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Highlights

01

Beginning a Lesson With Guesswork



We think of learning as a straight path: Start with little or no knowledge; grapple with challenging material; end the unit by demonstrating proficiency on tests.

But emerging research suggests that putting quizzes before lessons may be as good as—or better than—ending with them. In 2021, a groundbreaking laboratory study on pretesting revealed major benefits to the approach: Students who took a practice test before a lesson eventually outperformed students who had followed the more typical sequence by 49% on measures of recall.

A new study explored the practice in real classrooms. Across 10 lessons spanning topics such as environmental toxicology and Earth's hydrosphere, university

students were given 4 pre-questions designed to introduce key concepts while triggering "mental processes such as heightened curiosity"—and promptly scored 19 points higher on follow-up tests than peers who studied more typically.

A temporary lack of knowledge is also an opportunity. Guessing—even or perhaps *especially* when wrong—can spark a deep interest in new material and spur students to "search for the correct answers."



02A Dose of Positivity for Noisy Students



In elementary school, it's common for adorable but wiggly students to wander around during class or jabber disruptively with friends—behavior that stems not from disrespect for teachers but from a genuine misunderstanding of classroom norms.

What can be done about it? In a 2025 study, German researchers interviewed over 100 first-grade students and concluded that young children "are not necessarily aware of why their behavior meets or fails to meet the teacher's expectations." Frequent reprimands can exacerbate the problem: Students may "define themselves as troublemakers, seek out other disruptive pupils, and thus reinforce their rule-breaking behavior."

Clarity and positivity can turn the tide. To ensure that classroom norms are explicit, consider modeling expected behaviors, creating behavior contracts, and hanging anchor charts as reminders. When kids inevitably break the rules, opt for positivity: "I will put up my hand to talk" beats "I will not shout out in class," the researchers say, because "the positive formulation of rules" tends to reduce "rule-breaking behavior."

03 An Early Literacy Workout



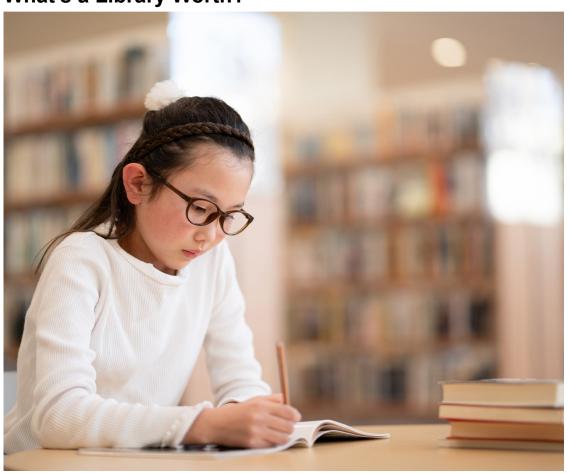
For 5-year-olds, fiction can be deeply moving—in a very literal sense—according to

a 2025 study.

Researchers observed 200 kindergartners as they read picture books and then acted out the story's plot—hopping, skipping, running, and throwing kid-safe objects in joyous emulation of the book's characters, before engaging in a more sober, 5-minute vocabulary and story review.

The performances merit more than a round of applause. Students who reenacted stories were more than twice as likely to succeed in foundational ELA skills like matching words and images, when compared to students who engaged in "business as usual" instruction. While this fun activity can't replace phonics, it can be used strategically to enhance student attention, improve brain function, and tap into the histrionics young kids love.

04What's a Library Worth?



When public libraries shutter, communities suffer. For suburban and rural students, in particular, a public library closure leads to "a substantial reduction" in 3rd–8th graders' reading scores—and even more drastic declines in math outcomes.

The researchers behind the 2025 study used data from 766 public library closures and matched them with district-level standardized test scores. Closures in urban areas had minimal impacts because the distance to the next closest branch is small, but for suburban and rural areas, where the loss of a library can leave students stranded, the effects were "more pronounced and long-lasting."

The association of libraries with book lending is too limited, the research suggests. Public libraries, like school libraries, are quiet sanctuaries for learning of all kinds—math included—and closures limit access to not only great books but also "study spaces, internet and computer access, interactions with librarians, and library programming such as storytimes, drop-in homework help, and study sessions."

8 Small But Impactful Classroom Management Shifts

How using subtle gestures, spatial awareness, and tone of voice can nudge your classroom towards smoother operations.

