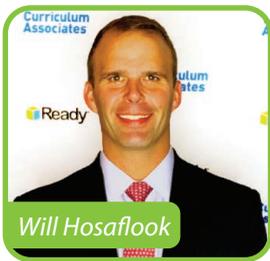


## Wood County Solves a Problem

A determined West Virginia district rises from 11th to third in the state for math in one year



**"I'm a very, very competitive person."**

Will Hosaflook, Superintendent of Wood County Schools, can easily recall the numbers that forged his career—and his focus—in education.

"My first year of teaching I had four out of nine students pass the AP Psychology exam," he says. "I thought, 'You know what? This isn't good enough.' Seven years later, it was 36 out of 41 students who passed, with fifteen 5s and fourteen 4s."

Hosaflook was voted in by the Wood County Board of Education in 2018. While doing some reading over the summer, he came across a number that surprised him.

"I read an article about coverage of academics comprising only eight percent of West Virginia School Board meeting agendas," he says. "Well, academics are the top priority in our school system. I want our meetings to reflect that."

And they do—Hosaflook has added an "Academic Success" item to Wood County School Board meeting agendas. On screen during the bimonthly presentations is data from *i-Ready*, the online diagnostic and instruction program Wood County adopted to identify students' placement levels and serve them lessons to address their skills gaps.

Hosaflook says he likes the objectivity inherent in reviewing a consistent data set with the community, and he especially relishes the opportunity to invite teachers up to be honored for their efforts.

"The most important part of the entire educational process is between the teacher and the student," he says. "We administrators are their support system."

And if the public recognition of exemplary Diagnostic results and lesson pass rates sparks some friendly competition across classrooms, Hosaflook says he is all for it.

"Game on!" he laughs. "Look, we've had a culture shift. We started with focusing on the low socioeconomic students and the Title I schools, which led to raising the bar for the entire county. Last year, we had the top growth in our state for Math in Grades 3–8. We've seen incredible results, and we're going full steam ahead."



**This is the story of what it took to make a systemic change to K–8 Mathematics education in Wood County, including how . . .**

- Routines and tools were modernized to reflect the latest educational research into what works best
- Students began thinking—and *talking*—about Mathematics in the ways that STEM careers require, planting new seeds of opportunity for education and beyond

## Five “D” Schools, One Purposeful Leader



Christie Willis and Diane Neese

During her first conversation with Christie Willis, trainer Diane Neese pulled her car off the road and took the Wood County educator’s words down on a napkin.

“Christie said, ‘I just want you to know that professional development in Wood County is on a continuum,’” remembers Neese, a veteran teacher and trainer employed by Curriculum Associates (CA).

Willis, Director of Curriculum & Instruction, continued: “I’m going to start with a purposeful plan, and I want you to be part of it.”

Then she said something Neese finds powerful to this day: “We are going to do this *with* teachers, not *to* them.”

So began a partnership marked by deep mutual respect and can-do enthusiasm.

Following a successful trial during summer school in 2017, district leaders invited five low-performing schools to be part of a new mathematics curriculum pilot. All five schools, each of which had earned a “D” grade from the West Virginia Department of Education (WVDE), accepted.

“Sometimes in schools where there’s high poverty, where year after year the kids aren’t performing, heads start to droop and shoulders start to sag,” says Neese. “You can just feel the capacity for hope flagging.”

Willis scheduled multiple summer professional development sessions, and as the school year got rolling, Neese would often be in her office past 7 p.m.

They sought “change drivers,” strategies that would lower the barrier to buy-in for pilot teachers and sustain them through two major challenges ahead:

- 1. Gaining confidence with the use of *Ready Mathematics***, a text and suite of supporting resources marked by the eight research-based Effective Teaching Practices championed by the National Council of Teachers of Mathematics (NCTM)
- 2. Administrating *i-Ready’s* first online, adaptive Diagnostic** and analysis of the various reports it generates

In Spring 2017, Jefferson Elementary Center (JEC) began piloting *Ready Mathematics* and its technology component, *i-Ready*®, in Grades K–5.

