



Superintendent's HOPE Note April 2024

"All genuine learning is active, not passive. It involves the use of the mind, not just the memory. It is a process of discovery in which the student is the main agent, not the teacher." ~ Mortimer Adler

A Case for Active Learning

Louis Deslauriers, Senior Physics Preceptor at Harvard University, and his team conducted a groundbreaking experiment in an introductory physics class to compare the effectiveness of traditional lectures with active learning methods. The study spanned 15 weeks, with the first 11 weeks featuring standard teaching methods and the remaining weeks introducing alternating sessions of traditional lectures and active learning. Despite both groups covering the same material, the level of learner engagement varied.

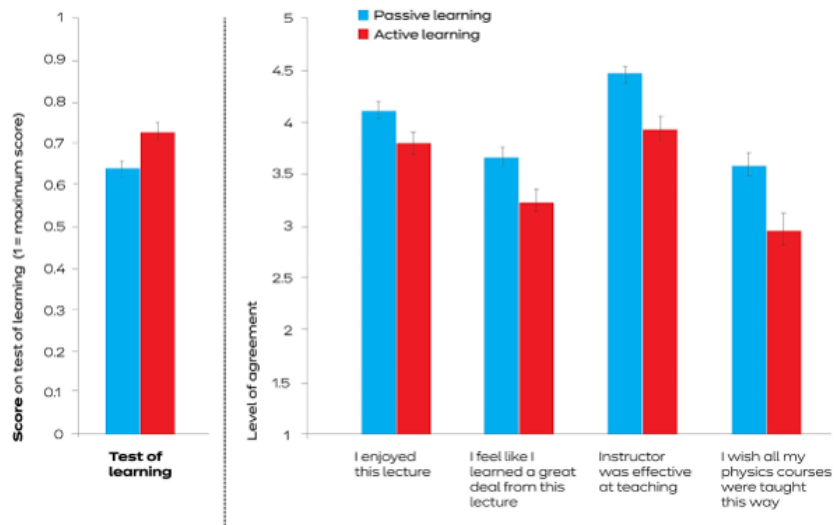
After each session, learners provided feedback through surveys, assessing their perceived learning experience. Additionally, they underwent testing to objectively measure their knowledge retention.

Surprisingly, while learners reported feeling they learned more from traditional lectures, their test scores revealed greater proficiency after active learning sessions. This paradox highlighted a notable discrepancy between perceived and actual learning outcomes.

However, the study's results do not suggest learners aversion to active learning. On the contrary, previous research indicates that students embrace active learning once they witness its effectiveness. Deslauriers emphasized this point, noting that courses at Harvard which adopted active learning saw improvements in overall course evaluations, underscoring its positive impact on student learning.

Read the full article in the [Harvard Gazette](#).

Performance vs. perception



Source: "Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom," Louis Deslauriers, Logan S. McCarty, Kelly Miller, Kristina Callaghan, and Greg Kestin

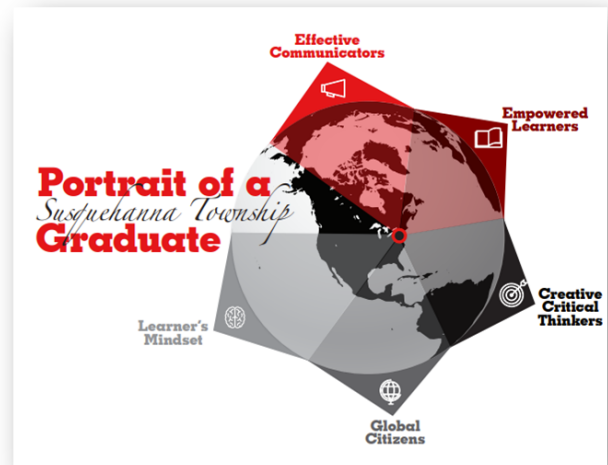
"In our classes, we start each topic by asking students to gather in small groups to solve some problems. While they work, we walk around the room to observe them and answer questions. Then we come together and give a short lecture targeted specifically at the misconceptions and struggles we saw during the problem-solving activity. So far we've transformed over a dozen classes to use this kind of active-learning approach. It's extremely efficient — we can cover just as much material as we would using lectures."

Dr. Logan McCarty, Assistant Dean of Science Education, Harvard University.



What is Active Learning?

Active learning is an approach to education where learners are actively engaged in the learning process rather than passively receiving information. It involves various activities such as discussions, problem-solving, group work, hands-on experiments, and other interactive exercises. In active learning, learners take responsibility for their learning by participating actively in class, asking questions, making connections, and applying what they've learned to real-world situations. This approach encourages critical thinking, deeper understanding, and retention of information compared to traditional passive learning methods.



Benefits of Active Learning:

- **Enhanced Engagement:** Actively participating in class activities boosts learners' interest and involvement in the subject matter.
- **Improved Retention:** Engaging in discussions, problem-solving, and other activities helps learners retain information for longer periods.
- **Development of Critical Thinking Skills:** Active learning cultivates critical thinking as learners analyze, connect, and apply concepts to solve problems.
- **Collaboration and Communication:** Collaborative activities promote teamwork and effective communication among students.
- **Application to Real-world Contexts:** Active learning activities allow learners to apply their knowledge and skills to practical situations, enhancing their understanding of concepts.
- **Immediate Feedback:** Learners receive prompt feedback during active learning, enabling them to identify areas for improvement and make adjustments as needed.
- **Increased Motivation:** Actively participating in learning activities boosts learners' motivation and confidence, leading to a more positive learning experience.

Piece of the Puzzle



This month, we recognize Rick Bruce, grounds keeper, as our Piece of the Puzzle! Rick willingly fulfills multiple tasks, including snow removal, mowing the lawns, and vehicle operation. Winter, spring, summer or fall, Rick is on the job with a smile. His readiness to tackle any job with enthusiasm makes him a valued member of our team. If you see Mr. Bruce, please thank him for his service and congratulate him for being our Piece of the Puzzle!