By <u>Youki Terada</u> April 25, 2025

1. 'The Look'

"Sometimes situations don't warrant words—mere eye contact or going to stand next to where a student is seated will do," writes Rebecca Alber, a teacher trainer at UCLA's Graduate School of Education. "Nonverbal classroom management tactics like these help keep everyone's dignity intact in the room." It's important to use "the look"—an arched eyebrow or a stern glare directed at misbehavior —moderately, both to maximize its effectiveness and limit its (modest) potential to stigmatize students if overused, says Alber.

Drawing on Jacob Kounin's concept of "overlapping," the researchers in a 2025 study suggest that experienced teachers often choose to respond quickly and unobtrusively, "without interrupting the intellectual flow of the instruction." By shooting a quick look, moving closer to the problem area, or deftly inserting the student's name into the lesson—"We're focused on the slope of this line, right,

John?"—the teacher "conveys several messages the student and the classmates immediately understand (e.g., 'I saw that,' 'Stop it,' 'First warning') while still carrying on with instruction."

It can feel awkward, but younger teachers can practice techniques like "the look" at home and then try them out in the classroom before refining their techniques. Other educators we've interviewed discuss their preferred nonverbal cues directly with students, describing the intended effect of hand signals and glances to model expected behaviors.

2. Tone of Voice

What may sound authoritative to you may come off as authoritarian to your students.

In a <u>2022 study</u>, researchers studied how elementary students reacted to typical classroom instructions —"It's time to start the lesson" or "Listen carefully," for example—delivered in tones ranging from demanding to neutral to supportive. While neutral and positive tones led to a warmer, more supportive classroom culture, stricter tones undermined trust and discouraged kids when it came time "to share secrets with their teachers," who subsequently missed out on important information related to bullying, hardships, and even the work students were proudest of.

Finding your voice will take time and practice, but "developing a calm, neutral, assertive voice is part of the teacher's own self-regulation," which in turn allows students to be "self-regulated and secure in the knowledge that the teacher will be receptive to them, but also in control," <u>explains Linda Darling-Hammond</u>, former professor at Stanford and current president of the Learning Policy Institute.

At <u>Van Ness Elementary School</u>, teachers actively work on tone of voice and then model self-regulation through its strategic use. "If we're talking in a voice that is too aggressive, we might accidentally be using fear to manipulate children's behavior," says Cynthia Robinson-Rivers. "Instead of helping them to gain that intrinsic motivation to do the right thing for the right reasons."

3. Getting to Clarity

Preparing a well-thought-out lesson with very clear instructions doesn't just grease the academic wheels, it also helps to minimize student disruptions. In a <u>2018 study</u>, researchers discovered that 15 percent of misbehavior was attributed to instructional factors such as "an instructor's failure to provide clear expectations or command of the classroom."

Christopher Pagan, a high school physics teacher, regularly surveys his students to gain a clearer sense of the clarity of his lessons. "The purpose of the survey is to give my students a voice to tell me what changes I can make and what practices I can implement to help them perform better in class," he says. The survey "has nothing to do with content. There are no questions about physics." A 2019 study backs his approach, revealing that highly effective teachers audit their materials regularly "to identify what was working or not." For academic work that involves complex instructions, ask students to talk you through what they think the steps are, and take notes on the whiteboard while offering clarifications.

Classroom transitions are another source of classroom calamity; clear routines are an effective way to minimize these disruptions. "Difficulties with transitioning may manifest in... avoidance, decreased attention, resistance, or fight-or-flight," <u>writes occupational therapist Lauren Brukner</u>.

Consider <u>displaying visual scaffolds</u> like anchor charts to remind students of your expectations, spend some time <u>recording yourself</u> to spot areas for improvement, or <u>visit the classrooms of mentor</u> <u>teachers</u> to draw lessons from their experience.

4. Greeting Students at the Door

Spending a few moments at the beginning of class welcoming students—by greeting them as they enter the class or scheduling a morning meeting, for example—not only sets a positive tone, but also can boost engagement and reduce disruptive behavior. In a <u>2018 study</u> (replicated with older students in another <u>2018 study</u>), positive greetings at the door increased academic engagement by 20 percentage points while decreasing disruptive behavior by 9 percentage points, effectively adding "an additional hour of engagement over the course of a five-hour instructional day," according to the researchers.

More recently, researchers in a <u>2024 study</u> explain that low-intensity classroom management strategies such as positive greetings at the door are effective at "defusing problems rather than exacerbating them" and allow students to see teachers less as arbiters of discipline and more as mentors and guides. When students feel welcome in the classroom, they're more likely to put genuine effort into their learning, the research shows.