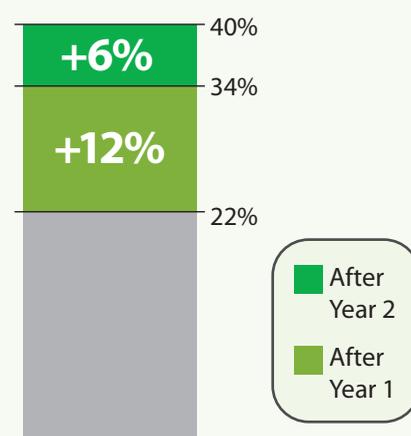
### After Year 1:

- Jefferson’s kindergarteners made the grade level’s highest growth districtwide as measured by the end-of-year *i-Ready Diagnostic*.
- Math proficiency rates rose to 34 percent, up from 22 percent the previous year.\*

### After Year 2:

- Jefferson’s growth in math ranked second across West Virginia’s Title I schools.
- Math proficiency rates rose again, up six more points to 40 percent.\*

Math Proficiency Rates at JEC



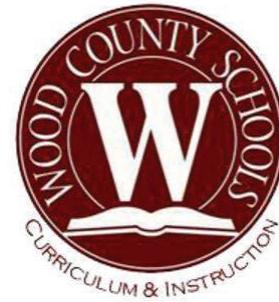
\*West Virginia has changed its end-of-year assessment provider in recent years, switching from Smarter Balanced Assessment Consortium (SBAC) in 2017 to American Institutes for Research® in 2018 (Year 1 above) and 2019 (Year 2 above).

## Steps for Driving Change

### Identify a talented leader who leads and follows through with intention.

“Christie Willis is intentional with the plan and with providing the direction to carry it out,” says Neese. “She is masterful at motivating others, and she is so reflective.”

Adds Justin Hartshorn, Principal of Blennerhassett Elementary School: “How do I make the data meaningful to me? And, how do I prioritize all this information? Those are the things Christie helped us with.”



**Line up like-minded professional development partners.** Willis and the Curriculum & Instruction department staff manage an extensive professional development schedule featuring sessions on onboarding new teachers, interpreting Diagnostic data, facilitating discourse, and monitoring grade- and school-level growth.

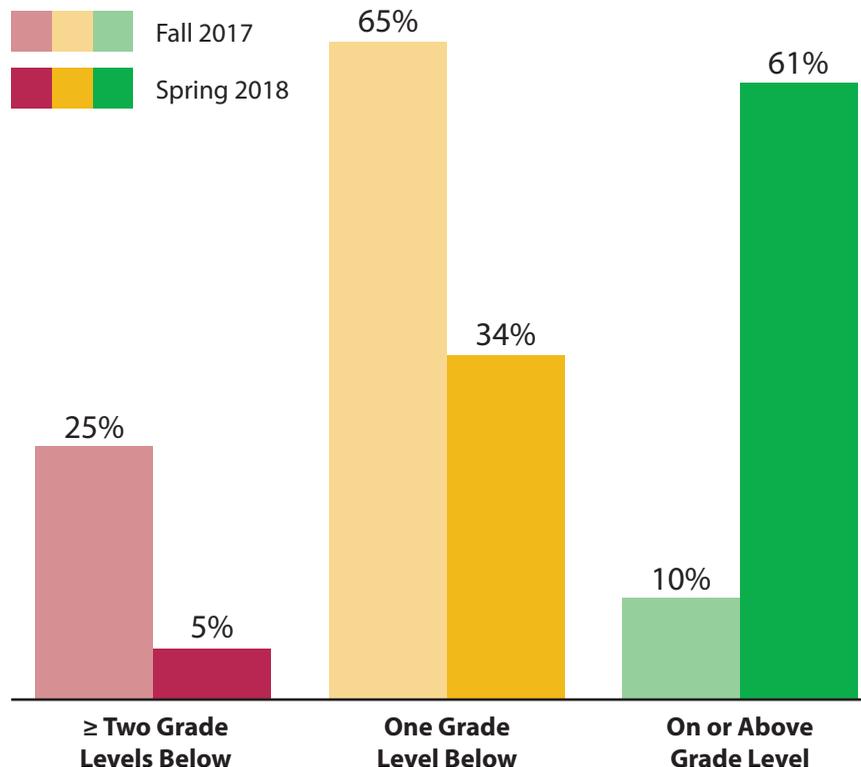
“The CA facilitators are so knowledgeable,” says Willis, pointing out Neese and other trainers’ willingness to make continual adjustments and strategize long after the final bell. “We collaborate on tailoring sessions to the level of the school and everything else. This has truly been a team effort.”

