

## Adaptive Teaching CPD Guide For Secondary Schools

Summary of Key Strategies With Detailed Step By Step Examples

**SLT Guides** 



## Contents

Introduction	1
Adaptive teaching versus differentiation	2
<ul> <li>Adaptive teaching in large groups or whole-class</li> </ul>	5
<ul> <li>Adaptive teaching in a one to one maths session</li> </ul>	6



## Introduction

Adaptive teaching is an approach that allows teachers to help **all learners reach the same goals and learn the same skills and concepts**. It involves continual assessment for learning and consequently adapting **how and what is taught in real-time**.

Like Ofsted, we believe adaptive teaching is an important strategy for teachers to develop. Here we provide a digestable summary of the key elements all teachers should know about adaptive teaching.

Use this guide as a quick reference point or share it with your colleagues via email or in CPD sessions.

We recommend you look at the examples provided to show you what adaptive teaching looks like 'in action' and then work with a colleague, or on your own, to decide what this might look like in your lessons.

As maths tutoring and resource experts, our examples apply to maths lessons and tuition sessions, but the principles work across all subjects.



"Third Space Learning provides personalised one to one maths support that we simply couldn't replicate in school. The biggest thing for me has been seeing how engaged the students are."

Rob Davies, Deputy Headteacher, Kent



# Adaptive teaching versus differentiation

While adaptive teaching focuses on changing the teaching strategy in real-time, differentiation focuses on helping individual learners through lesson content, task design and desired outcomes.

Adaptive teaching	Differentiation
During a lesson on simplifying fractions, the teacher notices some students struggling to find common factors. The teacher adapts and	The teacher pre-plans activities to teach simplifying fractions based on students' abilities:
switches to a different method on the spot, using prime factorisation to simplify fractions to help these students complete the lesson	Higher-ability students work on independently adding mixed numbers and improper fractions.
objective.	Middle-ability students add fractions with different denominators, using a
For students who grasp the concept quickly, the teacher gives more challenging fractions, while offering extra guidance to those who need it. The teacher modifies the approach but	scaffolded worksheet. Lower-ability students add fractions with one denominator being a multiple of the other, using fraction strips for visual support.
keeps the same learning goal for everyone.	While focusing on the same topic, each group works at different difficulty levels, with varying support and outcomes.
Adapting the teaching helps all learners reach the same goals and learn the same maths skills and concepts.	Differentiating by task and desired outcome lowers the expectations and widens the knowledge gap for these students.



#### How to use adaptive teaching in the classroom

When executed well, adaptive teaching should result in **fewer knowledge gaps** and students making better long-term progress.

Here are some tips to support adaptive teaching at every stage of a lesson:

#### Before the lesson

Know your learners and anticipate barriers to learning:

- What is their prior knowledge?
- What are the common misconceptions of the topic?
- Are there any SEND or EAL students in the class that have particular needs?

#### During the lesson

You need to know what your students know during the lesson, not after, so you can adapt teaching in real-time.

In-class formative assessments will inform you when and why you must adapt your teaching. Formative assessments may include:

- Diagnostic questions or hinge questions
- 🤣 Mini-whiteboards
- Low-stakes tests
- Effective questioning



If you see the need for an adaption, make it straight away. What will benefit one learner will likely help the majority of learners. In the moment adaptions may mean you need to:

- < Read a text out loud
- 오 Draw diagrams
- Use analogies learners can relate to
- Increase or remove scaffolding when necessary
- Provide extra examples alongside non-examples
- < Use peer support

#### After the lesson

The adaptions you make in the lesson can tell you a lot about where the learner is in their journey to reaching the lesson objective. Act on what you learned from the lesson and use the information and data to inform future planning. Ask yourself the following questions:

- Oid all learners achieve the required level of understanding and knowledge?
- Which learners will need more support next lesson?
- Which learners exceeded expectations?

Exceeded expectations	Understood the learning	Needs more support
Student 1	Student 2	Student 3



#### Adaptive teaching in large groups or whole-class

Adaptive teaching in action	How this works in the classroom (examples all taken from free resources available from Third Space Learning)	
Pre-assessment	GCSE revision mats are the perfect whole- class pre-assessment. Print and cut out the most appropriate questions and hand them out to each student as a starter activity to assess students' knowledge before the lesson. Based on student answers, teachers can decide whether students can proceed with the intended lesson objective or need to revisit prior learning.	<section-header></section-header>
Worked examples	Secondary Third Space Learning example videos talk through various exam-style questions on mathematical topics. The teacher or student can replay or pause the video while attempting to answer the question and then play to see if they are correct. If answers are incorrect, the teacher or student can recap the learning to see where the error or misconception occurred.	Try this exam style equestion. a) Find the value of $\vec{x}$ . a) find the value of $\vec{x}$ . b) Find the value of $\vec{y}$ . c) find the value of $\vec{y}$ . find the value of
Scaffolding	GCSE revision guides provide scaffolded examples to help all students achieve the learning outcome. Teachers can adapt the pace and structure of the example by showing or hiding each of the steps as the student works through it.	Example 1: Solving simultaneous equations by elimination (addition) Solve: $3_{1}+4_{2}+11$ $4_{1}-4_{2}+11$ 4 = -4_{2}+11 4 = -4_{2}+11 $4_{2}+4_{2}+11$ $4_{2}+11$ $4_{2$
Diagnostic questions	All Third Space Learning diagnostic questions are carefully designed to identify misconceptions. Each question contains 1 correct answer and 3 common misconceptions. Based on the students' answers the lesson can be appropriately adapted in real-time to address the students' needs for each learning objective.	



