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# Improving Student Engagement and Outcomes using Data-Driven Instruction

A Human-Centric Approach

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C.E.O. Validated Learning

## Data-Driven Instruction is a Human-Driven Process

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In this booklet we show you how to build a human-driven system to act on real-time student feedback and drive higher student outcomes where it counts, based on real-life examples of principals, teachers, and superintendents who have done it and succeeded.

### People (not data) achieve and sustain high academic performance

Whether you are at the top of your district or planning a school transformation to improve student outcomes, the quality of the education you provide will depend on the *human-centric* use of data to drive instruction.

What does *human-centric* mean? It means people drive learning, and therefore people are the essence of any improvement. True, data on students' mastery needs to be collected. But it also has to be used. And that's not a simple technological question. The challenges are human ones. *Using* data doesn't mean looking at it. It means *acting* on it. This is where most teachers and their leaders struggle.



*"We are so thankful to Quick Key for changing the way we do our instructional business, with real-time data ... and student engagement is at an all time high."*

### **Dr. Karen Roseboro**

Assistant Superintendent for School Transformation  
Winston-Salem Forsyth County Schools

## It Matters, but Does it Count? Test Scores v. Engaged Learning

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**Many parents and students have mixed feelings about** standardized testing. Many educators feel the same way. And yet state test scores and SAT/ACT scores are used to measure our success as educators, alongside other objective measures like college attainment and graduation rates. We ignore these metrics at our peril.

**And yet we know** that teaching to the test doesn't necessarily equate with real learning. Ideally, a single set of practices could achieve success in both the test and in our true goal of engaging *all* students in their learning, and lighting the candle of life-long success for every individual in our classrooms.

**Perhaps surprisingly, data-driven instruction achieves both objectives.** It may seem counterintuitive that *more* quizzes could actually be a remedy for the tyranny of state tests. But experience and science show that frequent low-stakes quizzes drive engagement and ownership for students, and that engagement drives academic achievement across the spectrum: from test scores to graduation to college attainment and lifetime success.



*"Engagement in the classroom is a lever to impact academic growth."*

**Diana Tang**

Senior Managing Director  
for Teacher Leadership Development  
Teach For America, Houston TX



*"...research that has shown that using formative assessment can improve student learning. One of the ways that formative assessment does this is by improving student engagement, a challenge for any teacher."*

**Kathy Dyer**

Manager of Education and Learning,  
Professional Learning , NWEA

*Quote from "Research Proof Points – Better Student Engagement Improves Student Learning"*

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# Overcoming Objections to Using Data: Why Student Feedback is not Just More Testing

**One group who you won't find objecting to low-stakes feedback in the classroom is students.** Multiple case studies in the literature and with our own partners show that frequent feedback actually *improves* student engagement and makes them excited about achieving proficiency and excellence.

**So, while many teachers (and parents too) are against more "testing" and by extension data-driven instruction, it is important to recognize these objections as stemming mainly from fears of being *unfairly measured or judged*.**

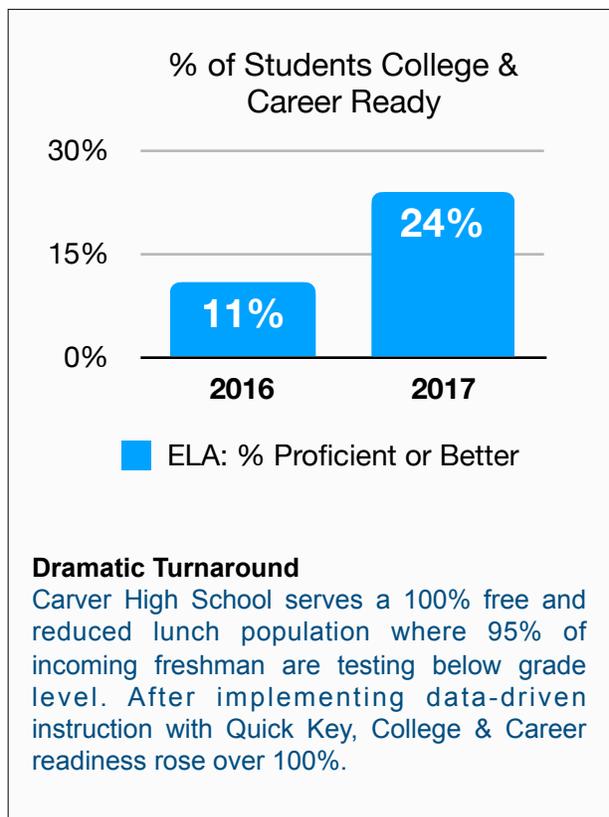
**Parents need to know** that data-driven instruction is not about doing more testing for the sake of test scores. It is about helping students engage with learning and get quick tangible rewards for making progress. Validated Learning can help school leaders communicate this core tenet to parents and help them understand.