**Show support where needed.** Site administrators praise Willis for deploying support at the first sign of need, dispatching coaches, tech specialists, and even retired Wood County educators to come in with fresh eyes and come alongside those on site. “We continually ask, ‘How can we help?’” says Willis.

**Find—and praise—what’s working, not what’s wrong.** “As an administrator, could I get up and teach it as well as the teacher who does it every day? No,” acknowledges Willis. “So you can’t go in and hammer teachers who are doing their best with four to five grade levels of skill deficit in their classrooms. Even if there was one positive thing, we found it and built from there. Every teacher, just like every student, has a different starting point.”

### Year 1 at Fairplains Elementary School

#### Distribution of Student Placement Levels on *i-Ready Diagnostic*



Grades K–5 at Fairplains Elementary School saw a sharp decrease in Tier 3 placements following one year of piloting *Ready Mathematics* and *i-Ready*.

Says Assistant Principal Jeremy Metz: “I don’t think we could have been as successful without the [professional development]. About 70 percent of our teachers were new, and I was really proud of how they stepped up and embraced the routines and the tools.”

## i-Ready Saves Teachers Time

“The performance of the pilot schools caught everyone’s attention,” says John McKown, Wood County Schools Director of Federal Programs. “Schools that had been at the bottom in the county for years and years were no longer there.”

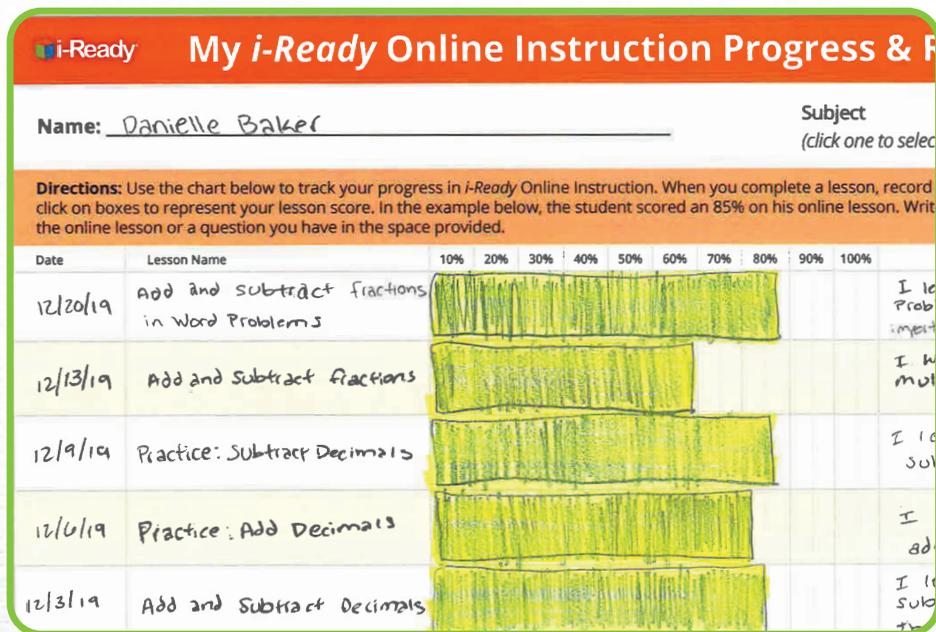


The district formally adopted *Ready Mathematics* and its technology supplement *i-Ready* in August 2018. Following their first *i-Ready Diagnostic*, each Wood County student received:

