

PRACTISING SKILLS, STRATEGIES & PROCESSES

CLASSROOM TECHNIQUES TO HELP STUDENTS DEVELOP PROFICIENCY

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Introduction

This guide, *Practising Skills, Strategies & Processes: Classroom Techniques to Help Students Develop Proficiency* is intended as a resource for improving a specific element of instructional practice: *practising skills, strategies and processes*.

Your motivation to incorporate this strategy into your instructional toolbox may have come from a personal desire to improve your instructional practice through the implementation of a research-based set of strategies (such as those found in the Marzano instructional framework) or a desire to increase the rigour of the instructional strategies you implement in your class so that students meet the expectations of demanding standards such as the emerging Australian Curriculum.

This guide will help teachers of all year levels and subjects improve their performance of a specific instructional strategy: practising skills, strategies and processes. Narrowing your focus on a specific skill, such as practising skills, strategies and processes, allows you to concentrate on the nuances of this instructional strategy to deliberately improve it. This allows you to intentionally plan, implement, monitor, adapt and reflect on this single element of your instructional practice. A person seeking to become an expert displays distinctive behaviours, as explained by Marzano and Toth (2013):

- breaks down the specific skills required to be an expert
- focuses on improving those particular critical skill chunks (as opposed to easy tasks) during practice or day-to-day activities
- receives immediate, specific and actionable feedback, particularly from a more experienced coach
- continually practises each critical skill at more challenging levels with the intention of mastering it, giving far less time to skills already mastered

This series of guides will support each of the previously listed behaviours, with a focus on breaking down the specific skills required to be an expert and giving day-to-day practical suggestions to enhance these skills.

Building on the Marzano Instructional Model

This series is based on the Marzano instructional framework, which is grounded in research and provides educators with the tools they need to connect instructional practice to student achievement. The series uses key terms that are specific to the Marzano model of instruction. See Table 1, Glossary of Key Terms.

Table 1: Glossary of Key Terms

Term	Definition
Desired result	The intended result for the student(s) due to the implementation of a specific strategy.
Monitoring	The act of checking for evidence of the desired result of a specific strategy while the strategy is being implemented.
Instructional strategy	A category of techniques used for classroom instruction that has been proven to have a high probability of enhancing student achievement.
Instructional technique	The method used to teach and deepen understanding of knowledge and skills.
Content	The knowledge and skills necessary for students to demonstrate standards.
Scaffolding	A purposeful progression of support that targets cognitive complexity and student autonomy to reach rigour.
Extending	Activities that move students who have already demonstrated the desired result to a higher level of understanding.

The educational pendulum swings widely from decade to decade. Educators move back and forth between prescriptive checklists and step-by-step lesson plans to approaches that encourage instructional autonomy with minimal regard for the science of teaching and need for accountability. Two practices are often missing in both of these approaches to defining effective instruction: 1) specific statements of desired results, and 2) solid research-based connections. The Marzano instructional framework provides a comprehensive system that details what is required from teachers to develop their craft using research-based instructional strategies. Launching from this solid instructional foundation, teachers will then be prepared to merge that science with their own unique, yet effective, instructional style, which is the art of teaching.

Practising Skills, Strategies & Processes: Classroom Techniques to Help Students Develop Proficiency will help you grow into an innovative and highly skilled teacher who is able to implement, scaffold and extend instruction to meet a range of student needs.

Essentials for Achieving Rigour

This series of guides details essential classroom strategies to support the complex shifts in teaching that are necessary for an environment where academic rigour is a requirement for all students. The instructional strategies presented in this series are essential to effectively teach your relevant standards. They require a deeper understanding, more effective use of strategies and greater frequency of implementation for your students to demonstrate the knowledge and skills required by rigorous standards. This series includes instructional techniques appropriate for all year levels and content areas. The examples contained within are year-level specific and should serve as models and launching points for application in your own classroom.

