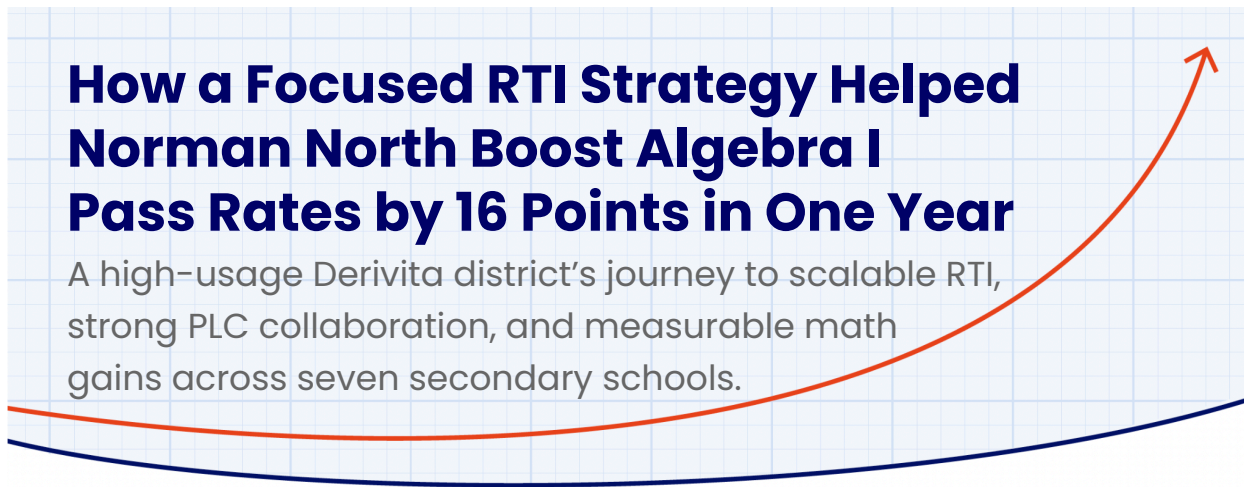


## **How a Focused RTI Strategy Helped Norman North Boost Algebra I Pass Rates by 16 Points in One Year**

A high-usage Derivita district's journey to scalable RTI, strong PLC collaboration, and measurable math gains across seven secondary schools.



## Overview

Norman North High School, as a part of Norman Public Schools, in Oklahoma, has significantly improved Algebra I outcomes by implementing a technology-enhanced RTI process powered by Derivita's 6-12 Math Support, Assessment, + Analytics Platform.

Spearheaded by 9th-Grade Math Teacher Teann Russ and supported by a six-teacher PLC, this innovative approach boosted student engagement, transformed peer conversations, and increased Algebra I course pass rates by 16 percentage points in just one year.

### **District Spotlight: Norman Public Schools**

Norman Public Schools has been partnered with Derivita since 2021 and is currently at 200% utilization of Derivita so far in the 2024-2025 school year, with an average of 1,500-2,000 students who utilize the platform weekly.

The Derivita platform is currently being utilized by all 7 secondary schools and 1 K-12 school of the 25-school district. Over 7,500 students have used the platform and over 200,000 assignments have been launched in the district since 2021, showcasing a consistent and high usage rate.

Norman Public Schools serves a diverse landscape of 15,700+ students in parts of Norman County, Oklahoma.

## The Challenge

At Norman North High School, 40% of Teann's 2022-23 Algebra I students were failing the course each semester.

*"I was very down in May because of the lack of retention... We're talking the average was a 59% on some of the tests."*

— Teann Russ

Teann Russ knew that something had to change in her Algebra I class. She had to find a way to easily drive student retention at scale for her and her whole team. That change would come in the form of an effective RTI Process powered by a strong Professional Learning Community (PLC) and Derivita's Math Support, Assessment, + Analytics Platform.

*"I have to do something. I can't change my kids. I can't change what they do, but I can change what I do. So I attended a PLC workshop and got a ton of ideas. Over the summer, I created an RTI program...it's more of a process. It's what we do in the classroom, and it required all of my Algebra I teachers to work together."*

– Teann Russ

## **The Solution: A Derivita-Powered RTI Process**

Teann Russ designed a weekly RTI cycle built around four-question quizzes in Derivita, which assessed student mastery of key concepts. The student performance data gathered from the quizzes would inform group assignments and instructional strategies carried out immediately in the students' following class period.