- **An overall scale score**—a number between 100–800 to indicate proficiency in the skills and standards tied to their grade level
- **Scale scores for each of four Math subdomains**—Number and Operations, Algebra and Algebraic Thinking, Measurement and Data, and Geometry
- **An indication of whether they were performing on, below, or above grade level**—and for those on level, a placement of Early, Mid, or Late in the year
- **A “Typical” and a “Stretch” Growth measure**—Typical Growth being the increase in scale score points that, if achieved or exceeded by the end of the year, indicates the student has made expected growth, and Stretch Growth being the increase in scale score points that indicates a below-level student is on a path to eventual grade-level proficiency
- **A queue of online lessons and quizzes selected just for them**, based on their Diagnostic results and optimized to support growth. Students aimed to spend the recommended 45 minutes per week “on task” in *i-Ready*, studying and taking quizzes on their missing mathematics skills. Willis says they found some kids benefitted from more: “Extra minutes proved quite helpful for our lowest performers,” she notes.

McKown says *i-Ready* won colleagues over with its ability to save teachers time: “Previously our teachers had to piecemeal together their plan for intervention. They had to plan groups—who to pull, which group needs which skills, and where to find the good lessons to teach those skills. That took a long time.”

Hosaflook notes that fidelity of the implementation has been crucial to success with *i-Ready*, and holding everyone accountable—even students—is required. From the teachers’ lounges to the central offices, teachers and leaders regularly monitor data, discuss the trends they see, and extend support where needed.



“Our students need to know where they need to be at the end of the year and why,” says Hosaflook. Data notebooks and worksheets help students visualize their progress and the purpose of *i-Ready* each time they log in.

## Wood County Educators Talk about *i-Ready*

“At first I really had to facilitate teachers keeping up and digging in. **But it’s become the expectation that we’re going to look at the data every week and we’re going to have discussions with students. It’s become the culture, and it’s a big change.**

Now I’m finding that teachers come having already identified students in need, and they just want my opinion on, ‘How do we best provide the intervention to help them?’”

—**Jeremy Metz**, Assistant Principal,  
Fairplains Elementary School



The Board of Education honors teachers, including Samantha VanDyke (third from left), whose students led their grade level in *i-Ready* growth data for Mathematics during the 2018–2019 school year.

“I’ve created an agenda item for Academic Success so in every single school board meeting, we talk about academics. We use *i-Ready* for that because it’s objective and it’s data-driven. **Sometimes I need to take the subjectivity out of the decisions I make.**”

—**Will Hosaflook**,  
Superintendent,  
Wood County  
Schools



“I go around and deliver certificates to the top 10 classrooms that had the highest growth in each grade level. It shows the kids and the teachers that we care and we want to recognize and celebrate their success. So what we’ve created is a kind of competitive academic environment where teachers will ask me, ‘How do I get one of those certificates?’”

“I calculate the overall passing rate for the class, and then I give certificates out. There’s a lot of joy and excitement. I’ve set a bar that if a class has an 85% lesson pass rate, they get five minutes of extra recess, and a 90% passing gets 10. **It’s been the best thing for me as an administrator because for the past six years, if you saw Mr. Hartshorn, it was, ‘Oh no. Who’s in trouble?’** It’s changed the whole morale of our school. I’m not the bad guy anymore—I’m the good guy, the celebrator!”



—**Justin Hartshorn**, Principal,  
Blennerhassett Elementary School

“*i-Ready* is a fantastic **Response to Intervention (RTI) tool for our students who struggle.** We’re a non-Title I school and I only have two interventionists. *i-Ready* allows teachers to pull students according to their Instructional Grouping and give those small group lessons to reinforce the concept, and then send the kids back and let them soar.”

“I think the big picture—the 30,000-foot view—is that we’ve had a **paradigm shift in this county. Instead of focusing on proficiency and looking at only the bubble kids, we are looking at growth for every single kid, whether it’s the lowest kid that we have in that grade or the highest kid. That was a mindset shift we had to make.**”

—**John McKown**, Director of Federal Programs, Wood County Schools

## A Case for Free-Ranging Math Discourse

McKown is the son of a mathematics professor who holds teaching certificates for chemistry, physics, and general science. He notes that philosophies about teaching mathematics have changed since he was in school, and the generational gap between how they were taught themselves and how teachers are being asked to teach today creates challenges for some.

