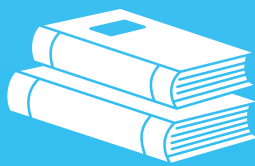
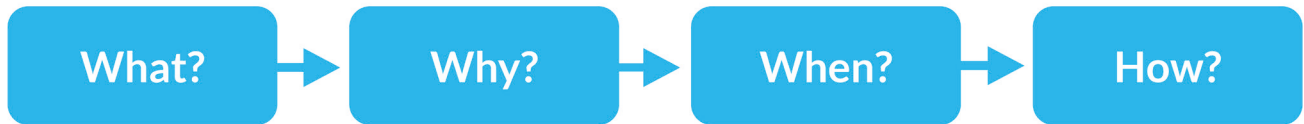


Theory Guide:



Consolidating learning

Consolidating learning: Overview



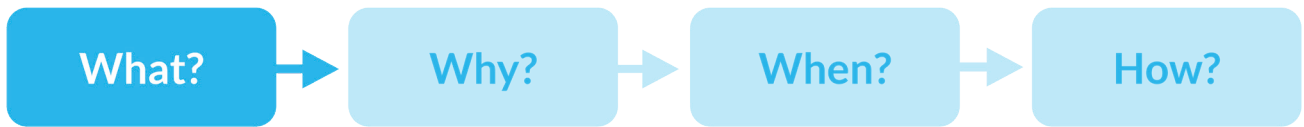
In this theory guide you will understand:

- what consolidating learning is
- why it is so important for teachers to think about consolidating learning
- when consolidating learning is important
- how teachers can support students to consolidate learning



Consolidating learning:

What is consolidating learning?



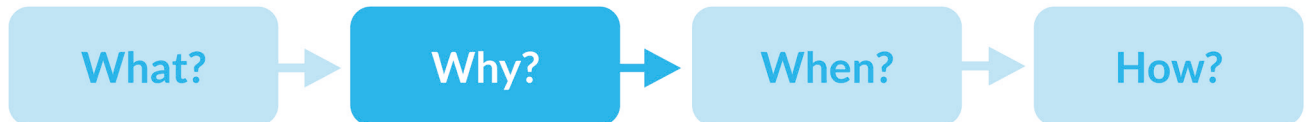
Consolidating learning is about supporting students to remember important ideas for the long term. Forgetting is inevitable but there are ways teachers can support students to remember ideas for longer.

What is long-term learning? Knowledge that is stable and accessible tends to be recalled over the long term. It begins with how ideas are learned in the first place. In our theory guide 'Instruction for initial understanding' we look at how to introduce ideas or processes in a way that is likely to make them meaningful to students. This starts learning down a better path whereby it is likely to stick around for longer. However, there are also ways teachers can continue to support students' long-term learning.

An important mindset shift for teachers is to recognise that performance is not the same as learning. Just because students show they can complete a set of questions or a task correctly soon after it has been explained to them does not mean they have learned it. The brain consolidates memories over time, so it is not possible to 'see' learning as such. With this in mind, teachers can think about introducing desirable difficulties (Bjork, 1994) into their teaching. These are techniques that appear to slow down student performance but can improve long-term learning.

Consolidating learning:

Why is it so important for teachers to think about consolidating learning?

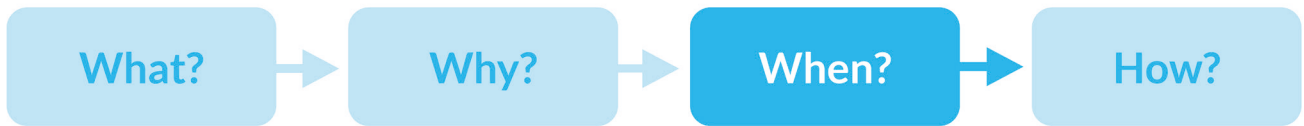


One of the key aims of education is to equip students with knowledge and skills to use in the future. Students need to remember important ideas if they are to develop them further. Students who do not remember characters in books or causes of world wars are going to struggle to develop their understanding any further without getting confused. In more practical subjects, students build their repertoire of skills and it is difficult to develop their technique if they keep forgetting them.

We also want students to remember ideas into the future including for exams but also for everyday life. Even though students do not always explicitly use the ideas in the subjects we teach, the residue of thought that they leave behind shapes who they are and how they think.

Consolidating learning:

When is consolidating learning important?

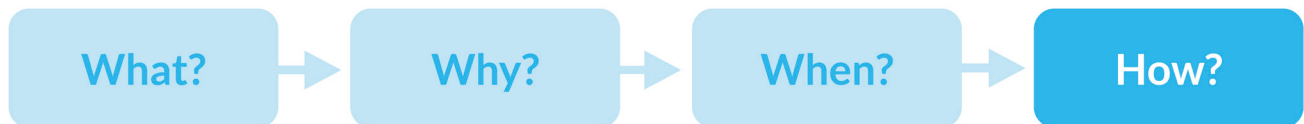


When students have a secure understanding: students cannot consolidate ideas they do not understand in the first place. Techniques that encourage the consolidation of learning should generally be used once teachers are confident that students have a secure initial understanding. If teachers introduce 'desirable difficulties' too soon, they will not be desirable at all as they may be too challenging for students.

At curriculum level and lesson level: techniques that encourage consolidation should be planned over the long term where possible. For example, 'spacing' ideas out so teachers return to them over time can be powerful for long-term learning. When planning at curriculum level, teachers and leaders should think about how to space content in a way that makes sense for the subject content. At lesson level, teachers should plan for long-term learning through techniques such as retrieval practice and variation. Retrieval encourages long-term learning and variation means students are having to think about knowledge in different ways - this should make it more accessible.

Consolidating learning:

How can teachers help students to consolidate learning?



Checks for secure understanding: make sure you check students' understanding is correct and secure before factoring in techniques for long-term learning.

Make it difficult but in a good way: factor in evidence-informed techniques that may slow performance but are likely to improve long-term learning.

Think about motivation: students who see their performance dip or experience challenge are at risk of becoming demotivated. Careful explanation of why these approaches are useful and supporting them to see the long-term benefits can help with this.

Any technique will only be effective if it is linked to a well-understood problem. Reflect on and define the problem you are trying to solve or do so with your coach. Then, you can use our decision tool for suggestions as to techniques you can adopt, adapt and test.

Any technique will only be effective if it is linked to a well-understood problem. Reflect on and define the problem you are trying to solve or do so with your coach. Then, you can use our problem-technique tool for suggestions as to techniques you can adopt, adapt and test.

Problems related to this area:

- *How do I make sure students remember important ideas?*
- *How do I help students have flexible knowledge they can apply in different contexts?*
- *How can we help students make links between what they know?*

Define your problem. What do you think might be the cause? Why?

Consolidating learning:

References and further reading

Bjork, R. A. (1994). Memory and Metamemory Considerations in the Training of Human Beings. In J. Metcalfe & A. P. Shimamura (Eds.), *Metacognition: Knowing about Knowing* (pp. 185–205). MIT Press.

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