### **Step 1:**

Every Friday, the Algebra I teachers would assign a retention quiz and retake option utilizing the Derivita Platform to curate the question sets, create randomizations, recreate retake codes for existing quizzes and automatically grade the assessments.

### **Step 2:**

The following Monday, based on Friday's quiz performance, students were assigned to one of three RTI rooms for the first half of the class period:

- Enrichment

- Reteach
- Retake

Instructors then returned to their regular classroom instruction for the second half of the period.

Students were then able to retake the Friday quiz to get a better score and increase their understanding of the concepts in class, during their lunch period, or at any time that worked best for them.

## Technology Built to Simplify Every Step of The Process

Derivita integrates directly with Norman's existing Learning Management System (LMS) and offers support for every level of the new RTI process; including the weekly quizzes, PLC collaboration and discussion, and real-time data analytics. Highlights of the solution include:

### RTI Quiz Support Features

- 150K+ high-quality, pre-created Derivita Dynamic Math Questions
- 100's of Question randomizations so every student receives a unique version of the quiz
- Randomizations for concept redundancy and activated rigor
- Access to Lockdown browser to support a secure exam environment
- Auto-graded assignments and assessments to save staff time
- Platform support for paper/digital hybrid workflows
- Streamlined assessment retake processes with easy-to-create retake codes for existing quizzes.

*"[For] the retakes, all I did was copy the quiz I made and rename it... Because Derivita gives the ability to randomize, the students are still seeing a new quiz."*

— Teann Russ

### Tools to Ensure Mastery and Retention

- Students can access Derivita materials with any Norman North High School teacher, instead of being limited to just their assigned teacher.
- Randomizations with varying DOK levels to ensure rigor and quality of exams
- Allowed multiple attempts to ensure mastery
- Automated, fully worked-out solutions using the students' method
- Immediate feedback on every Derivita Question to increase independent learning and student agency
- SpotCheck to encourage in-class discussions and whole-class or small-group practice

### **One Digital PLC Workspace**

- Derivita PLC Workspaces enable self-selected teams to collaborate on, share, and deliver common PLC assignments and assessments directly from Derivita.
- Automated PLC data comparisons to provide actionable insights that save time and guide instructional strategies and PLC conversations.

### **Analytics Dashboards at Every Level**

- Easy-to-read dashboards that offered data at the individual question, standard, student, teacher, course, PLC, and school levels.
- District-level analytics with SIS Integrations allow leaders to have insights into subgroups, gender, and demographic data for the entire district
- Ability to create High-quality EOCs, benchmarks, summative and common assessments, etc.

## **A Working PLC Built to Support**

Teann's RTI process unified the Norman North six Algebra I teachers under a common goal. With consistent access to Derivita's collaborative PLC workspace and Derivita's Analytics data, they transitioned from siloed teaching to cohesive teamwork.

*"We were Algebra I teachers... Now we're an Algebra I team. I think working together that closely also benefits the students."*

— Teann Russ

The value of this PLC and teamwork shone in the first year of implementing the RTI process, which saw one major hiccup: Timing.

Teann and her team saw that they couldn't wait a week to reteach concepts assessed on the Friday retention quiz because at that point, their students had already lost the problem-solving process.

Reteaching the same day as the Friday quiz lost them too much instructional or reteaching time, or was cut off by school-wide events or announcements. After careful discussion as a team and analyzing student performance, they settled on dedicating half of Monday's classroom period to their RTI process.

When Norman North High School Math Teachers and PLC Members were asked "What makes the RTI process a success?", they answered with the following:

- Targeting students that need help before getting too far into the curriculum.
- It allows teachers to keep working with a student until they master it
- Gives students multiple teacher voices to learn from.

