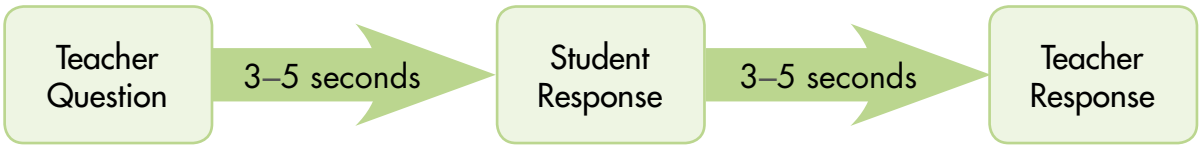
IRIS CENTER

Fundamental Skill Sheet

Wait-Time

What Is It?

Wait-time describes either the amount of time a teacher pauses between asking a question and the beginning of a student's response ***or*** the amount of time between a student's response and the teacher's reacting or asking another question.



What Do We Know About This Skill/Practice?

The concept of wait-time and its effectiveness as an instructional practice was established in the early 1970s, as is evidenced by the seminal research cited below. Research conducted during the subsequent 40 years, some of which is also cited in this resource, confirms these findings. More specifically, the research indicates that:

- On average, teachers provide approximately one second of wait-time between asking a question and allowing a student to respond.
- The wait-time for the highest-performing students is typically longer (approximately two seconds) than the less than one-second wait-time allowed for the lowest-performing students.
- Allowing 3–5 seconds of wait-time promotes positive outcomes for students ranging from elementary to high school and for low-performing students, high-performing students, gifted and talented students, and students with disabilities. These outcomes include:
    - Increases in the length of student responses
    - Increases in the number of unsolicited appropriate responses
    - Increases in responses from students categorized as low-performing
    - Increases in student-to-student interactions
    - More thoughtful and contemplative answers, including speculation and alternative answers
    - Decreases in students not responding or saying "I don't know."
    - Decreases in discipline problems
    - Increases in student achievement
- Increased wait-time also affects teacher behavior, in that teachers:
    - Ask fewer questions, but those they do ask seek clarification or elaboration on the part of the student
    - Show a gradual positive shift in expectations for certain students, such as those with disabilities or from culturally and linguistically diverse backgrounds, as they begin to participate more

Procedures

1. **Ask a relevant and well-formulated question.** Instead of primarily asking knowledge-based questions (e.g., "What are the stages of the water cycle?"), the teacher should ask higher-order questions that require students to make inferences, generalize information, and make connections between concepts (e.g., "In what ways are the stages of the water cycle affected by the sun?")
2. **Allow 3–5 seconds for the student to begin to respond.** This allows the student time to process the question and formulate an answer. After 3–5 seconds, if the student does not respond, the teacher can repeat or rephrase the question, ask another question, or ask another student to respond. Wait-times for knowledge-based questions should be three seconds, those for higher-order questions up to five seconds.
3. **Allow 3–5 seconds after the student stops speaking before continuing with instruction or questioning**. This allows the student time to further process information and to elaborate on her response.

Tips for Implementation

- Slow the pace of instruction. Instead of providing instruction at a fast pace, slow 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 (e.g., students with learning disabilities, students with ADHD).
- 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.

Things To Keep in Mind

- Although not intuitive, slowing the pace of instruction and allowing more wait-time can have a positive effect on student achievement and behavior. Fast-paced instruction with approximately one second of wait-time, both after the teacher asks a question and after a student responds, is what typically occurs in classrooms.
- Although high-performing students might be able to answer questions with a one-second wait-time, most students will require 3–5 seconds to formulate an answer. With increased wait-time, more students, even those considered low-performing, will feel comfortable responding, something that will result in improved classroom participation and discussion.

- During fast-paced instruction, students often respond using short phrases and rarely elaborate. To compound matters, teachers who respond immediately after a student pauses prevent student elaborations.
- Teachers often pose lower-order questions (e.g., factual questions) during fast-paced instruction. When teachers ask higher-order questions and increase wait-time, students have time to make connections to what they know and generate more elaborate responses. Allowing students the time to think and discover maximizes student learning.
- When teachers ask lower-order questions that require less cognitive processing, a three-second wait-time may be sufficient.
- Slower-paced instruction can promote a relaxed classroom environment where students feel comfortable sharing their thoughts.
- Wait-time can be difficult to implement. First, it requires a change in teacher behavior—slowing the pace of instruction and asking different types of questions. Also, many teachers might feel uncomfortable at first, because the extended wait-time—even if only a few extra seconds—can seem like an unnatural "dead" time.
- Even after they begin to implement slower-paced instruction with increased wait-time, many teachers revert back to fast-paced instruction after 3–4 weeks. For this reason, it is important that teachers talk to colleagues and reflect on and discuss their experiences with one another.

Implementation Examples

Now it is time to watch what you've learned put into practice. The elementary and high school videos below depict simulated classroom scenarios and include both examples of correct implementation and non-examples of implementation that comes up short.

Elementary Video Example

In the video below, Mrs. D. wants to encourage thoughtful student response and classroom discussion. Note in the example how Mrs. D. correctly implements the procedures for wait-time, but in the non-example she fails to implement a number of key components.

High School Video Example

In the video below, Mrs. Ward wants to encourage thoughtful student response and classroom discussion. Note the procedures Mrs. Ward uses to deliver wait-time in the example video and where her delivery falls short in the non-example.

Foundational Research & References

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About the Author

Caitlyn Majeika is a former special education resource teacher for students in elementary and middle school. Currently, Caitlyn is a PhD student in the Special Education Department of Peabody College, Vanderbilt University. Her research focuses on using principles of data-based decision-making to enhance the implementation of behavior interventions for students who display challenging behavior in the classroom.

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