Academic Outreach & Innovation

Think-Pair-Share

Overview

Think-Pair-Share is a form of peer instruction that is an effective means of promoting active learning in class. Students first think individually about a prompt. Then, they share their argument with a partner before sharing a response with a larger group. Think-Pair-Share activities engage frequent use of feedback which can help students develop error detection skills which may be useful during independent learning. Additionally, when think-pair-share is combined with student response on multiple-choice questions, student misconceptions are highlighted which can be promptly addressed through peer and instructor feedback.

Think-Pair-Share activities are ideal for: alternate approaches/more than one right answer, identifying misconceptions.

Think-Pair-Share meets the following WSU Learning Goals: critical and creative thinking, quantitative reasoning, scientific literacy, information literacy, diversity, communication, and depth, breadth, and integration of learning.

Group size: 3-5 | **Active Time**: 20 mins | **Prep. Time**: Low

Active time is an estimate and may vary depending on your class.

Implementation

Suggested Tech Tools: Blackboard Discussion Board, Blackboard Assignments, VoiceThread, Kahoot, TopHat, Poll Everywhere.

Instructor:
Provide students with a question.

Learners:
1. Formulate an initial response on your own.
2. In small groups, discuss your responses and explain your choices using reasoning and evidence.
3. Share your responses with the larger class.

Variations & Tips:

- For **all course types**, implement voting before and after a Think-Pair-Share activity to assess student misconceptions and save time in class if students know the correct answer and can provide adequate and reasonable reasons.
- To pair students in **online** and **video conference (VC)** courses, create Blackboard Group Discussion Boards or use Blackboard Collaborate Ultra.
- Create distinct incorrect answer choices that are representative of likely student conceptual or reasoning difficulties to encourage discussion of why an answer is (in)correct. Review all responses—not just the correct response.
- Use a tool like Google Docs or Padlet to compile responses.

You may also be interested in:

What's the Principle?
Picture prompt

Resources:

A meta-analysis of the effects of audience response systems (clicker-based technologies)
Carl Wieman Science Education Initiative at the University of British Columbia (provides guidance on writing effective questions, gaining student buy-in, and addressing logistical concerns).
The Power of Feedback
Why Peer Discussion Improves Student Performance

Let's explore the possibilities together!
Spark 102 Faculty Studio | 509-335-3557 | li.wsu.edu | aoi.li@wsu.edu