

Modelling

Overview

Gradual release of responsibility is sometimes called ‘I do, we do, you do’ or ‘modelled, guided, independent practice’. It is a structured approach that gradually shifts responsibility from the teacher to the students and is informed by checking for understanding.

In the ‘I do’ phase the teacher is responsible for modelling, demonstrating and explaining the learning objective or skill as they continually check for student understanding. The teacher models the thinking process, strategies and steps required for a learning task. The teacher makes links to prior learning when thinking aloud.

Teachers engage students in the modelling process through checks for understanding and feedback. The teacher can move back to the ‘I do’ phase at any point in a lesson, if they determine students would benefit from further modelling.

The teacher manages student cognitive load by taking on the most responsibility in the ‘I do’ phase. This allows students to focus their attention on the key parts of the learning.

Key considerations when modelling:

- New and complex tasks are modelled through demonstration and explanation.
- Think-alouds are used to verbalise thought processes.
- Worked examples are tangible resources for students to use and refer back to throughout the learning process, not just at the beginning.
- The teacher should clearly explain the connections between prior and future learning.
- Includes several demonstrations and explanations depending on the complexity of the skills being taught.
- Checking for understanding is used throughout the modelling to inform the teacher if students are ready to move to the guided (we do) phase or if the skill or concept needs to be taught again.
- Thinking time is provided during modelling so that students process and absorb the information being presented (Archer and Hughes, 2011).

Classroom application

Think-alouds

The teacher communicates their thought process as they model, making their cognitive strategies clear to students.

Reading example

Bamboozled!

Bamboo is an amazing plant. Did you know it is actually a grass? In fact giant bamboo is the largest member of the grass family. Some types can grow an incredible 90 centimetres in just one day. Some bamboo plants can grow to over 30 metres tall, which is as tall as a gum tree.

You probably know that bamboo is the favourite food of pandas, but chimpanzees, gorillas and elephants eat it too.

Bamboo is also extremely useful to people. It is a very valuable construction material because it is so strong. In fact, whole houses can be built from bamboo. In some parts of the world bamboo is used as scaffolding (the frame used to support building work).

The range of things that can be made from bamboo is huge. Furniture, cooking utensils, and musical instruments can all be made from bamboo. Bamboo fibres can be used to produce a soft, cotton-like material for T-shirts and underwear. Bamboo fibres are also used to make paper. Bamboo can even be used to make bicycle frames and boats.

‘Bamboo has unique qualities’

‘Bamboo is a food source for some mammals’

‘Bamboo is useful for people because it is strong and is used to build shelter’

‘Bamboo can be used to make a range of important items people use everyday’

‘Bamboo is a material with many positive uses

Bamboo is good for society as it grows quickly, abundantly and is used for essentials like housing and transport’

(NAPLAN 2016)

Paragraph 1 think aloud script

‘Read with me: “Bamboo is an amazing plant” STOP. Amazing is a positive word – **I wonder** what other words could be used instead of ‘amazing’ in this sentence that will keep the same idea? **If I was** replacing the word, **I would think** things like ‘Bamboo is an impressive plant’, ‘Bamboo is an exceptional plant’, ‘Bamboo is a phenomenal plant.’ **This makes me think** the text will have a key idea that Bamboo has unique qualities. Unique – meaning there are no other plants like it, it’s the only plant like this.’

‘Read with me: “Did you know it is actually a grass? In fact giant bamboo is the largest member of the grass family. Some types can grow an incredible 90 centimetres in just one day.” STOP – Is incredible a positive word or a negative word? **I know some other words** that are synonyms for incredible are unbelievable, spectacular, and remarkable. **These words all relate to** ‘unique’, so having the word incredible here helps me to further understand that the first paragraph is about Bamboo’s unique qualities.’

‘Modelling is a powerful instructional tool. If the skill you are teaching consists of steps to follow or actions to complete, the best way to begin instruction is to show students what they are supposed to do.’ (Archer and Hughes 2011:29)

Classroom application

“Some bamboo plants can grow to over 30 meters tall, which is as tall as a gum tree.” I know gum trees are considered to be a very large tree and not many plants and trees will grow this tall, especially grass. Because bamboo can grow as tall as gum trees, and I know that not many plants can do that, it confirms for me my idea that bamboo has unique qualities.’

The teacher will use this think aloud model to continue building meaning in the text, providing opportunities for students to demonstrate their thinking process in creating meaning from the text.

Why are think-alouds effective?

Thinking aloud by the teacher and more capable students provided novice learners with a way to observe expert thinking which is usually hidden from the student (Rosenshine 2012).

Worked example

Worked examples are completed samples of the task. They are powerful when used through the whole gradual release of responsibility – not just in modelling. Worked examples help to manage cognitive load as students learn new parts of a whole. It is important however, that we understand the ‘expertise reversal effect’ that shows that over-scaffolding can be counterproductive once students have gained expertise, leading to disengagement (Yeung, Jin and Sweller 1998; Leslie et al. 2012). Responding to checks for understanding is therefore crucial.

It is important for teachers to be responsive to HPGS and the way they can learn more quickly and easily than similar aged peers, meaning they may progress faster and grasp content more easily.

Using explicit teaching practices with this in mind assists teachers with knowing:

- when to move on
- how to scaffold differently – that might mean in a more complex way, or
- when to release these students more quickly into independent learning, or
- application of learning in more challenging and abstract ways.

Writing example

Students in an English class are introduced to a writing scaffold to construct a paragraph. In the ‘I do’ phase, the teacher uses a worked example to model and explain the thinking process and steps involved. The teacher should provide opportunities for clarifying questions and ensure the focus is on the teacher.

Worked example – critical paragraph

The main character shows courage throughout the story.



Point (topic sentence): this sentence introduces the main idea and sets up what the rest of the paragraph will be about.

Courage is shown through the character's willingness to face challenges despite being afraid.



Explanation: this sentence explains the courage shown by the character and adds detail to support the topic sentence.

For example, in chapter 2, the character stands up to the bully even though he knows he might get hurt



Evidence: this sentence provides evidence using an example from the text to support the explanation.

This shows that the character consistently acts bravely, even in difficult situations.



Linking sentence: this sentence explains the character's bravery and links back to the main point to complete the paragraph.

Why is this technique effective?

Worked examples support students in building schemas they can then apply to solve problems quickly and efficiently (Sweller 2006).

Gradual release of responsibility resources



<https://education.nsw.gov.au/teaching-and-learning/curriculum/explicit-teaching/explicit-teaching-strategies/gradual-release-of-responsibility>

More resources

AERO (2023) – How students learn best

https://www.edresearch.edu.au/sites/default/files/2023-11/how-students-learn-best-aa_0.pdf

Explicit teaching – Checking for understanding

<https://education.nsw.gov.au/teaching-and-learning/curriculum/explicit-teaching/explicit-teaching-strategies/checking-for-understanding>

References

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Sweller J (2006) 'The worked example effect and human cognition' *Learning and Instruction*, 16(2):165–169.