



3 Ways to Prove the Effectiveness of Your edTech Product

A weak data dashboard can stand in the way of your edTech product's success. Discover the 3 things your dashboard needs to engage teachers and buyers alike.

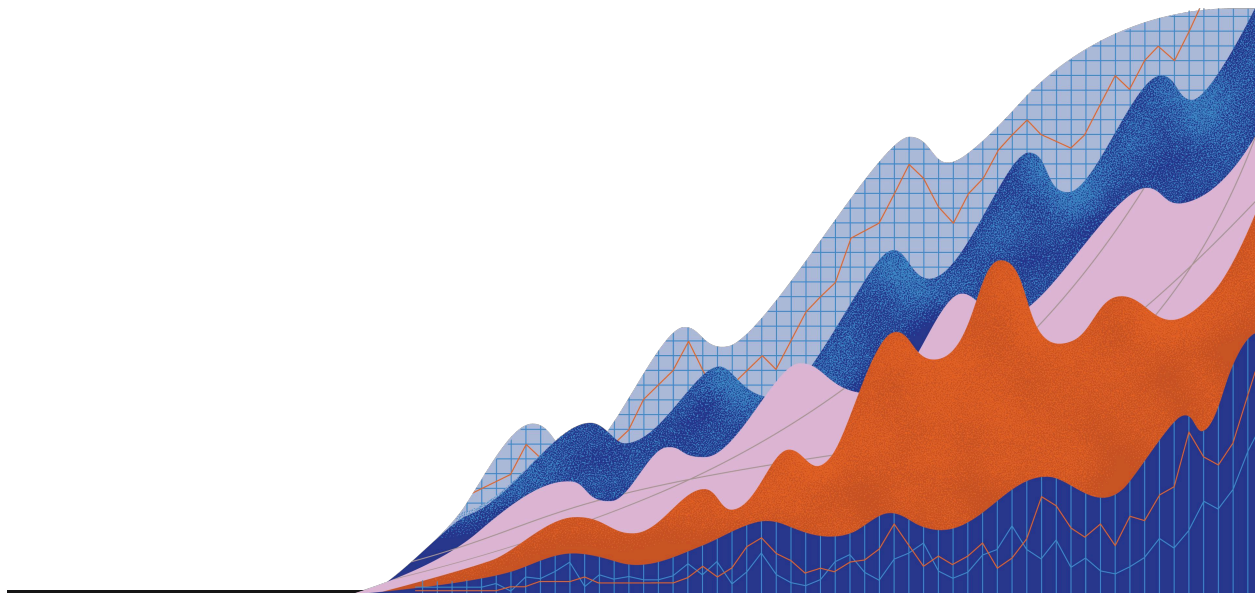


3 Ways to Prove the Effectiveness of Your edTech Product

As new edTech products crowd the market, school administrators and other technology **buyers judge learning tools by their effectiveness**. They look for products that help teachers make sense of student data and take meaningful next steps.

If you don't allocate enough resources to your **data dashboard** throughout product design and development, you'll miss out on a way to **differentiate your product**—and suffer from lack of **user engagement**.

Here's how to set yourself—and your users—up for success.



How to Tell a Better Data Story for edTech Buyers

In order to be successful, your product must help teachers and administrators easily track, monitor, and react to student performance data.

Otherwise, teachers and parents are left drowning in data that isn't actionable.

After working with edTech brands over the past 20 years, we've identified the following measures of efficacy sought after by school administrators and other edTech buyers:

- High user engagement
- Improvement of assessed learning outcomes, i.e. "hard" data
- Improvement of observed learning outcomes, i.e. "soft" data
- Teacher satisfaction





High user engagement

If teachers aren't using student performance data to improve instruction, they might not be using your product to fidelity—and buyers won't see the value.



Improvement of assessed learning outcomes, i.e. "hard" data

Building in ways to assess and report on student performance shows buyers your product is making a quantifiable improvement.



Improvement of observed learning outcomes, i.e. "soft" data.

Student engagement, including critical thinking and team building skills, shows buyers your tool supports learning more holistically.



Teacher satisfaction.

When your product is easy to use and you connect data to teacher pain points, your learning tool becomes more effective in the classroom—and more persuasive to edTech buyers.

Even if you're not a data nerd—don't worry! Our design tips will help you solve for each of these needs.

Together, these tips can help you support the needs of teachers and learners, all while telling a better data story for edTech buyers.

3 Tips for Designing a Great Data Dashboard

All great data dashboards do three things simply and elegantly:

- 01** Provide an overview of your learning tool's efficacy
- 02** Detail student activity and engagement with your product
- 03** Make recommendations to teachers and administrators about what to do next



01 Provide an overview of your learning tool's efficacy

In order to avoid data overwhelm, allow users to get the big picture in one snapshot before they drill down into details. Here's how to do it:

■ Show just the right amount of data.

