

How students learn

Using research in cognitive science and classroom practices to
inform our teaching

Learning Goals:

After today's meeting, TAs should be able to...

- 1) Connect research-based strategies for teaching to key principles of student learning

What promotes student learning?

How do we know how students learn?

Cognitive research: how our brains acquire and use information

Research on the classroom practices: how teaching practice relate to student achievement

Principles of Instruction

Research-Based Strategies That All Teachers Should Know

- Read through the research-based strategy assigned to you
- Present your strategy (2-3 minutes) to the rest of the group



Your presentation should address:

- What does this strategy teach you about how students learn?
- An example of how you could implement this strategy in your teaching.

Research-based strategies all teachers should know!

1. Begin a lesson with a short review of previous learning.
2. Present new material in small steps with student practice after each step.
3. Ask a large number of questions, checking the responses of all students.
4. Provide models.
5. Guide student practice.
6. Check for student understanding.
7. Obtain a high success rate.
8. Provide scaffolds for difficult tasks.
9. Require and monitor independent practice.
10. Engage students in weekly and monthly review.

Exit Ticket:

+ What stuck out to you about how students learn, or the strategies we can use to meet these needs?

△ Is there anything you still have questions about?

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