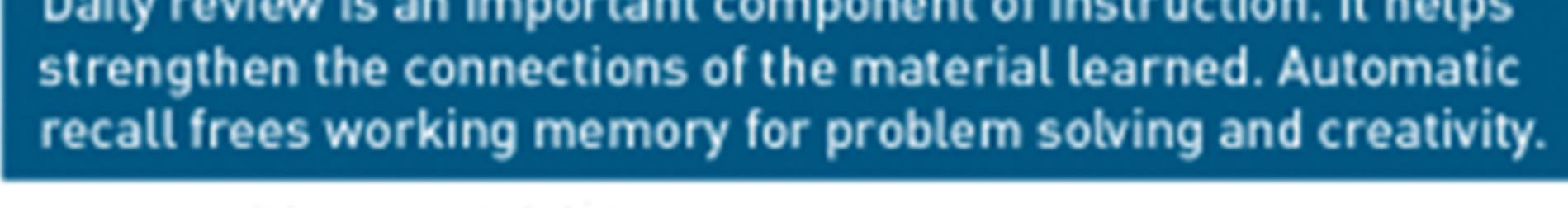
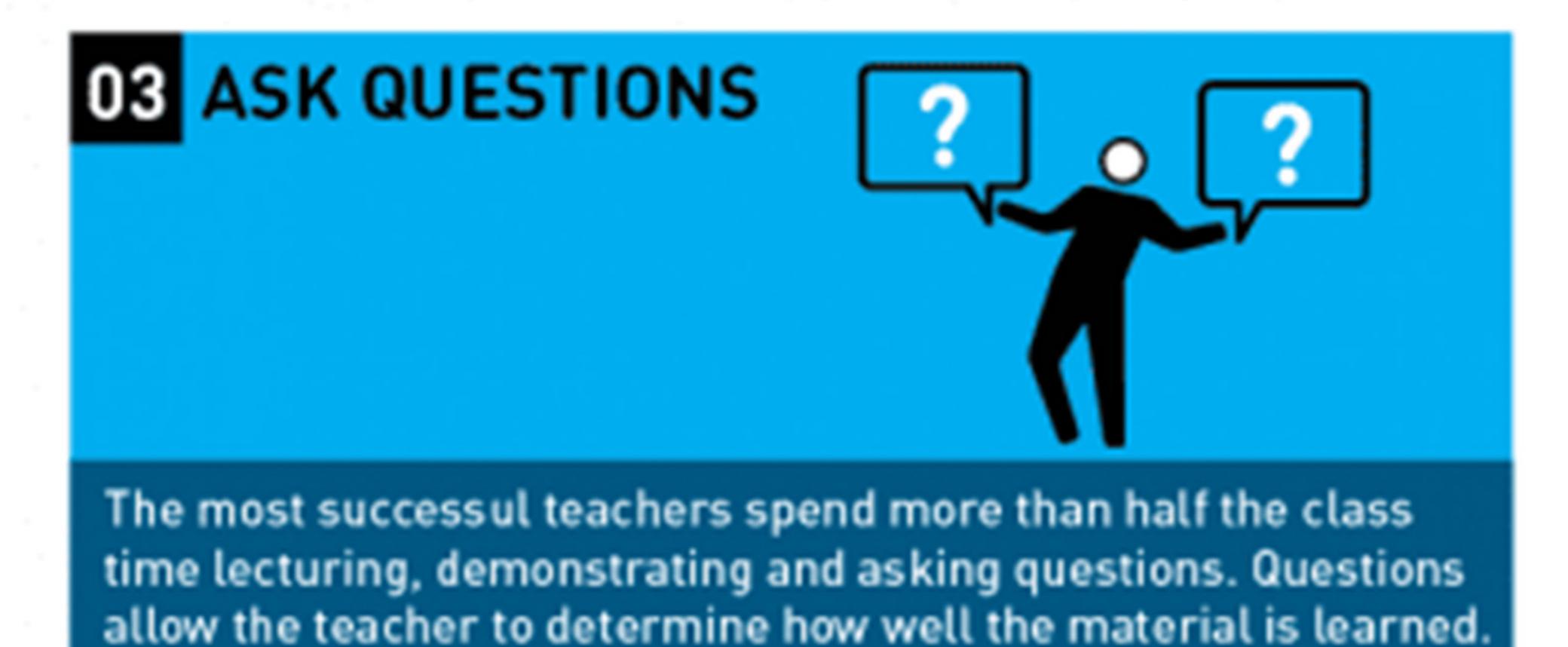
## Rosenshine's 10 Principles of Instruction