Your data dashboard should show the most useful pieces of data, provide shortcuts to the user's most repetitive tasks, and build a user's engagement with the product.

■ Make data visual.

The bigger the data set, the more crucial it is that your data dashboard converts numbers into shapes and colors your user can easily digest and compare.

■ Have a point of view or goal for your data.

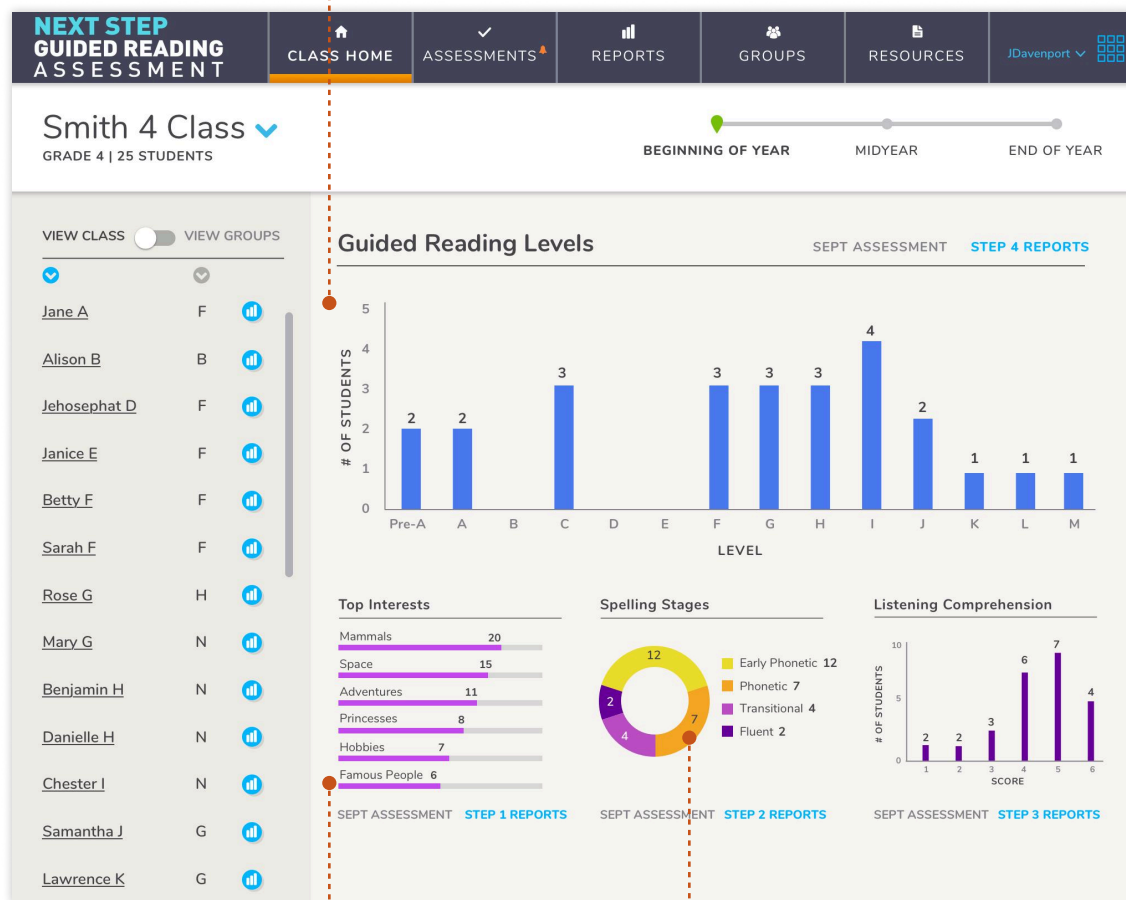
You also need to bring a point of view to your dashboard. Without an editorial or curatorial point of view, you've simply set your user adrift in a sea of information. Determine the tool that users need—not the tool the data needs.

01 Provide an overview of your learning tool's efficacy

Scholastic's Next Step Guided Reading Assessment (NSGRA) software helps teachers determine student reading levels and develop targeted next steps in their instructional plans.

Show just the right amount of data

This page helps teachers quickly see how many students are in each reading level.



Scholastic's Next Step Guided Reading Assessment

Have a point of view

Educators can quickly scan student reading interests, which supports individualized learning.

Make data visual

A variety of graph styles make important metrics digestible for educators.

02 Detail student activity and engagement

There's more to learning and engagement than student performance data. Here's how to help teachers understand what meaningful learner engagement looks like in your tool:

- **Show users recent activity within the tool.**

Allowing users to review current or recent activity provides a snapshot of the program as a living thing. By contrast, showing users only year-long averages of activity may give teachers a false impression about student engagement.

