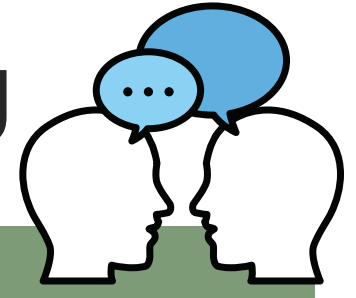




EPHS Teaching and Learning Blog

Worked Examples and Backward Fading

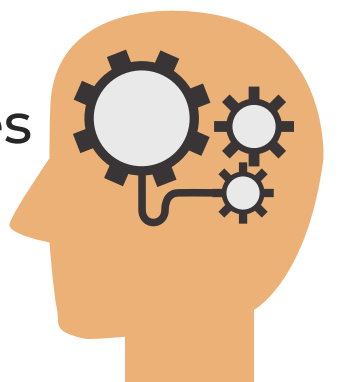


WHAT'S THE IDEA?

Students learn more successfully from studying a series of complete worked examples of problems or tasks than if they are asked to problem solve independently. This is because the cognitive load is reduced if we learn the overall method separately from trying to apply it to a particular question. Once we know the method, it is easier to apply it successfully. Teachers should make sure that they are providing enough worked examples. The backward fading technique provides a good model for moving from guided to independent practice through worked examples

HOW CAN I APPROACH THIS?

1. Introduce the first example of a question that you are aiming for students to answer. With their attention secured, go through the problem on the board, producing a model answer, talking through what you are doing as you write. It is better to model live than to produce a pre-prepared example.
2. Repeat the process with another example, taking care to draw out the ways in which it is similar to the first example and the ways it is different. The similarities should serve to reinforce the general idea or method you are teaching. The differences should illustrate how the method works with different cases.
3. Introduce a question and begin to answer it, doing the first couple of steps, following the pattern or procedure you introduced in the first two examples. Give students time to complete the question and check for answers, errors or misunderstandings
4. Set one or more questions, of the same type as the examples, giving information so that they are cued i.e. where you have started them off or signalled the way to begin
5. Set one or more questions where students have to undertake the whole thinking process independently. Stress the need to follow the details of the modelled examples. Follow up with self assessment, checking for accuracy including process questions to verify the methods are understood as well as being copied. You may need to include a range of questions of varying difficulty in order for independent completion to be successful and challenging for all students



WANT TO KNOW MORE?



<https://teachinnovatereflectblog.wordpress.com/2019/07/02/the-evolution-of-my-examples/>