

A DERIVITA GUIDE TO

Implementing a Derivita Classroom Instruction Model to Maximize Teacher Impact & Improve Math Scores

A practical guide to leveraging Derivita to scale high-quality math instruction and improve math outcomes—while reducing teacher workload.

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Introduction: The Math Instruction Challenge

Mathematics is the foundation for critical thinking, problem-solving, and analytical reasoning—skills that are essential for success in today’s technology-driven workforce. Yet, math proficiency is at an all-time low. According to recent NAEP and PISA reports, student math scores have declined sharply, with many struggling to develop the skills needed for higher-level learning and career readiness.

One of the biggest barriers to improvement? Scaling high-quality math instruction. Unlike other subjects, math requires constant feedback, detailed grading, and tailored differentiation—tasks that quickly become unmanageable for a teacher with 25+ students. Without real-time insights and scalable support, teachers are forced to rely on broad-stroke instruction, which leaves many students behind.

The Opportunity: Leveraging Technology to Automate Key Instructional Pain Points

To improve math outcomes at scale, educators need solutions that:

- **Automate key instructional tasks** (creation, differentiation, feedback, and grading) without sacrificing quality.
- **Leverage high-quality, rigorous questions** that drive deeper learning instead of defaulting to multiple-choice.
- **Provide real-time insights** so students get immediate, personalized feedback, and teachers get actionable analytics to focus their efforts where they will have the greatest impact.
- **Align with research-backed best practices** like Bloom’s Two Sigma Problem and Zone of Proximal Development (ZPD), ensuring that technology enhances instruction rather than replaces it.

This is where a Derivita Class model transforms math instruction.

A Day in the Life of a Derivita Teacher & Class

How does Derivita Class fit into a real teacher's daily workflow? Let's walk through a typical day to see how it seamlessly integrates into lesson planning, instruction, and assessment.

Morning: Lesson Planning with High-Quality Content

A teacher logs into Derivita and selects questions from our library of more than 150K questions with millions of variations that align with and support the day's lesson. With Derivita's Smart-Randomization feature, these practice activities enable every student to engage in personalized practice without ever receiving the same problem twice. This ensures deeper conceptual mastery, eliminates cheating, and most importantly, provides real-time feedback and grading until students reach proficiency or require personal intervention from the teacher.

"I feel like Derivita came into my life at a time that I definitely needed it because it really streamlined my prepping process." - Michelle O'Reilly, HS Math Teacher, Brighton High School, Utah

Classroom Instruction: Real-Time Engagement with SpotCheck

To start class, the teacher uses SpotCheck to assess students' current knowledge in real time. Within seconds, the results reveal common misconceptions, allowing the teacher to adjust instruction on the spot, and ensuring time isn't wasted on concepts students already understand.

"I love using SpotCheck with my students. It gives me immediate data on how my students are understanding what we are learning. I can inform my instruction in the moment." - Megan K., Math Teacher, Charleston County School District, SC

Implementation Example: Before introducing quadratic equations, the teacher runs a quick SpotCheck on factoring. If the data shows the class struggling, they spend additional time reviewing foundational skills. If most students show mastery, they move ahead with confidence.

Classroom Impact: Teachers get instant feedback on student understanding, allowing them to adapt lessons dynamically and prevent gaps from forming.

Independent Practice: Unlimited, Personalized Feedback

After whole-class instruction, students work on Derivita-powered practice problems that provide instant, personalized feedback. Instead of waiting for graded assignments, students learn at the moment, adjusting their approach based on real-time insights.

"My students like Derivita for the same reasons that I do. They like that they get the immediate feedback on each homework question instead of having to wait." - Memory Aviles, 6th Grade Math Teacher, Draper Park Middle School, UT

Implementation Example: The teacher assigns a 15-minute practice set. Students are encouraged to attempt each problem at least four times before asking for help, using Derivita's feedback to refine their approach. If they continue struggling, they raise their hand for targeted assistance.

Classroom Impact: This shifts the teacher's role from a grader to a guide, allowing them to focus on individualized instruction for students who need it most.

End-of-Class Assessment: Actionable Insights for Next Steps

At the end of class, the teacher assigns a short Derivita quiz to measure progress. Since grading is automatic, the teacher immediately sees which students mastered the material and who needs further support.

Implementation Example: The teacher reviews the class-wide real-time analytics in Derivita and notices that 75% of students correctly applied the quadratic formula, but 25% struggled with setting up the equation. The next day's warm-up activity targets this specific skill.

Classroom Impact: Instead of waiting for summative assessments, teachers make immediate data-driven instructional decisions, improving learning outcomes.

The Outcomes: What Happens When Teachers Use Derivita Class?

When teachers integrate Derivita Class into their instruction, they experience:

- **More instructional time**—automation reduces grading and administrative work.
- **Higher student engagement**—interactive, feedback-driven learning keeps students invested.
- **Improved differentiation**—teachers pinpoint individual and group needs in real time.
- **Data-informed decision-making**—teachers, PLCs, and districts make better curricular choices with actionable insights.

Conclusion: Transform Your Math Classroom Today

Scaling high-quality math instruction is one of the biggest challenges in education today—but with Derivita Class, it doesn't have to be. By automating key instructional tasks, providing real-time data, and ensuring every student receives immediate, personalized feedback, Derivita empowers teachers to do what they do best: teach.

Are you ready to transform math learning in your classroom? Schedule a demo today and see how Derivita Class can help you accelerate student success at:

<https://www.derivita.com/request-a-demo>

About Derivita

Derivita enables high-quality, rigorous math instruction at scale, from individual students and classes to school and district levels. Derivita uniquely streamlines your math workflows, content and data, automating common tasks, and seamlessly integrating it all within your LMS.

Our holistic design reduces teacher workload, enables collaboration, and connects data to provide real-time analytics that drive instructional improvements—from student and class levels to school- and district-wide. No other math platform offers more comprehensive support for educators to deliver personalized pathways to math proficiency for every student.

To learn how Derivita can support your efforts to improve student math outcomes, schedule a conversation with your local Derivita representative at <https://www.derivita.com/request-a-demo>.