- **Tell teachers more about student choices.**

If learners can choose to play a variety of math games or read specific titles within your product, show teachers details about these choices. It creates a profile of the learner that's helpful for targeted instruction.



- **Keep participation data about community interactions.**

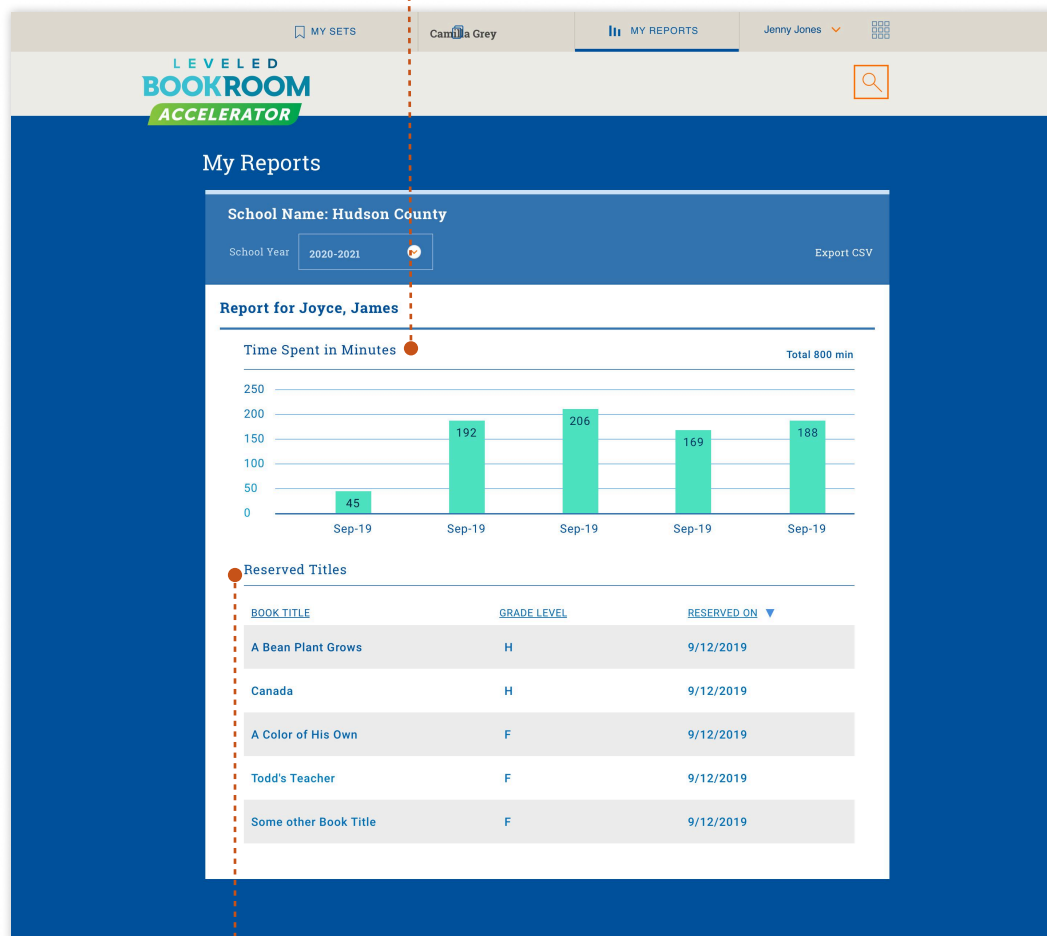
edTech products with project-based learning or community features have an opportunity to make "soft" data visible and meaningful for teachers. Collecting and displaying information about student comprehension, collaboration, and communication provides a richer, more nuanced picture of student engagement.

02 Detail student activity and engagement

Scholastic's Leveled Bookroom Accelerator helps teachers plan, differentiate, and accelerate reading comprehension by providing a large library of texts for students to read and practice with.

● Show users recent activity

This report categorizes reading time per school day, rather than rolling data up into a weekly or monthly report.



Scholastic's Leveled
Bookroom Accelerator

● Tell teachers more about student choices

Capturing data about reserved book titles helps teachers better understand individual student interests.

03 Make recommendations to teachers and administrators about what to do next

Making student data visual is just the first step to proving the efficacy of your learning tool. Great data dashboards also give teachers and administrators actionable next steps for improving classroom outcomes. Here are a few ways to make that happen:

■ Make data actionable.

Show both trends and outliers, in order to make it easier for teachers and administrators to take concrete next steps, address classroom needs, and assess individual student performance.



■ Give users the capability to reference assessments and other tools of performance measurement.

If the data references a student's response on an assessment, link to the actual assessment, so your user can review the answer in real time. Don't disconnect the data dashboard from the origin point of the data.

