

How Often Does Active Learning Actually Occur? Perception versus Reality (Sheridan and Smith, 2020)

A typical education curriculum relies on teacher lectures as the main learning mechanism. Students show up to lectures and listen to the teacher. Learning literature defines this approach as a passive method. In contrast, active methods involve students in their learning. For example, asking students to briefly summarize the topic at the start of the class. Freeman et al., (2014) showed that students perform better in exams when the instructor predominantly used active teaching methods.

One Sentence Summary

Exploring when and how much does active learning happens in the classroom, they found that 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 software identified a single voice during 90% of the class time. This indicates that most teachers use a “speak and listen method” and occasionally ask questions. However, asking questions is considered an active method while only talking is passive. The DART tool, considering latter distinction, calculated that a mean class consisted of 78.5% of class time is dedicated to passive learning. In contrast, only 21.5% of the class involves students in active learning.

After the classes, the teachers were surveyed 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 that the higher the percentage of passive learning is correlated with a higher perception-reality gap.

Concluding Remarks

Currently, some universities are introducing active learning in their curriculums. University focuses on a *Problem Based Learning*, in which students discuss problems and relate them to the content. Despite the positive evidence, many teachers fail to 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 more 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>.