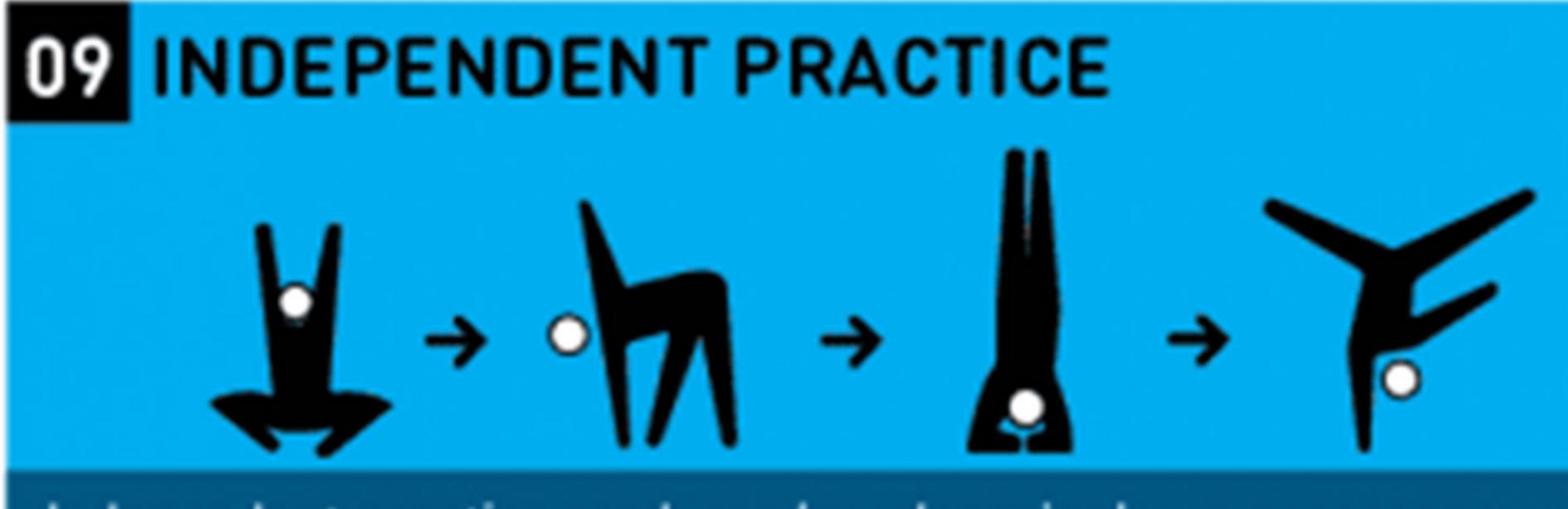
05 GUIDE STUDENT PRACTICE

Students need additional time to rephrase, elaborate and summarise new material in order to store it in their long-term memory. More successful teachers built in more time for this.



showing students are learning and also being challenged.

Better teachers taught in small steps followed by practice.



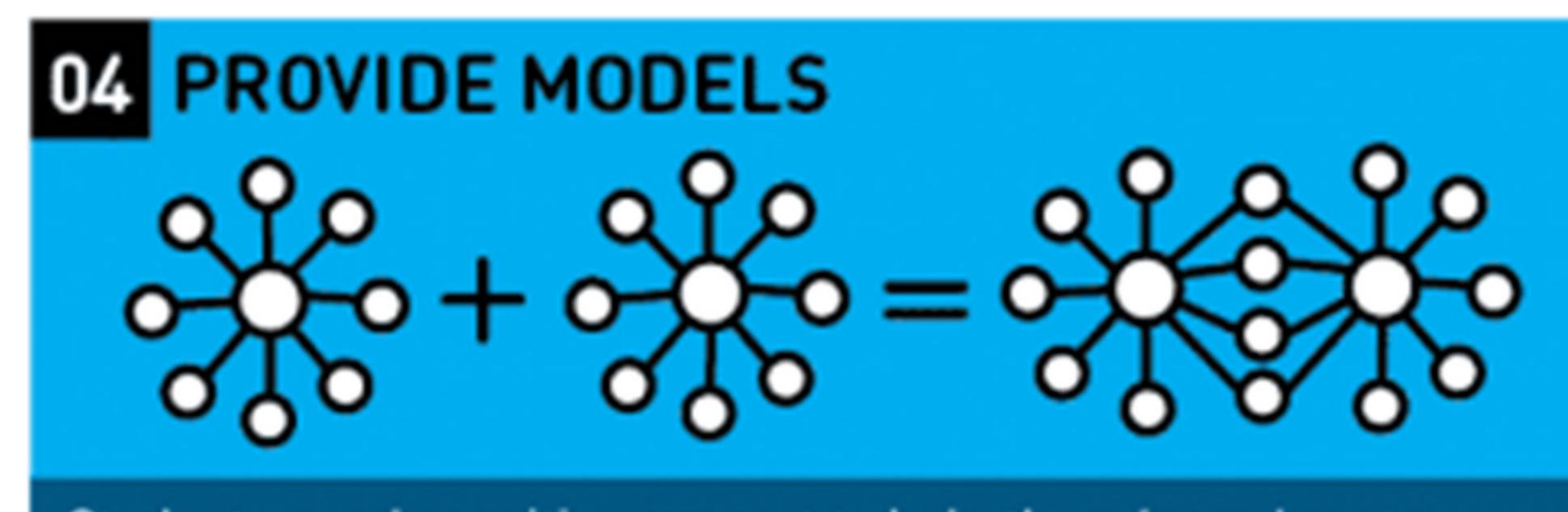
Independent practice produces 'overlearning' — a necessary process for new material to be recalled automatically. This ensures no overloading of students' working memory.

## 1. Begin the lesson with a review of previous learning.

- 2. Present new material in small steps.
- 3. Ask a large number of questions (and to all students).
- 4. Provide models and worked examples.
- 5. Practise using the new material.
- 6. Check for understanding frequently and correct errors.
- 7. Obtain a high success rate.
- 8. Provide scaffolds for difficult tasks.
- 9. Independent practice.
- 10. Monthly and weekly reviews.



Our working memory is small, only handling a few bits of information at once. Avoid its overload — present new material in small steps and proceed only when first steps are mastered.



Students need cognitive support to help them learn how to solve problems. Modelling, worked examples and teacher thinking out loud help clarify the specific steps involved.



Less successful teachers merely ask "Are there any questions?"
No questions are are taken to mean no problems. False.
By contrast, more successful teachers check on all students.



Scaffolds are temporary supports to assist learning. They can include modelling, teacher thinking aloud, cue cards and checklists. Scaffolds are part of cognitive apprenticeship.



The effort involved in recalling recently-learned material embeds it in long-term memory. And the more this happens, the easier it is to connect new material to such prior knowledge.