



**BOOSTING
LEARNING
THROUGH
WAIT
TIME**



Boosting Learning through Wait Time

It is necessary to give students some time to think about the questions and formulate a response before they speak (Sachdeva, 1996). Research shows that when faculty members ask questions, they do not



receive an answer from the students approximately 30 % of the time, so the faculty members tend to give the answer themselves instead of waiting for the students' answers (Barnes, 1983).

According to Stahl (1994), on average, teachers only wait 0.7 and 1.4 seconds after asking a question. Fowler (1975), Tobin (1986) and Walsh (2006) reported that students are more likely to take extended turns without being interrupted if they are provided with sufficient periods of silence.

The researcher, Mary Budd Rowe, first proposed the term 'wait time' in her paper *Wait-time and Rewards as Instructional Variables* (1972). It detailed several changes that happened when students were given sufficient 'wait time':

- The length of student responses increased.
- The number of unsolicited responses increased.
- Responses from students categorized as low-performing increased.
- Student-to-student interactions increased.
- More thoughtful and contemplative answers, including speculation and alternative answers increased.
- Students not responding or saying "I don't know" decreased.
- Frequency of student questions increased.
- Failures to respond decreased.



Wait time refers to two specific practices where instructors deliberately pause (Rowe, 1980).

Wait time 1 constitutes a 3-5 second pause between asking a question and soliciting an answer.

Wait time 2 is a 3-5 second pause after a student completes an answer to when the teacher resumes the presentation or asks another question.

Tips for Implementation

- ❖ Instead of providing instruction at a fast pace, slow down instruction and encourage more student participation and discourse.
- ❖ Expect all students to answer questions and be active participants.
- ❖ Offer longer wait-time for English language learners or students who have difficulty processing information.
- ❖ Monitor wait-time using a device (e.g., stopwatch, smartphone) or by silently counting.
- ❖ Create a climate in which students feel safe to share their thoughts, and inform students that learning is not always about getting the correct answer.

On the other hand, too much wait-time can also be detrimental to student interaction. When no one seems to be able to answer a question, more wait-time will not necessarily solve the problem. Experts say that waiting more than 20-30 seconds is perceived as punishing by students. The amount of wait-time needed in part depends upon the level of question the instructor asks and student characteristics such as familiarity with content and past experience with the thought process required.



References

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<https://citl.illinois.edu/citl-101/teaching-learning/resources/teaching-strategies/questioning-strategies>

Further Readings and Resources

- [Using Wait Time to Improve Learning](#)
- [Wait Time in Education By Melissa Kelly. ThoughtCo.](#)
- [Wait Time: Making Space For Authentic Learning](#)
- [Extending the Silence. Edutopia.](#)