Post session questions and exit tickets	Using the Secondary Resource Library following a lesson, the teacher can select the appropriate topic worksheet and subsequent questions from the skill section to test students on the content covered. Students' answers will help the teacher adapt the teaching and learning for the following lesson.	<page-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></page-header>

#### Adaptive teaching in a one to one maths session

Adaptive teaching in action	How this works in a tutoring session with Third Space Learning	
Pre-assessment	All tutoring lessons begin with a <b>pre-</b> <b>assessment</b> slide to help tutors understand how secure a student is with the maths concept the learning objective covers. If the student answers incorrectly or struggles, tutors identify the student's misconceptions and adapt teaching to address the student's needs.	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>
Worked examples	GCSE students attempt a GCSE exam-style question based on the learning objective. If students answer incorrectly or make an error, tutors walk students through a worked example, demonstrating each step in detail before students have another attempt at a similar question. Having a worked example for reference helps to support learners break down the problem- solving process.	In probability that it will rain on Monday is 0.2. The probability that it will rain on Tuesday is 0.3.       (2)         a) Complete the tree diagram to represent this situation.       (2)         b) Complete the tree diagram to represent this situation.       (2)         c) Complete the probability it rains on better Monday and Tuesday (2)       (2)         c) Find the probability it rains on either Monday or Tuesday.       (2)         (2)       (2)         (2)       (2)         (2)       (2)         (2)       (2)         (2)       (2)         (2)       (2)         (2)       (2)         (2)       (2)         (3)       (2)         (4)       (2)         (5)       (2)         (4)       (2)         (5)       (2)         (4)       (2)         (5)       (2)         (5)       (2)         (6)       (2)         (7)       (2)         (7)       (2)         (7)       (2)         (7)       (2)         (8)       (2)         (9)       (2)         (9)       (2)         (9)       (2)



Scaffolding	Tutors scaffold each session as much or as little as students need. For students who need a little extra support, tutors work through problems, prompting them with appropriate questions, and demonstrating maths strategies when needed. Those who need less support can move straight onto similar GCSE exam- style questions and the 'challenge' problems.	Let's go through it together.The probability that it will rain on Monday is 0.2. The probability that it will rain on Tuesday is 0.3.a) Complete the tree diagram to represent this situation.(2)The diagram is a way of representing and calculating probabilities of two ar more events.MondayOut of representing and calculating probabilities of two ar more events.MondayOut of representing and calculating probabilities of two ar more events.MondayOut of the diagram is a way of representing and calculating probabilities of two ar more events.MondayOut of the diagram is a way of representing and calculating probabilities of two ar more events.MondayOut of the diagram is a way of representing and calculating probabilities of two ar more events.Out of the diagram is a way of representing and calculating probabilities of two ar more events.Probability diagram is a way of representing and calculating probabilities of two ar more events.Out of the diagram is a way of representing and calculating probabilities of two ar more events.Out of the diagram is a way of representing and calculating probabilities of two ar more events.Out of two ar more events.
Diagnostic questions	Every Third Space Learner completes an online diagnostic assessment before their first tutoring session. Results are shared with teachers and tutors to help personalise a student's learning journey and ensure they receive the right level of support.	Woohoo! Kick off Quiz complete! Expand and simplify: (x - 4)(x + 3) $x^2 - x - 12$ $x^2 + 7x - 12$ $x^2 - 12x - 1$ complete!
Post session questions / exit tickets	All Third Space Learning tutoring sessions end with <b>Post-Session Questions</b> (PSQs) which ask students to answer a question on the topic covered by their tutor. This helps teachers to track student progress during the programme and gives tutors more insights to adapt their teaching in the future.	Constructive Const



"The personalisation is second to none, and this is the only opportunity they're going to get to have that one to one experience."

Kate Davies, Maths Director, Outwood Grange Academies Trust

## Do you have a group of students who need a boost in maths this term?

Each student could receive a personalised lesson every week from our specialist 1-to-1 maths tutors.



Raise attainment



Plug any gaps or misconceptions



**Boost confidence** 

93% of teachers feel Third Space Learning lessons helped their pupils achieve higher assessment scores

### Speak to us



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