5. Keeping Distractions In Check

In the battle for student attention, you're not going to beat the lure of electronic devices and whirring, flashing fidget toys. In a 2020 study, students who were seated by a classmate browsing the internet on a laptop scored 9 percentage points lower on retention tests than their distraction-free peers. Even those who couldn't glimpse the laptop screen were distracted, suggesting that they picked up on the subtle cues—a stifled chuckle or slouched posture—that signaled a lack of academic focus, the researchers found.

At the beginning of class, math teacher Rebecka Peterson asks her students to <u>deposit their devices</u> in a cell phone holder. "Don't make phones a big deal; it's just another procedure," she writes. If keeping devices out of reach isn't an option, you can create firm boundaries: "I have a doorbell in my classroom… and students know it means to put phones away and take AirPods out of their ears," <u>writes</u> educator Sarah Said.

Finally, be wary of fidgets that make noise, light up, or can be thrown. "There is not sufficient support for the implementation of fidget toys in the classroom," researchers explain in a 2023 study. That's because students who fiddle with fidget spinners, poppers, and balls—the most distracting of the bunch—tend to score significantly worse on academic tests and often affect the performance of nearby students, a 2019 study reveals.

6. Warming Up Your Cold calls

Many students are wary of participating in class discussions, often because they're shy, afraid to be seen as incompetent, or simply not interested in the topic. It's not uncommon to ask a question and hear crickets in response. Yet not all teachers approach cold calling the same way—a 2022 study found that the practice generally fell into one of two categories: "Encouraging and engaging on the one hand" or "confrontational and intimidating" on the other.

If you want to keep class participation on track, try warming up your cold calls. In the study, middle school teachers who couched their cold calls in an inviting, respectful manner—using language like "I'd like to hear some ideas," for example—were able to assuage their students' fears and anxieties about being put on the spot, leading to more fruitful conversations in which students felt "safe to take risks."

Over time, well-executed cold calling can decrease anxiety levels and increase class participation, since "once a student has participated a few times, it becomes easier to participate," according to a <u>2013</u> study. In fact, when teachers regularly integrate cold calling, participation increases from about 50 percent to slightly above 90 percent, the researchers found, and the approach can be especially helpful for typically quieter students, such as girls, according to a <u>2019</u> study.

7. Break Time!

A short break after a long lesson can keep students more engaged throughout the day, while reducing classroom disruptions. Brain breaks aren't a fad—they're backed by science and trusted by experienced teachers. A 2024 study, for example, found that 91 percent of K–2 teachers rely on intermittent breaks to refresh student attention spans and improve information processing.

In a <u>2021 study</u>, scientists used brain imaging to analyze cognitive activity after elementary students engaged in short brain breaks—tossing balls, pretending to be cars and zooming around the classroom, or playing Simon Says, for example. They discovered that four-to-six-minute brain breaks improved "children's neural activity efficiency," leading to "significantly higher odds of being observed on-task" during later instructional periods.

Even older students benefit from brain breaks. In a 2020 study, a brief exercise break reduced off-task behaviors among high school students—gazing off, staring into space, or putting their head down on the desk, for example—by nearly half, making it "a feasible and practical approach" for older adolescents.

8. Let the Small Stuff Go

Trying to catch and fix every minor disruption might seem like a good classroom approach, but it often leads to more misbehavior in the long run. A <u>2016 study</u> shows that calling students out for minor issues like daydreaming or brief chatter can erode their feelings of connection to the classroom, leading to even more misbehavior down the road. For some students, this negative attention can actually lead to a "negative reinforcement pattern" that "actually amplifies students' inappropriate behavior" over the long haul.

While a stern approach to classroom management may be necessary to combat severe or repeated infractions, it's better to start small and focus on de-escalating or defusing the situation.

When teachers react defensively to student behaviors, they "may become locked in a power struggle or an ineffective pattern of communication," writes special education teacher Nina Parrish. Remain calm and avoid using statements that begin with "You"—for example, "You never listen and follow directions. Don't get out of your seat again!"—which typically triggers defiant behavior. Instead, rephrase it to an "I statement": "I would like for all of my students to sit down, listen, and follow directions so that they know what to do next."

When kids inevitably push your buttons, take things slowly and approach each situation with calm and compassion. <u>Educator Emily Terwilliger suggests</u> playing out tense moments ahead of time: "Think through scenarios that might happen in your classroom and how you want to respond before the start of the year," she writes. "It will make those first redirects and interventions less intimidating."