How Often Does Active Learning Actually Occur? Perception versus Reality

(Sheridan and Smith, 2020)

A typical education curriculum relies on teacher lectures as the primary learning mechanism. Students show up to lectures and passively listen to the teacher. Freeman et al. (2014) showed that students perform better in exams when the instructor predominantly used active teaching methods, such as impromptu group problem-solving. Despite the growing evidence favoring active teaching, teachers rarely use them.

One Sentence Summary

Exploring when and how many does active learning happens in the classroom, Sheridan and Smith (2020) found teachers dedicate most of their time to passive teaching (almost 60%) and consistently overestimate the time allocated to active learning (error of 10%).

Main Findings

The Decibel Analysis for Research in Teaching (DART) is a software that objectively measures how much time is allocated to active and passive learning during a class. The authors used DART to study several business and economics classes. The DART tool estimated that passive learning took composed 78.5% of class time, and the remaining 21.5% of the class involved students in active learning.

After the classes, Sheridan and Smith (2020) surveyed the teachers on their performance. Teachers underestimated the time allocated to passive learning and overestimated the time of active learning. Specifically, there is a 10% gap between teacher perception and the reality of time dedicated to active learning. Looking at individual cases, they find a correlation between the percentage of passive learning and perception-reality gap.

Concluding Remarks

Currently, some universities are introducing active learning in their curriculums. Maastricht University focuses on a *Problem Based Learning*, in which students discuss problems and relate them to the content. Despite the positive evidence, many teachers do not incorporate active learning methods because of the perception and reality gap. To bridge the gap, the authors propose the use of the DART system to improve teacher's perception of their teaching performance. With concrete information, a teacher could easily adapt their methods to improve student learning.

References

- Sheridan, B.J., Smith, B., 2020. How Often Does Active Learning Actually Occur? Perception versus Reality. AEA Pap. Proc. 110, 304–308. https://doi.org/10.1257/pandp.20201053.
- Freeman, S., Eddy, S.L., McDonough, M., Smith, M.K., Okoroafor, N., Jordt, H., Wenderoth, M.P., 2014. Active learning increases student performance in science, engineering, and mathematics. Proc. Natl. Acad. Sci. U. S. A. https://doi.org/10.1073/pnas.1319030111.