03 Make recommendations to teachers and administrators about what to do next

■ Summarize the next actions required of the user.

Users need prompts about time, following up on tasks, and product engagement. Here are the best tools for helping users take the next step within your product:



Calendars. Remind your users about the time they need to complete a task.



Alerts. Remind your users to follow-up on questions or follow through on planned tasks.



Engagement. Help train your users to use your tool using progressive onboarding and build user engagement over time. Remind them that they've only completed 50% of their user profile, for example, or that they still need to set a reading goal for the quarter.

03 Make recommendations to teachers and administrators about what to do next

Heinemann Publishing's Listening to Learn is a professional development tool that helps teachers determine the thought process behind student mathematical reasoning.

Listening to Learn INTERVIEWS STRATEGIES **REPORTS** LABS RESOURCES M. Burns

← Reports

Individual Report

GENERAL INTRODUCTION

Interview: **BLAKE** Date: 9/12/20 Time Period: Beginning of Year

Teacher: Marilyn Burns Date: 9/12/20 [Go to Interview Summary](#)

WHAT WE LEARNED

Blake answered all of the 12 interview questions correctly. Blake demonstrated applying the strategies that relate to mentally adding and subtracting with numbers within 20.

- Counts on or back
- Decomposes numbers within 10
- Uses benchmark of 10
- Uses the inverse relationship between addition and subtraction
- Solves missing addend problems
- Solves contextual problems that involve addition or subtraction
- Decomposes numbers (11–19) into their place value parts

Counts on or back

Counting on or back, for example solving $8 + 5$ by counting on from 8, is a strategy that students often use when they first learn to add and subtract. It's important that students learn to use the other six reasoning strategies and not rely on counting by 1s to compute. Blake did not count on or back, a strategy that relies on counting by 1s, but instead applied other reasoning strategies.

Decomposes numbers within 10

Being able to break apart numbers within 10 is critical for students in order to add and subtract mentally. For example, to figure out the answer to $8 + 5$, a student might decompose 8 into $5 + 3$, add $5 + 5$ (which is typically easier for students), and then add $10 + 3$. Blake demonstrated the ability to decompose numbers within 10.

Uses benchmark of 10

Using 10 as a benchmark number is a reliable indicator of a student's ability to reason numerically. For example, to figure out the answer to $8 + 5$, some students explain that they "make a 10" by breaking apart 5 into $2 + 3$, adding 2 to 8 to make 10, and then adding $10 + 3$. Similarly, for a subtraction problem like $14 - 8$, a student might break apart 8 into $4 + 4$, subtract $14 - 4$ to get to 10, and then subtract $10 - 4$. Blake was able to use the benchmark of 10 to add and subtract within 20.

Uses the inverse relations between addition and subtraction

Using addition to solve a subtraction problem is evidence that a student can apply the inverse relationship between addition and subtraction. For example, a student might explain that $11 - 9 = 2$ because $9 + 2 = 11$ or 9 is just 2 away from 11. It's possible to use the inverse strategy for seven questions in the interview. Blake used the inverse strategy to solve several of the problems.

Solves contextual problems that involve addition or subtraction

The interview includes three contextual problems. These word problems help us learn if students can interpret situations mathematically and then do the calculations required. Blake was successful solving all three word problems.

Decomposes numbers into their place value parts

Finally, it's especially important to note that understanding place value is essential for students to progress to problems with greater numbers. Blake was able to explain that the 1 in the two-digit number, 16, represents 10. Blake also knew, without having to figure or count, how many would be left from 16 cubes if you removed 10 or 6. Together, these responses indicate an understanding of place value.

NEXT STEPS

From this interview, we learn that Blake demonstrated applying the reasoning strategies that are important and useful for mentally adding and subtracting within 20.

Along with learning which reasoning strategies were demonstrated, we also learn from six of the problems whether a student knows answers from memory. Blake answered five of the six problems from memory. Also, Blake was able to apply the two important reasoning strategies of decomposing numbers within 10 and using the benchmark of 10. Giving interview 4 would provide information about whether Blake can apply the strategies to numbers within 100.


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Reference assessments directly
This report links directly to the relevant interview, as well as to the student.

Make data actionable
A detailed summary helps teachers understand assessment results. This way, teachers can plan for individual student needs.

Summarize the next actions
At the bottom of this report, teachers receive recommended next steps. In this case, the user is prompted to hold an additional interview.

Listening to Learn Individual Report



No matter what kind of edTech product you're building, these design tips will improve your user experience and give teachers the data they need to make successful decisions in and out of the classroom.





Need help proving the efficacy of your learning tool? Build a better data dashboard with our specialized design team.

Backpack Interactive helps organizations research and design purpose-driven, scalable, digital learning experiences. Enhance your internal capabilities or get your learning tool to market quickly with our team of edTech design experts.

Get in touch

