

Research-based teaching tip

The Random (or Cold) Call

Use random call or cold call when selecting students to answer in-class questions or participate in activities.

Rationale:

While you may be hesitant to use cold calling to avoid embarrassing students or making them uncomfortable, random call can improve overall class participation and engagement, student preparation, and student comfort in participating in class activities, all of which improve learning outcomes.

Evidence:

1. Class participation is related to positive learning outcomes.¹ Students who don't participate may not perform as well. Female students, in particular, are less likely to volunteer to respond², which may skew course outcomes.
2. The use of cold call, or higher frequency of use of cold call, increases student-reported class preparation, and student-reported and observer-measured class participation, including increased participation in volunteer questions.^{3,4}
3. Cold calling increases students' perceived comfort in participating, which leads to further increased participation.^{1,3-5}
4. Random call eliminates gender bias in classroom questions and activities.²

Implementation:

Cold calling is easy to implement in the classroom, and can be done by making a set of flash cards with student names, randomly generating numbers in association with a list of names, or using smart phone apps.

Sources:

¹Dallimore EJ, Hertenstein JH, and Platt MB. 2010. Class Participation in Accounting Courses: Factors That Affect Student Comfort and Learning. *Issues in Accounting Education* 25:613-629.

²Eddy SL, Brownell SE, and Wenderoth MP. 2014. Gender gaps in achievement and participation in multiple introductory biology classrooms. *CBE Life Sciences Education* 13:478-92.

³Dallimore EJ, Hertenstein JH, Platt MB. 2006. Nonvoluntary class participation in graduate discussion courses: effects of grading and cold calling. *Journal of Management Education* 30: 354-377.

⁴Dallimore EJ, Hertenstein JH, Platt MB. 2012. Impact of cold-calling on student voluntary participation. *Journal of Management Education* 37:305-341.

⁵Souza TJ, Dallimore EJ, Aoki E, Pilling BC. 2010. Communication climate, comfort and cold-calling: an analysis of discussion-based courses at multiple universities. In LB Nelson & JE Miller (eds), *To improve the academy: resources for faculty, instructional, and organizational development* (Vol. 28, 227-249). San Francisco, CA: Jossey-Bass.