Thinking back on his school days, McKown remembers, “The teacher would work three example problems on the board and assign ‘one through 30, evens,’ and that’s just how math was. For most people, that doesn’t lead to a deep understanding.

If you don’t understand why you’re doing the steps, you can get fouled up by a slight change to the problem,” he continues. “But if you look at folks who make a career out of math and who get published, they *have* to come up with novel ways of looking at things.”

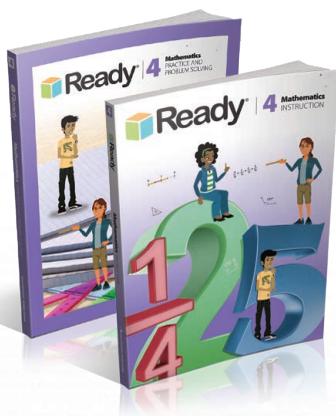


“When you’re used to teaching procedural mathematics, there’s not too much that can come out of left field and surprise you.

But when the kids are just free-ranging, coming up with different problem solutions, you can’t predict what they will come up with. We want our teachers to not only feel comfortable with that, but also to encourage it.”

—John McKown,  
Director of Federal Programs,  
Wood County Schools

## Adoption of *Ready Mathematics*



In 2018, Wood County adopted *Ready Mathematics* for Grades K–5 as a step toward modernizing teaching practices and tightening curriculum alignment to the increased rigor of the standards.

Part of realizing that rigor meant balancing out an overabundance of procedural question types with an increase in conceptual and application questions instead.

## With *Ready* . . .



**Lesson pacing slows considerably to encourage focus.** Most *Ready* lessons span a week—five class sessions—to allow comprehension to take root.

**Problem solving is paused while everyone examines the problem.** Topics are introduced using real-world problems and, before any discussion takes place, students take part in multiple reads, discussing questions like, “What are we trying to find out?” and “What information is most important?”

**Students do most of the talking.** In keeping with NCTM-endorsed methodology, teachers step back and put students' conversation at the heart of instruction.

In *Ready's* Think–Share–Compare routine, students formulate an approach to the problem independently, critique each other's ideas with a partner, and then compare strategies as a class to build appreciation of the connections between different representations.

"It's not the teacher up there and students just sitting and getting," says Metz. "What really made me a believer was seeing students talking and problem solving out loud with their classmates.

There was one instance where I watched a special education student who was completely engaged and just having great ideas and insights," he continues. "I would never have seen that before. Good teachers always encourage student participation, of course, but I feel that *Ready* is set up in a manner to really facilitate it."

**It's about more than being marked correct.** *Ready* prizes the ability to identify and discuss multiple representations, so lessons require students to explore more than one solution strategy.

**Teachers are equipped with resources to support differentiation.** From the Teacher Resource Book to the online Teacher Toolbox to students' Practice and Problem Solving books, *Ready* provides a wide range of resources to challenge kids at every level.

Wood County administrators roundly commend the teaching staff for sticking with *Ready* through the upheaval of Year 1.

"With the last curriculum I was searching out ways to make the lessons even harder, or to bring in small group instruction," says second grade teacher Samantha VanDyke. "But I don't have to fill in a lot of holes with *Ready*. I've most enjoyed taking the time for kids to figure out their thinking and build their math together. After using it last year, I expect my second graders will be ready to have those math conversations sooner this year."

**“Ready Mathematics has been a game changer for us. I believe you need both conceptual understanding and procedural fluency, and you need to understand why you need both.**