Your skilful implementation of these strategies is essential to your students' mastery of the Australian Curriculum or other rigorous standards, no matter the year level or subject you are teaching. Other instructional strategies covered in the Essentials for Achieving Rigour series, such as analysing errors in reasoning and engaging students in cognitively complex tasks, exemplify the cognitive complexity needed to meet rigorous standards. Taken as a package, these strategies may at first glance seem quite daunting. For this reason, the series focuses on just one strategy in each guide.

Instructional Technique 1

CLOSE MONITORING

The technique of close monitoring is characterised by a highly structured period of practice in which you observe your students practising. Close monitoring is essential during the beginning stages of acquiring critical content. Students need guided practice with a teacher or coach who is closely watching their responses to explicit instruction and teacher modelling. During close monitoring, students receive feedback and reinforcement of their correct approximations of the skill and immediate correction of any errors or misunderstandings. Since practice makes permanent, ensure that your students practise accurately from the beginning. Following the initial instruction of any type of procedural knowledge, students will need to execute the initial skill, strategy or process several times, depending on the ease and speed with which they progress. Close monitoring can occur at any year level or in any content area, and it is critical when students are beginning to learn the first discrete skills in a process or steps in a strategy and need closer supervision and scaffolding to master those skills.

How to Effectively Implement Close Monitoring

The effective implementation of close monitoring depends on your understanding of and close attention to several variables as you plan and then implement this technique:

- Grouping students in ways that facilitates close monitoring
- Explicitly instructing the key concepts and vocabulary that are foundational to the target skill or process
- Providing opportunities to process the key concepts and vocabulary
- Modelling that shows students how to execute the skill or thinking aloud that shows students how to use a cognitive process
- Successfully practising immediately following modelling

Table 1.1 contains a template that shows how to effectively implement close monitoring during practice. The template is divided into three parts. Part 1 of the template describes the steps during which you teach the conceptual knowledge that is foundational to the skill. Part 2 describes the steps that lead up to the practice session. These steps include the instructional decisions you make before you are fully prepared to put the practice session in your plan book. Part 3 describes the actual practice session. Column 1 describes each of the steps, while Column 2 provides explanatory notes for the teacher.

Table 1.1: Sample Lesson Template for Effectively Implementing Close Monitoring

PART 1: Teach the Conceptual Knowledge That Is Inherent in the Skill, Strategy or Process	
Implementation	Explanatory Notes for the Teacher
1. Select the learning target for which you will implement close monitoring during practice.	Practice should always be connected to the learning target you select. Hastily chosen practice from a workbook or website can easily become nothing more than a way to keep students busy that does not produce the desired result.
2. Identify the critical content that you will initially teach your students prior to the practice session.	Identify the vocabulary and concepts that students need to understand before they can practise meaningfully.
3. Identify the ways in which students will process the critical content they need to understand as a foundation for practising the skill.	Once you have introduced the conceptual knowledge, engage students in processing it in a variety of ways.
PART 2: Do Before Your Practice Session	
1. Determine how you will monitor students' performance of the skill, strategy or process.	Close monitoring is immediate monitoring that enables you to correct an error, ask a guiding question or point students in a more productive direction. Small groups are the most productive way to closely monitor.
2. Determine how you will chunk the skill, strategy or process to make it more manageable.	Begin with the smallest chunk or step of a skill, strategy or process to give your students a greater likelihood of experiencing immediate success during their first practice session.

