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Transforming Teaching and Learning



Adaptive Teaching:

Teaching to the Top

InnerDrive

ADAPTIVE TEACHING

By InnerDrive



Adaptive Teaching involves adjusting teaching to meet students' different needs. This might include adapting the pace of a lesson, thelevel of support provided or the materials used depending on how students are progressing.

Recognising that students do not all learn at the same pace or start from the same place is core to Adaptive Teaching. While this might sound like a time-consuming and demanding approach, it doesn't mean creating a different lesson for every student. So, what does Adaptive Teaching look like in the classroom.

1. ADAPTIVE TEACHING VS DIFFERENTIATION

Maintaining high expectations for all and meeting the needs of all students involves teachers tailoring their instruction to pupils' different levels of understanding (Hardy et al., 2022). This should not be confused with differentiation, which involves setting different learning goals for different students based on their perceived ability levels. This comes with the risk of teachers being expected to plan different content or learning tasks for different groups (Reis and Renzulli, 2018). The key distinction here is that under differentiation, adaptations were pre-planned and rigid (Tomlinson et al., 2003).

In contrast, adaptive teaching requires continuous and responsive adjustments during instruction. This means responding to difference by providing targeted support that is likely to increase students' chances of success.

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2. THE THREE PHASES OF ADAPTIVE TEACHING

Teacher and author Jade Pearce, in her book 'Demystifying Adaptive Teaching' writes that it can be best thought of in three distinct but related phases:

- ***Prior to the lessons*** – teachers plan the ways in which they will provide additional support and/or challenge during lessons.
- ***During the lessons*** – teachers flexibly adapt their instruction based on the learning taking place. This is also known as reactive adaptive teaching (Schipper et al., 2023).
- ***Following the lesson*** – teachers decide which pupils may need further challenge or support going forward (Maulana et al., 2023).

3. WHAT DOES ADAPTIVE TEACHING LOOK LIKE IN PRACTICE?

Adaptive Teaching involves regularly assessing students' understanding and responding to what this tells us. Students don't enter the classroom with the same levels of prior knowledge. Research has shown that prior knowledge enhances learning by providing a foundation for future learning (Simonsmeier et al., 2021). While some may have a strong foundation to build upon, others may have gaps that make new content more difficult to understand. Adaptive Teaching allows teachers to identify these gaps and respond accordingly. By strengthening students' foundations, teachers can make new learning more accessible without lowering expectations.

This might mean changing the level of support, revisiting content, adjusting the pace or providing greater challenge for those excelling. There are several ways you can do this in practice:

Regular checks for understanding

Adaptive Teaching starts with knowing what students understand. Formative assessment provides teachers with ongoing information about students' learning, allowing them to identify gaps and misconceptions and decide what to do next.

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Some useful forms of formative assessment include:

- ***Hinge questions*** – quick questions that check understanding of a specific concept.
- ***Mini whiteboards*** – low-stakes opportunities for all students to demonstrate their understanding.
- ***Quizzes*** – short retrieval activities to reveal what students can recall.
- ***Generative tasks*** – activities that require students to apply or explain what they have learned.

By using formative assessment to identify how your students are coping with content, you can adapt your teaching to meet individual needs whilst ensuring every student can succeed.

Adjust the level of support

Not every student needs the same amount of support to reach the same learning goal. Adaptive Teaching involves adjusting the level of scaffolding according to what students need. For example, a student who is struggling with a complex task might benefit from the task being broken down into smaller steps and/or providing a worked example (Carroll, 1994). This temporary increased scaffolding can then be removed as students become more confident and develop mastery of the topic. Likewise, research suggests that giving new learners explicit instructions can significantly improve their rate of learning (Rastle et al., 2021).

Provide appropriate challenge

Adaptive Teaching can also help students who are ready for greater challenge. If students demonstrate that they have understood the material quickly, teachers can increase the level of challenge rather than revisiting content they've already mastered. This might involve increasing the complexity of a task or inviting students to elaborate further. For example, teachers could ask them to explain their reasoning, justify their conclusion or go beyond the current situation and apply their knowledge to a new scenario.

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FINAL THOUGHTS

Adaptive Teaching is about understanding where students are in their learning journey and responding to what they need to make progress. By identifying barriers and adjusting support, teachers can help all students engage with the same ambitious learning goals. Effective Adaptive Teaching helps teachers become responsive to what students demonstrate in the classroom, so everyone feels supported and challenged.

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ADDITIONAL RESOURCES: BLOGS AND PODCASTS

A teacher's guide to Adaptive Teaching innerdrive.co.uk/guides/guide-to-adaptive-teaching/

Adaptive Teaching: Explanations and Modelling innerdrive.co.uk/blog/adaptive-teaching-modelling/

Adaptive Teaching: Feedback and Retrieval Practice innerdrive.co.uk/blog/adaptive-teaching-retrieval/

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