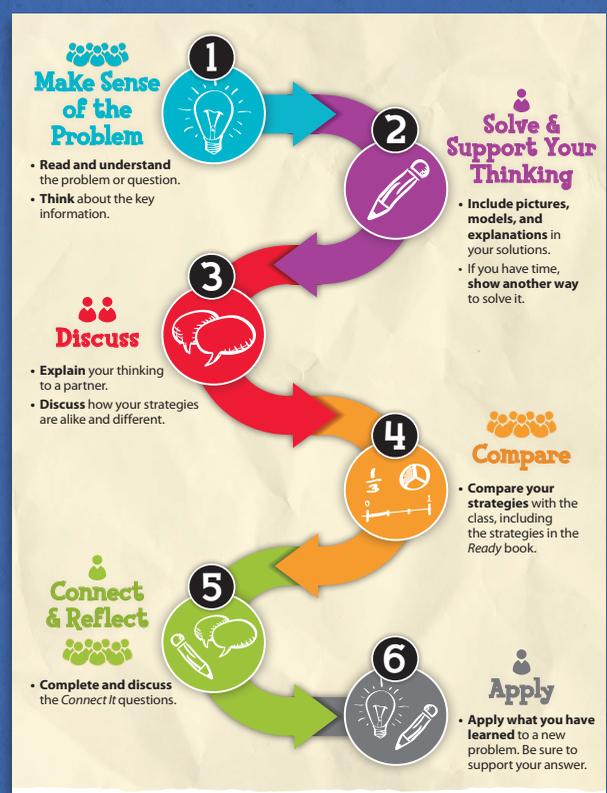
**The first year I heard, ‘It’s too hard’ or ‘It doesn’t sit right’ a lot. Because it’s different—a mindset change. But now, as teachers enter the second year, they’re saying, ‘It’s easier this year. The kids get it!’**

**From every level within Wood County Schools, this has truly been a team effort to improve student learning.”**

—Christie Willis, Director of Curriculum & Instruction, Wood County Schools

# Think–Share–Compare

(Grades K-8)



Ready | Mathematics

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# Ready for Some Results?

A look at the numbers that gave Wood County a resounding victory in mathematics education in 2019



**To:** Curriculum Associates  
**From:** John McKown  
**Subject:** GSA Scores  
**Date:** Spring 2019

... Scores in Wood County are looking very good. You will be shocked when you see them. Folks at the West Virginia Department of Education spent an hour and a half on the phone with us, asking what we are doing.

You have been with us on this journey from the start. I just wanted to drop you a note so you can share in the joy of our success!

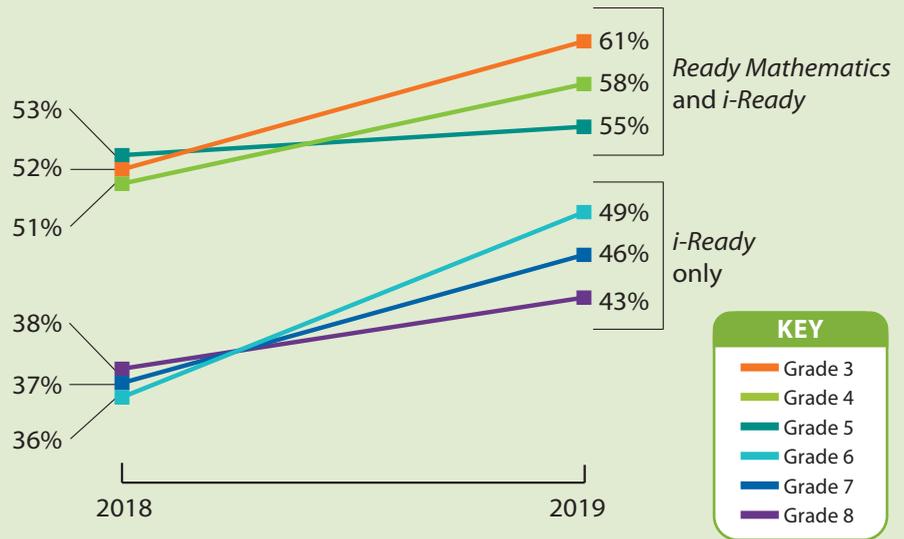
## Mathematics Proficiency Rates on the General Summative Assessment (GSA)

# 1st

Statewide growth ranking in mathematics. Overall, Grades 3–8 grew a total of 45 percentage points.

# 52%

Percentage of students in Grades 3–8 proficient in mathematics, up from 44 percent the previous year



## When it comes to math, are your students growing up?

Visit [ReadyMathematics.com](https://www.ReadyMathematics.com) to learn more about how the use of *Ready Mathematics* and *i-Ready* encourages a modern and mature understanding of math for students at every level.