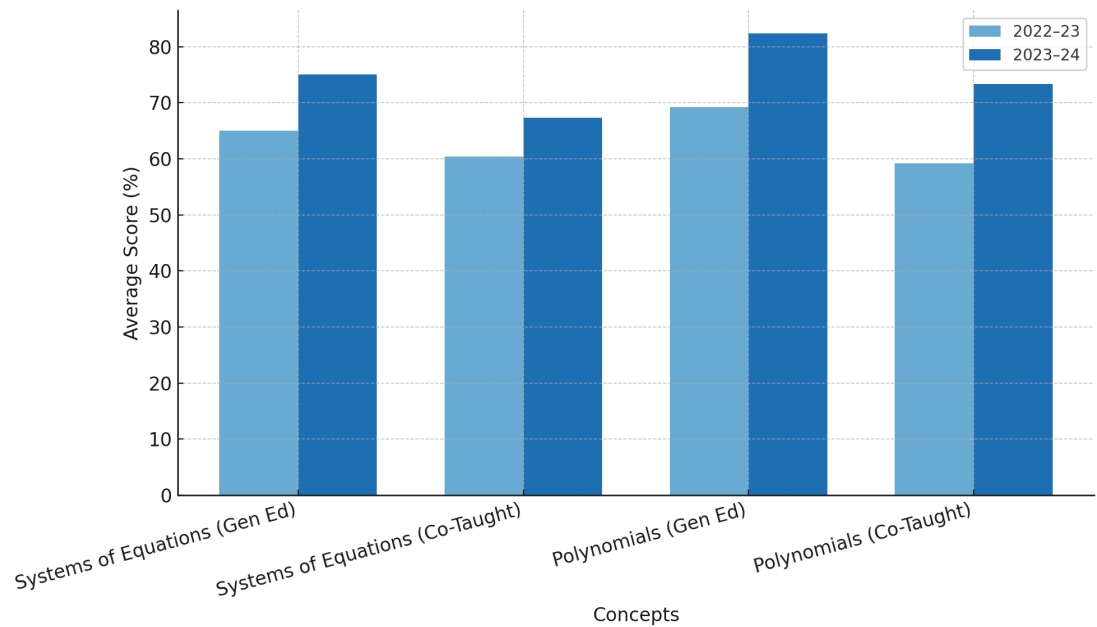
## **The Impact on Outcomes and Scores**

Derivita's implementation at Norman North High School led to measurable improvements not just in student achievement—but in mindset and motivation. From higher Algebra I pass rates to a marked shift in how students engage with math, the results reflect a deeper transformation: one where growth is driven by understanding, persistence, and student ownership. *As Teann Russ puts it, "To have grown that much, it has to be due to the change."*

## Algebra I Pass Rates

- 16% increase in Algebra I course pass rates (2022–2024)

## Examples of Unit Assessment Score Increases – Algebra I



*"We saw growth in every class. To have grown that much, it has to be due to the change... The RTI process made us a stronger team."*

— Teann Russ

## Positive Shift In Student Attitude and Engagement

Teann and her team have also seen a shift in student attitudes towards math and problem-solving from answer-sharing to strategy-sharing.

*"In the classroom, when I started implementing Derivita, I noticed that kids, instead of saying, 'hey, what'd you get for number two?', their questions changed to, 'hey, how did you do number two?'"* — Teann Russ

The randomized quizzes prevent the students from cheating, since every student receives a different version of the same exam. With this security measure in place, it forces students to truly understand the concepts and establish their own thinking process.

The students are also offered more flexibility with their learning experience with the ability to access Derivita practice, quiz, and retake content in-class, at-home, online, or printed with their assigned teacher or different math department staff members. This offers the students more choice and ownership of their own learning journey to learn in a way that makes the most sense for them.

Derivita also allows teachers to offer their students immediate feedback as they're working through an assignment and view a fully worked-out solution; students are also given the opportunity for more independent and individualized practice to ensure mastery and explore multiple ways of thinking.

Lastly, by offering students the opportunity to retry a question three times in an assignment and opportunities to refresh and reteach in a timely manner, students are given multiple opportunities to grow and master their content without fear of failure. This, in turn, encourages confidence in the math classroom.

*"A feature that I use often to support differentiation is the ability to submit a problem multiple times. If the student is wrong three times, the program will show them a detailed explanation of how to solve that problem. Students are then given the option of solving a similar problem. This feature is important because it gives students another example of how to solve the problem." – Teann Russ*

Teann promotes this safe, positive, and engaged learning environment with affirmations, high energy, sports metaphors, and meeting her students exactly where they are.



*"I'm getting smiles. I'm getting kids looking at me like I'm crazy, which is fine. I will act a fool if it changes your attitude towards a test. If it at least puts a smile on your face, then I win." – Teann Russ*

## **The Takeaway**

Derivita's platform empowered Norman North's Algebra I team to deliver a targeted, student-centered RTI process at scale. The result? Higher scores, better engagement, a positive student attitude shift, and a reinvigorated and effective Professional Learning Community.

*"I tell the district math coordinator every year, 'If we don't have Derivita, you might not have me.' I took it and I created a program [RTI Process] and I have shown that it works". – Teann Russ*