**Teachers need to know** that data-driven instruction isn't about measuring *them*, either. It is about finding learning gaps and addressing them as a team, both with other teachers and between them and their students. Great teachers find learning gaps and foster enthusiasm in their students to close them. This is another area where Validated Learning can provide guidance and training.



*"When we give these low-stakes feedback opportunities it turns learning into a game. Students want to do better. They want to come for tutoring so they can increase their score. And self-esteem goes through the roof."*

**Dr. Felicia Piggot-Long, Ph.D.**  
English Department Chair  
Carver High School



## Case Study: Data-Driven Instruction at a Title I School

Lake Arthur High School is a Title I School with 90% of students receiving free lunch. Principal Amanda Fontenot has consistently kept graduation rates and state test scores above the state average by building her data-driven Response to Intervention (RTI) program around people and the Quick Key platform. Here is how she and her staff did it.



*"Getting the data into a usable format transformed our RTI process and our PLC meetings became meaningful. At last, we saw significant quantifiable improvements in student achievement."*

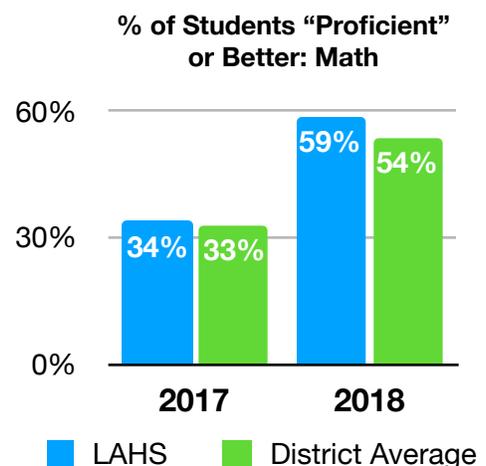
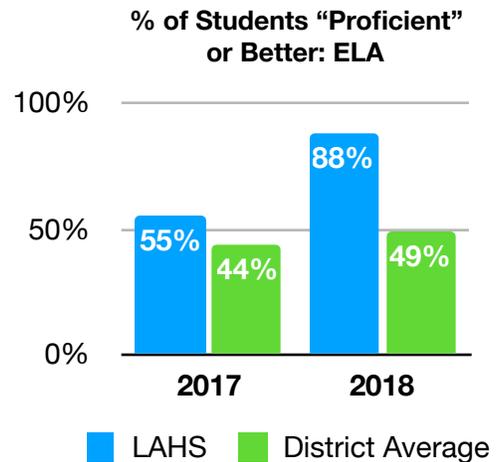
**Amanada Fontenot**  
 Principal, Lake Arthur High School

*"The 25-minute RTI period is a daily opportunity to work on specific areas where students need help. To sort students into the proper RTI period, core teachers created short formative assessments that addressed a specific skill or standard. Their non-core team teacher would administer the assessment, grade it, and create an excel sheet for the core teacher. Core teachers collaborated to create rosters for an RTI period for that week. This was Tier II of our Tiered Learning Plan, and it was effective at catching students back up. But it took great effort and it was not 100% accurate.*

*The biggest challenges were gathering the needed data and analyzing it in order to divide the students into groups and plan unique RTI curriculum. It took too long to grade the assessments and the resulting data still needed to be put into a useful spreadsheet. In the end there wasn't much time left to deploy the third tier of Lake Arthur's Tiered Instruction Plan: one-on-one tutoring.*

*Upon implementing Quick Key for assessments each teacher saved instructional time and several hours per week of hand-grading and reporting time. Overall, the feeling among teachers and students was that the logistical benefits of using Quick Key made the entire RTI process much more effective.*

*And there was another benefit: Quick Key's Itemization Report for each quiz made the RTI periods far more effective at addressing students' academic needs. The reports were also used to guide Lake Arthur's PLC meetings. From the Quick Key data, core teachers were able to pull only the students who had not mastered the skill or standard into a small group during RTI and provide small group intervention.*



# Closing Achievement Gaps: Principal Desiree Galashaw



*“School turnarounds come with a lot of responsibility to students, lots of challenges, and not a lot of time. But with the right staff, the right plan, and essential tools like Quick Key, anything is possible!”*

