on the 3 moments in the scene that pupils have identified are best moments for facial expression to have a big impact on audiences b. Group by group intervention as teacher circulates room, targeted reminders of where pupils should focus their attention within the scene and the impact of facial expressions at these moments c. Use pupils who have performed well to model this for rest of the group, expose their thinking and unpick with whole class

Appendix 3: responsive teaching planning proforma blank

Underlying feature	Prompt questions	Planning and notes
Set clear learning goals	What is the overarching learning goal? What are the broken-down learning goals that you will focus on in this lesson/learning moment?	
Identify and anticipate potential misconceptions	What potential misconceptions could occur whilst pupils are working toward this/these learning goals(s)? What could these misconceptions 'look like' in the context of this lesson?	
Plan and use assessment tools that achieves desired purpose	What are the best assessment tools to use in this lesson? (e.g. hinge questions, quizzes, observation, verbal questioning, pupil practice, reading written work etc.) What information are you hoping to get from each? At which moments are best to use each of these assessment tools? You may want to script questions in this space also.	
Interpret information about student learning in a timely manner	What are you looking for that will tell you pupils know/understand what you need them to?	
Adapt teaching to respond to pupil learning and address	How could you respond in each of the below scenarios? Consider how you can adapt your lesson to ensure the understanding of all pupils is taken into account. Nearly all pupils perform well on your formative assessment	

Early Career Teachers Programme: ECT Conference 2

aps/ misconceptions	around half of pupils perform well on your formative assessment Only a few of your pupils perform well on your formative assessment	
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