



THINK-  
PAIR-  
SHARE



# THINK-PAIR-SHARE

Think-pair-share (TPS) is a collaborative learning strategy where students work together to solve a problem, scenario, or question. It can work in varied size classrooms and in any subject. Pose a question to your students and give them the **time and opportunity** to complete the following steps:

## Think

- Students “think” about the problem, scenario, question or what they have learned about the topic individually.

## Pair

- In groups of two or three, ask the students to discuss their ideas.

## Share

- Students share their ideas with a larger group, such as the whole class.

TPS offers benefits of small-group collaborative learning in a large lecture class, makes students think about course content under consideration and allows them to formulate their **reasoning** individually before sharing it with others, which help them to develop **higher order thinking** skills (Meltzer & Thornton, 2012).



## How to Implement TPS in my class?

You can describe TPS to your students, why you are doing it and how TPS helps learning.

**THINK:** You can pose an open-ended question, short problem or scenario aligned with your instructional goal and ask them to think to themselves for about **1 minute** and write down their thoughts.

**PAIR:** You can ask them to turn to the person next to them and share their thought process / answer with each other. Groups can be made up of 2 or 3 students. You should tell students how they should be spending the time throughout (**usually 5 minutes**) and let them know when they should be finishing up their thoughts. Also, you can add the problem and instructions on a slide to help your students follow the given problem and directions.

**SHARE:** Allow each group to choose who will present their ideas to the rest of the class. Pairs, then, share their ideas with a larger group, such as the whole class. Students are more comfortable when presenting their ideas to a group with the support of a partner.

If your lesson format is **online**, you can use Zoom's Breakout Rooms.

- You click on Zoom's Breakout Rooms tool and you enter the number of breakout rooms needed in order for each to contain a pair of students.
- Zoom conveniently displays the number of participants per room based on the number of participants present and the number of rooms you select.
- If you have an odd number of students, subtract one from the total number of students and divide that by two to get the number of rooms you should create.
- Zoom will automatically assign one of the breakout rooms with three students instead of a pair.



## Some guidelines for what to do in class when you implement your TPS activity:

1. Don't panic if no activity happens in the first minute. It will take time for students to get started.
2. Do encourage students to write their ideas down during the "think" phase.
3. Do walk around the class during the "pair" phase, answer relevant questions, encourage students to talk to their pair and write down their answers.
4. Keep track of time.
5. Do discuss students' solutions in the "share" phase, and then transition into points that you want to highlight.

You can use the templates listed below;

Template A

Template B



## References

Active Learning – Think, Pair, Share. Kent State University, Center for Teaching and Learning. Retrieved from <https://www.kent.edu/ctl/think-pair-share>

Meltzer, D.E., & Thornton, R. (2012) Resource Letter ALIP–1: Active-Learning Instruction in Physics. *American Journal of Physics* (6), 80.

Active Learning Strategies. Columbia University, Center for Teaching and Learning. Retrieved from <https://ctl.columbia.edu/resources-and-technology/teaching-with-technology/teaching-online/active-learning/>

Think-Pair-Share. University of Toronto, Center for Teaching Support and Innovation. Retrieved from <https://teaching.utoronto.ca/teaching-support/active-learning-pedagogies/active-learning-adapting-techniques/think-pair-share/>

Templates adapted from NSW Department of Education. Retrieved from <https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/645#>

## Further Reading and Resources

- [Active Learning Strategy: Think-Pair-Share, MIT OpenCourseWare](#)
- [Think, Pair, Share: A routine for active reasoning and explanation, Harvard Graduate School of Education](#)
- [Getting the “Think-Pair-Share” Technique Right](#)