



A SCHOOL LEADER'S GUIDE TO

USING DATA TO ENRICH CLASSROOM TEACHING & LEARNING

Dear Educators,

Inside this guide, you'll find practical solutions to current challenges in your school.

First, you'll be introduced to a process called AFTER, designed to help teachers find and use good data. Use this for teaching points during a practical professional development exercise for your teachers.

Next, you'll find information about what a data wall is and how to use it most effectively. Setting up a data wall makes a fantastic agenda item for a staff meeting in the beginning of the year. Once the data wall is set up, one staff meeting per month can include a data wall check in on the agenda.

Finally, we've given you a checklist of 20 immediate solutions to help your teachers get started on improving their data-driven teaching and student learning in the classroom.

The Using Data to Enrich Classroom Teaching & Learning guide, sponsored by Renaissance® and designed especially for school leaders, will show you the first steps your staff can take. To download additional copies, visit schoolleadersnow.com



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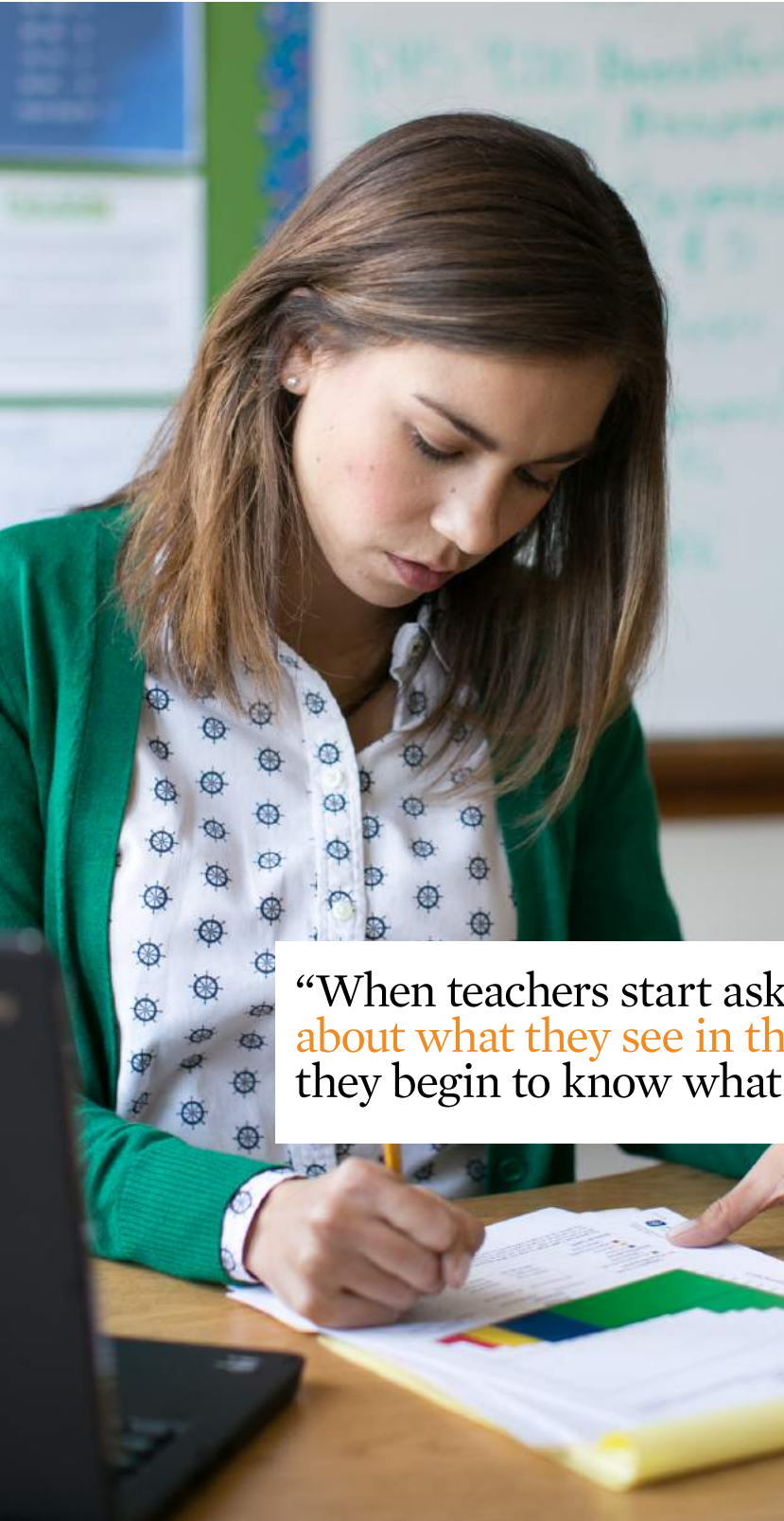
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HOW TO USE DATA TO IMPROVE TEACHING AND LEARNING SCHOOLWIDE



