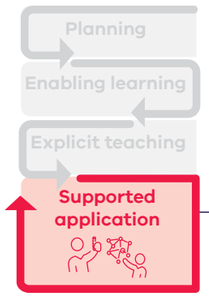
Vary practice

To consolidate learning after explicit teaching, students need to retrieve and practise knowledge in different ways and contexts, and at spaced intervals. The challenge introduced by the spacing and varying of practice helps to consolidate learning and to make future recall easier (Bjork and Bjork 2011).

Varying how students practise and apply their learning supports them to develop multiple connections to knowledge, build mastery and transfer learning to new situations (AERO 2023).

Elements | **Strategies**



- Vary practice
- Revisit and review
- Apply learning and build mastery

Key links to other guides

- **Positive Classroom Management Strategies**
- **Scaffold practice**
- **Monitor progress**
- **Enable student self-regulation and self-efficacy**

Links to departmental initiatives

- **Diverse Learners Hub**
- **Phonics Plus**
- **Professional Learning Communities**
- **Student Excellence Program**
- **Victorian Lesson Plans**

References and further reading

arc.educationapps.vic.gov.au/learning/resource/77581

Target audience: Teachers

Practice 1 Use a variety of tasks and question types

Use tasks to apply knowledge in varied ways

Varying task types can enhance students' ability to use knowledge across different contexts and for different purposes. It helps students develop multiple connections to knowledge stored in long term memory, improving retention, retrieval and transferability of learning (AERO 2024).

HOW?

- During guided and independent practice, provide a range of related tasks that enable students to apply knowledge multiple times, in different ways. E.g. in Maths, teach division in concrete, representational and abstract ways by sharing counters, drawing representations and writing out matching equations.
- Include tasks that involve the application of knowledge in different contexts or using different materials. E.g. in lower primary Physical Education, practising throwing and catching in different sports.
- Vary the way students demonstrate their knowledge by changing the response mode. E.g. writing a summary of a topic, creating a concept map or engaging in a structured discussion or debate.
- Move from familiar to unfamiliar tasks to manage student cognitive load. Build student confidence as they engage with more challenging material. E.g. in Food Technology, creating a meal plan consisting of dishes eaten at home before using the same core ingredients to create a restaurant menu.

Use questions for engagement, explanation and elaboration

Questions can vary in purpose, stimulating either simple recall or an ever more complex understanding and application of knowledge. They can be delivered in different formats to match the purpose of the task and to maximise student engagement and participation.

HOW?

- Include a range of question types to engage students in different learning activities, matching questions to the task purpose. E.g. eliciting recall, demonstrating understanding, connecting knowledge and synthesising topics.
- Use questions to manage students' cognitive load. E.g. pair factual recall and application questions so that students first retrieve relevant knowledge and are then asked to use it.
- Introduce questions that probe students' assumptions and prompt them to explain their thinking. E.g. 'Your answer assumes ___. How do you know that? What would happen if ___?'
- Promote 'elaborative interrogation' by introducing 'how' and 'why' questions that guide students to explain and actively use their learning. E.g. after a lab session, ask: 'What happened to the ice? Why did this happen? How can we explain this using particle theory?'
- Vary how questions are delivered and what students do in response. E.g. delivering and answering questions orally or in writing, facilitating student self and paired questioning, or embedding questioning in routines such as cold calling and whole-class interactive quizzes.

Practice 2 Space and alternate practice

Space practice

Spacing practice leads students to engage and re-engage with knowledge and ideas over time. Re-engaging with content at spaced intervals, and in different ways, requires students to actively retrieve information from long term memory. Each spaced engagement that requires reasonable effort to remember content (a form of desirable difficulty), strengthens connections in long term memory (Bjork and Bjork 2011; AERO 2024).

HOW?

- Space the learning and practice of new knowledge, concepts or skills across lessons. E.g. over a week return to the same small set of vocabulary words, each time doing different activities with them such as word associations and generating examples and non-examples (Beck et al. 2013).
- Use review routines to space practice (see **Revisit and Review**).
- Homework tasks can be an opportunity to provide additional spaced practice at intervals outside of timetabled lessons.
- Use assessment to decide when and how often material should be practised to consolidate learning, and when to increase challenge or move on.

Alternate practice of related content

Practice			
A	B	A	B

Alternating practice between related but different concepts or skills (referred to as interleaving), requires students to repeatedly recall relevant knowledge and determine the right rule or strategy to use. Interleaving helps students to discern between different problem types, consolidate learning and use knowledge flexibly (Bjork and Bjork 2011; Dunlosky 2013).

HOW?

- Use interleaving after explicit teaching and practice so that students have basic proficiency of the knowledge, skills or concepts to be applied.
- In Mathematics, interleaving is used to alternate between exercises that require the application of distinct but related formulas or concepts. E.g. alternating between adding, subtracting, multiplying and dividing fractions.
- As students develop proficiency, increase the level of challenge by requiring students to recall and apply knowledge to increasingly similar interleaved tasks. E.g. After students have alternated reviewing the key features of different art movements they may move to alternating review of the styles of artists within the one movement.