

Research-based teaching tip

Allow thinking time before discussion

Build in class time for students to think individually before engaging with peers in discussion or other educational activity.

Rationale:

Giving students time to think independently before answering questions or engaging in discussion increases the quality and quantity of their contributions to discussion and stimulates depth of thought.

Evidence:

- Students report that a period of individual thought prior to discussion increased participation in discussions, increased benefit of peer discussions, and deepened thinking that concept.¹
- Allowing time for students to think independently was reported as important for constructing arguments and engaging in discussions.²
- A period of individual thought prior to discussion increased argumentation time during discussion and improved some discussions.³

Implementation:

Before asking students to discuss material, answer questions, or engage in other educational activities, give students time to think independently.

Sources:

¹Nicol DJ, Boyle JT (2003). Peer instruction versus class-wide discussion in large classes: a comparison of two interaction methods in the wired class. *Stud High Educ* 28, 457–473.

²Nielsen KJ, Hansen-Nygard G, Stav JB (2012). Investigating peer instruction: how the initial voting session affects students' experiences of group discussion. *ISRN Educ* 2012, 1–8.

³Nielsen KL, Hansen G, Stav JB (2016). How the initial thinking period affects student argumentation during peer instruction: students' experiences versus observations. *Studies in Higher Education* 41, 124-138.