“When teachers start asking questions about what they see in their classrooms, they begin to know what data to seek.”

Data is a great way to personalize learning in the classroom. Many teachers have not received enough support to learn how to track learning data, analyze it, and use it to affect planning.

AFTER (Ask, Find, Track, Examine, Repeat) is a process designed to help teachers find and use good data to inform their teaching and student learning. Using technology like the [Renaissance Star 360](#) assessment suite can be a great way for you and your teachers to collect accurate data.

Ask When teachers start asking questions about what they see in their classrooms, they begin to know what data to seek. What are my students understanding? What are they missing? How can I build on their comprehension and fill in the gaps?

Find The trick to knowing what data will best inform a teacher is to find out which data points answer the ques-

tions defined in “Ask.” Take a look at reports that are already available: standardized tests, quizzes, informal observations, and notes from previous teachers. And don’t forget that you can create your own forms of assessment for your students and for yourself.

Track Screening data is a great starting point, telling

teachers where students are when aligned with state standards. It also shares what skills a student has already learned or needs to know. A bigger picture is then revealed when data is tracked over time. This is when you can create a digital data wall for teachers to view. This can be useful for vertical and grade-level discussions around what kinds of teaching must occur in order to meet the needs of all students.

Examine Take a look at the data you’ve collected. Ask yourself how it compares to what your district expects of student learning in each grade level. Do you see any patterns? You need to be objective. Look at the data in front of you and determine what it means while also taking into consideration what you already know about these particular students. This is the part of the process, for example, when you look at reading growth consistency and math foundational skills. How can your lessons reflect what you are seeing? Moving into two-digit multiplication does not make sense if students are not yet automatically multiplying the basics. Are any students stuck on one reading level because of higher level vocabulary words? What resources do you have to move them forward?

Repeat For the AFTER process to work, it can’t be done once and forgotten. Data needs to be revisited regularly. A great system to put into place is one in which data reflection and discussion is scheduled for all teachers individually and in small groups. Just as a scientist records the results of an experiment for extended periods, teachers need to evaluate student progress over longer periods of time. ■

5 STEPS TO IMPLEMENTING AN EFFECTIVE DATA WALL



A data wall is a visual representation of all student progress. Every child in the school is represented by an interactive display of data. This is a great way to show change over time by program, teacher, and grade level. It is a non-threatening form of accountability. Consider making a collaborative gathering of data designed to inform and used as talking points during a grade-level or school-wide discussion.

1 Make it Digital

The most effective data walls are digital and confidential. Data posted on walls, doors, and bulletin boards only positively reinforce the students who do well. If you want to use data effectively to support every student in your school, create a digital wall that is color-coded according to relationship to benchmark (above, at, or below) in a spreadsheet program that everyone can access (like Google Sheets). Set up

expectations that teachers review and discuss the data wall at regular intervals throughout the year. The more you know what your students need, the better you can manage having [limited resources](#).

2 Get Everyone On the Same Page

Be sure all teachers are collecting data from the same places. If this part isn't standardized, they will be comparing apples to oranges. Use common sourc-

es and share how data was gathered if it's informal. Start small. Generate data points that correlate to report card standards. This will help focus data analysis in areas where it is most necessary. For example, in ELA, a teacher might keep track of reading levels and percent accuracy. In math, a teacher might keep track of end of unit tests by standard.

3 Train and Educate All Users

Set up a staff meeting specif-

5 STEPS TO IMPLEMENTING AN EFFECTIVE DATA WALL



tutoring. Set a time for teachers to work with this fragile population.