3. If appropriate for the skill, strategy or process as well as for the year level and content, prepare an anchor chart that gives students visual cues for reviewing the steps of a skill, strategy or process.	Anchor charts should include a definition or description and the steps for executing a skill, strategy or process. In addition to anchor charts, consider preparing a handout for students to consult. This handout can be useful during later independent practice sessions.
4. Develop a menu of guiding questions that are appropriate for your year level and content.	For example, while students practise a maths skill, ask the following questions: 1) How should you begin? 2) What do you need to do next? 3) How will you check your work?
PART 3: Practise the Skill, Strategy or Process	
1. Determine the specific task you want students to practise during the practice session.	Although this sounds simple, this step often takes the most thought. Will the task produce the desired outcome of your learning target? Do students have the essential conceptual knowledge to understand what they are practising and why? Is the task too complicated? Is the task relevant?
2. Model the task for students.	Show students how to execute a skill, strategy or process before asking them to do it on their own. Even though you are closely monitoring, your students' first attempts can often establish a pattern of success or frustration.
3. Throughout the practice session, focus on shaping students' conceptual understanding by asking them to explain what they are thinking or why they did what they did.	Rather than telling your students what to do, pose a question, provide another model or demonstration, or think aloud. This approach demands that your students do the thinking and learning.
4. After several opportunities for students to respond in which you have closely monitored their progress, ask students to reflect on their practice session.	As appropriate for your year level, help your students break down what may not be working for them and what needs to change so they can develop proficiency with a skill, strategy or process.

Common Mistakes

The implementation of a new technique can often result in unanticipated mistakes. However, knowing ahead of time where problems might arise will increase your likelihood of success in implementing this technique.

Primary Example of Worked Examples

This example demonstrates how a primary teacher uses worked examples as part of guided practice in her year-four maths class. The example is divided into two parts: 1) a sample template that will enable you to follow the lesson steps and 2) a classroom scenario describing the specific aspect of the lesson devoted to using worked examples in a practice session.

Sample Lesson Template for Implementing Worked Examples: Year-Four Maths

Table 2.2 is a sample lesson template describing the steps for using worked examples to practise in a year-four maths classroom.

Table 2.2: Sample Lesson Template for Implementing Worked Examples: Year-Four Maths

PART 1: Teach the Conceptual Knowledge That Serves as a Foundation for the Skill, Strategy or Process	
Implementation	Explanatory Notes for the Teacher
1. Select the learning target for your worked example.	The learning target for this worked example practice lesson is <i>multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays and/or area models.</i>
2. Identify the critical content you will initially teach your students prior to introducing the worked example.	The critical content includes the concepts of place value and the properties of operations.
3. Give your students opportunities to process the important conceptual knowledge they will need to fully benefit from the worked examples.	Students will process this critical content by illustrating and explaining the calculation using equations, rectangular arrays and/or area models.
PART 2: Do Before Your Practice Session	
1. Develop the worked example that you plan to use.	The teacher develops a worked example of double-digit multiplication. See Figure 2.1.
2. Develop a model script to demonstrate to students how to talk to themselves or think aloud about the various steps in the task or problem.	The model script is in column 1 of Figure 2.1.

Table 5.2: Sample Template for Implementing Varied Practice: Year-Five Maths
(continued)

Implementation	Explanatory Notes for the Teacher
5. Make notes of students' progress in varied practice.	The teacher records her notes on her clipboard or in her marking book.
6. Make notes on the success and challenges of the varied practice.	Teacher develops a list of questions to ask students.
7. Debrief with students regarding their success and frustrations and also what new insights they gained into applying previous learning to the new task.	Teacher determines whether students need reteaching of any key concepts.

Classroom Scenario for Implementing Varied Practice: Year-Five Maths

The secondary example for implementing varied practice takes place in a middle-years maths class. The varied practice is designed to apply and extend previous understandings of multiplication and division. The teacher has spent more class time working on mathematical concepts and attempting to guide his students to understandings of mathematics as more than memorising a list of steps to solve a problem. Most students have developed fluency with single-digit multiplication and it is time for more rigorous application of the critical content. He is hoping that the combination of solid concepts and procedural fluency will help his students solve the challenging problems he has put together for their first varied practice session. Here is how he introduces the practice session to his students:

Good morning, class. Today is kind of an experiment for me. *His class sits up a little straighter in their seats.* You probably didn't realise, but I've taught this unit quite a bit differently this year than I have in the past, and today I'm going to find out whether that was a good idea. The results that you give me on this set of practice problems is going to provide evidence for my new method or it's going to make me question my decision.