

WHAT IS IT?

Peer instruction is an interactive teaching technique popularised by Harvard Physics Professor Eric Mazur in the late nineties. Mazur developed his version of this practice to address his students' struggle to apply factual knowledge to conceptual problems. In Mazur's technique, multiple-choice conceptual questions are posed at key parts of the lecture. If the majority of the students' responses are incorrect they are asked to turn to their neighbour to convince them of their answer. Peer instruction works on the theory that students at similar cognitive levels can at times explain content where educators may experience the "expert blind spot" (Wiggins & McTighe, 2006). Mazur claims his technique works best if students prepare before class and then test their application of knowledge in class where they have opportunities for rich feedback (self, peer and teacher). Mazur also sees this technique as a form of the flipped classroom which presents an opportunity for educators to understand the basis of the flipped classroom model.

WHY USE IT?

- Mazur (2001) has reported significant learning gains using this technique.
- Though developed in the Science discipline, it has been successfully transposed to other disciplines (see Monash University 's Peer Instruction in the Humanities Project).
- Peer instruction is considered a form of the flipped classroom and provides a structured way to guide student preparation, in-class active learning and rich feedback opportunities (see Vanderbilt University article).

HOW DO I DO IT?

1. Provide students with materials to study before class to prepare them for active learning in class.
2. After a brief lecture (10-15 minutes) ask students a challenging conceptual question.
3. Individuals think for 1-2 minutes.
4. Ask students to vote on their answer (show of hands, cards, electronic voting- e.g. UQ Poll).
5. If under 30% are correct then revisit the concept.
6. Ask individuals to think and revote.
7. If 30-70% are correct, engage in peer discussion (pairs or small groups).
8. Students re-vote. If over 70% are correct then explain the answer and move on. If they are still struggling, revisit the concept (e.g. mini lecture) and repeat the process.
9. Remind students of the relevance of the activity to broader outcomes.

WHAT COULD I USE?

- UQ Poll
- Kahoot.it

WHAT SHOULD I CONSIDER?

- Design sufficiently challenging conceptual questions to promote higher order thinking. Mazur (1997) refers to these as [ConcepTests](#) (question banks available). Also, see the collated question banks from the [Peer Instruction in the Humanities Project](#).
- Students need to prepare before class and have sufficient background knowledge to take on the challenging questions.
- Don't give away the answer too soon; allow time for students to think, debate and discuss.

WHAT IF I WANT MORE?

- [Peer Instruction for Active Learning - Eric Mazur](#) [video 13:56]
- [Eric Mazur - Peer instruction](#) [video 5:03]
- [Peer Instruction in the Humanities Project - Monash University](#)
- [Mazur Group](#)
- Crouch, C. H., & Mazur, E. (2001). Peer instruction: Ten years of experience and results. *American journal of physics*, 69(9), 970-977.
- Mazur, E. (1997). *Peer Instruction: A User's Manual*. Series in Educational Innovation, Prentice Hall, Upper Saddle River, NJ.
- Mazur (2012) *The flipped classroom will redefine the role of educators*
- Wiggins, G., & McTighe, J. (2006). *Understanding by Design*. Upper Saddle River: Pearson Education.

WHAT IF I NEED SUPPORT?

For further support contact ITaLI TeachAssist

