

CLASSROOM TALK & QUESTIONING

What does three seconds of silence change?

Four decades of US classroom research, translated for UK practice.

How long do you actually wait after asking a question?
Long enough for a learner to think, or just long enough to feel comfortable?

The nugget

Not a new technique, a pause: when teachers hold silence after a question, and especially after a learner's first answer, for about three seconds rather than one, answers get longer, better reasoned and more widely shared. The pattern has held up for forty years across many classrooms, but the evidence behind it is older and softer than the size of the claim suggests.



From a one-second reflex to a three-second habit

Mary Budd Rowe spent nearly twenty years recording real lessons, mostly in US elementary and secondary science classrooms. Her recordings showed teachers waiting under a second after asking a question before moving on, and under a second after a learner finished speaking before reacting. In the handful of lessons where teachers held both pauses to three seconds or more, discussion changed shape.

- ✓ **Longer answers** · up 300–700%, depending on the study
- ✓ **Reasoned, evidenced answers** · rare at one second, common at three
- ✓ **Fewer 'I don't know' answers** · a common one-second response, dropping back
- ✓ **Wider participation** · quieter learners start answering unprompted
- ✓ **Fewer disciplinary moves** · rapid-fire pacing bred restlessness, not calm

Page 3 translates the two pauses behind these findings for your classroom.

1 → 3 seconds

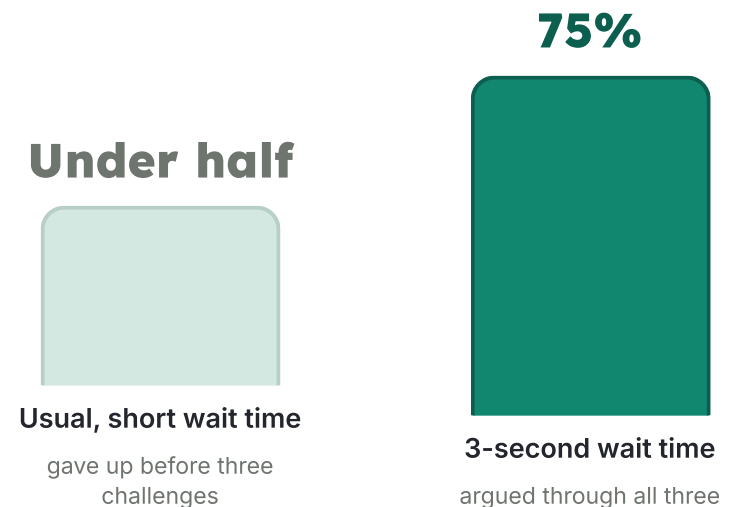
The pause Rowe tracked, after a question and after a learner's first answer. Effects appear once it passes about 2.7 seconds.

300–700%

How much longer learners' answers became once wait time passed three seconds, depending on the study.

Persisting through disagreement

Rowe told individual learners 'I disagree' up to three times about a finding they had just demonstrated. Same science curriculum both times, only the teacher's wait time differed.



Learners on an older, book-based programme did worse still, only 2% persisted, but that group differed in curriculum as well as pace, so it is not a clean comparison.

Name the pause, and half the work is done

THE IDEA

WHAT IT SOUNDS LIKE AT SCHOOL

WHY IT MATTERS

Wait time 1

"Teacher asks 'why do you think the ice melted faster in this cup?'; then holds a silent count of three before choosing a hand."

Under a second, most learners can only manage a short guess. Rowe's recordings show reasoned, evidenced answers barely appear until this pause reaches about three seconds.

Wait time 2

"A learner finishes an answer and the teacher stays quiet, letting the class sit with it before responding or asking someone else."

Rowe found this second pause mattered even more than the first: the one most consistently linked to longer answers and to quieter learners joining in unprompted.

The 'I pass' option

"A learner says 'can I pass?'; the teacher agrees, and returns to them later in the same lesson rather than never again."

Learners who passed at the end of a three-second wait were 70% more likely to rejoin the discussion unprompted before the lesson ended, far more than under the usual one-second pace.

Cutting the repeat-back habit

"Instead of repeating a learner's answer back to the class, the teacher stays silent and lets the next speaker respond to what was actually said."

Repeating answers cuts off the pause that makes wait time work. In one of Rowe's classes a learner explained it themselves: "we can tell from the tone of her voice which answers she likes... and we can stop thinking."

The honest fence: where this evidence stops

Not a single trial

This is Rowe's own narrative synthesis of a nearly-twenty-year research programme, not a modern systematic review. Much of the underlying evidence is unpublished dissertations, theses and conference papers.

No effect sizes reported

Headline numbers like '300–700% longer answers' are given as ranges with no confidence interval or significance test in this synthesis. If a precise figure existed, we would expect it stated.

Comparisons, not random assignment

Rowe's own confidence study compared existing classes rather than randomly assigning learners to wait times, and one comparison group also differed in curriculum, not just pace.

US classrooms, decades ago

Every classroom described is American, mostly 1960s–1980s science lessons. Replications named in the paper (Thailand, Australia, South America) still are not UK data.

Three seconds is hard to hold

Even trained teachers reverted to the old, fast pace within three or four weeks without ongoing support, and written training alone barely moved anyone's pace at all.

A caution from within the same literature

A contemporary of Rowe's titled a 1985 conference paper 'Wait time in science: necessary but not sufficient', a reminder that pausing longer is not, alone, a complete method.

● Developing

What would raise this grade: a modern meta-analysis pooling effect sizes across these studies, a randomised UK trial, or replication reporting today's standard of confidence intervals. Any of those lands, we upgrade our read and say so.

Don't chase three seconds on a stopwatch. Chase the second pause.

What made Rowe's wait-time regimen work was not the number three itself. It was two specific silences: one after the question, and a longer, more important one after the first answer, held long enough that the class stopped performing for the teacher and started listening to each other. That pattern, pause after the question, pause again after the answer, is borrowable in any subject, without a stopwatch in hand.

1

Count two slow breaths, not three seconds

A silent count is easier to hold than a stopwatch. After you ask, and again after the first answer, count two slow breaths before you speak.

2

Kill the repeat-back habit

Notice if you repeat learners' answers before responding. Stopping this, on its own, protects the second pause Rowe found mattered most.

3

Offer 'I pass', then return

Let a learner pass instead of guessing, and come back to them later in the same lesson. Rowe's data suggests they are far more likely to rejoin than if pressed or moved past for good.

Developing evidence, so run it as an experiment: pick one lesson a week and hold both pauses deliberately. Watch whether quieter learners start answering unprompted, and whether 'I don't know' becomes rarer. That is your evidence.

Why not try? Slower, better classroom talk still needs planning support. Explore our oracy tools for building thinking time into discussion: structural-learning.com/oracy, and open a free account to plan it into next week at app.structural-learning.com.