5 Create Grade-Level Professional Learning Communities

The best use of data includes all people who will affect student learning. A good digital data wall is **flexible**, integrated, and well used. Everything teachers do either affects or reflects the digital data wall whether it is intentional or not. Even social-emotional lessons can be designed to help student-teacher relationships so that students are better positioned to learn and grow. Data that is transparent for all teachers helps them assess students authentically and share that information with parents.

One way teachers can help parents understand growth

ically for learning how to use the new digital data wall. Let teachers make decisions about color coding, frequency of entering and discussing data, and from where the data will come. The more teachers develop the data wall, the more likely they will be able understand it and use it.

4 Establish Best Practices

Using and tracking data can be incredibly useful in setting up small groups and in making decisions around student fluctuating needs. One week a child is working on multiplication facts with a small group and the next, she has mastered the facts and can move into a group working on division.

▶ **Intervention Groups:** Use data where students are below benchmark to set up small groups of students who need extra practice in specific skills. For example, all students who need to practice recognizing a long vowel.

▶ **Goal Setting:** Choose a few data points to help kids track on their own for self-discovery. Kids will love to challenge themselves to reach a higher reading



The best use of data includes all people who will affect student learning.

level or algebraic equation.

▶ **If/Then Charts:** Ask teachers to fill in a chart that will be shared with all other teachers. This chart will make it easier to plan with students in mind. For example, if students aren't iden-

tifying long vowels, then play long and short vowel games with them.

▶ **One-on-One:** Establish a **benchmark** for which students will automatically receive one-on-one

mindset is to show them how children's data grows from one year to the next. This information can help every parent see that their child is learning and growing wherever they may fall. ■

18 WAYS TO START USING DATA NOW

A Checklist of Practical Solutions to Help Students Grow

If a student struggles with...

Reading

- Accuracy and Expression:** Have students try repeated readings through choral reading and reader's theatre.
- Prosody and Intonation:** Challenge students to read 10 poems quickly.
- Background Knowledge:** Use picture books and short videos to build schema.
- Self-monitoring:** Prompt them for strategic thinking, "You said ... Did that make sense?"
- Reading Independence:** Help them set goals and teach them [problem-solving](#) strategies.
- Main Idea:** Ask them to write new chapter titles for each chapter.
- Comprehension:** Have them create a map of the events in the story.
- Asking Questions About the Text:** Give them only the first lines of each paragraph and ask them to predict what happens next.
- Saying Each Letter Sound:** Use [Elkonin Boxes](#) to help them visualize the different sounds.
- Recognizing Frequently Used Words:** Make a personalized word wall for their desk.

Math

- Number Sense:** Give them manipulatives and ask them to write the numbers underneath and decide which number is bigger.
- Computation:** Give them a 100 board and have them highlight all patterns they see.
- Fractions:** Use [games](#) to help them visualize the concept.
- Geometry:** Do math yoga by having them line up their bodies into the shapes.
- Word Problems:** Use a mnemonic like RUN (Read the problem. Underline the important information. Name the problem type.)
- Math Talk:** Have them use [Explain Everything](#) to create a video teaching the class about a math concept.
- Remembering Math Words:** Put equations on poster board and add labels with math vocabulary.
- Decimals:** Play [Pet Shop Aquarium Math](#).

RESOURCES TO GET YOU STARTED

Article: Improve Student Learning

Here are some awesome ways teachers are using data to help students grow. www.weareteachers.com/5-ways-teachers-can-use-data-in-unexpected-ways-to-improve-student-performance-2/



Video: Observe Reading Instruction

Check out these videos to see how teachers are using reading data. www.renaissance.com/resources/videos/#-2



Webtools: Use Math Data

These resources help demystify math but they also dig deeper, showing you how to meet even your neediest students. www.renaissance.com/products/practice/accelerated-math/demystify-math/



What makes struggle productive?
You may have heard about the importance of productive struggle. Learn how to ensure your students are getting the practice they need in order to learn.
[Get the infographic >](#)

Understand Educational Terms

No matter how long you've been in education, the jargon can really be confusing. In order to understand data, you need to make sense of the words being used. Here's EdWords to the rescue. www.renaissance.com/edword