## Desiree Galashaw

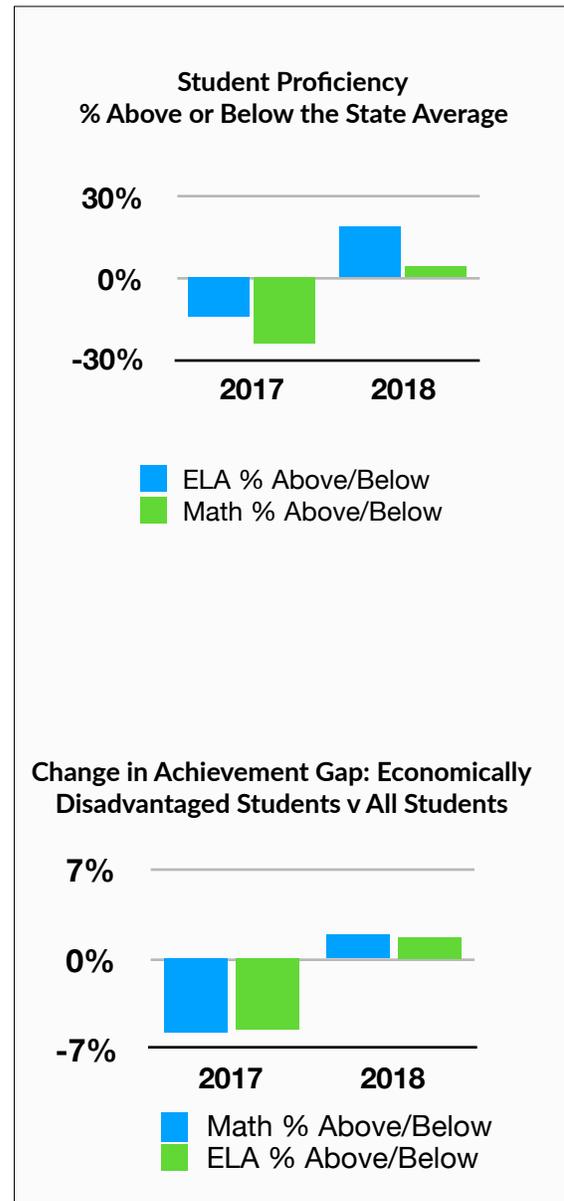
Principal  
 Roosevelt Children’s Academy

**Principal Desiree Galashaw** arrived at Roosevelt Children’s Academy (RCACS) in the fall of 2017 fresh off her success at Academy of the City Charter School, where she had successfully increased student test scores by over 20% 2016-2017, all while narrowing the achievement gaps for ELL, special needs, and economically disadvantaged students.

Achievement is a human-driven process and no more so than with Dez’s mix of leadership, change-management, and process-building skills. But she also knows her technology, and specified Quick Key for her program at RCACS after first using the software at Academy of the City.

At Roosevelt, Principal Galashaw was charged with doing for her new school what she had done for her old school, and she delivered. Student Proficiency rates at RCACS rose from 36% to 58% in ELL and from 35% to 53% in math in just one year, putting RCACS above the state average.

In another example of what is possible with data-driven instruction, she also closed the achievement gap among economically disadvantaged students, English language learners, and special needs students (see chart, right).



# A Human-Centered Plan for Improving Engagement and Outcomes using Data-Driven Instruction

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## A simple human-driven plan for data-driven instruction

After working with district and school leaders who have made the move to data-driven instruction we have seen some successful practices emerge that are focused on people and how they work and change.

### 1 Adopt one system for quizzes and tests

When all of your teachers use the same tool for giving and grading quizzes and tests, it gets all the data in one place and sets the stage for measurement, collaboration, planning, and action. As long as the technology provides access to the needed data and is affordable, *pick the one that is easiest for teachers and students.*

### 2 Overcome objections to using data

Many teachers are reluctant to use data to drive instruction because on its face it takes more effort, or because they are wary of being judged. Overcome the first objection by providing extra time for data-driven practices - and don't cut into existing planning periods. Overcome the second objection through training, collaborative planning and practice.

### 3 Find your Data Champion

Find Data Champions in each department where you plan to start using data. If there is only one, then start with that Champion's department. Recruit this Champion to help you design the feedback quizzes and get buy-in.

### 4 Know your summatives and model your frequent feedback on them

Key to success with data-driven instruction is making sure the effort is linked to outcomes on which teachers and schools are measured. Many of our partners have succeeded by creating a set of 12 low-stakes assessments, each one mapped to standards that are tested on end-of-year or semester exams.

### 5 Provide time for working with data, and choose a framework for using it

Several of our partners have succeeded with tiered instruction, a combination of the basic curriculum with study group time and ultimately one-on-one tutoring for those who need it. Validated Learning can help you and your staff research different methods and choose the one that will work best in your school.

### 6 Practice, collaborate, and refine! (and oh yeah ... this is a judgement-free zone)

No data-driven learning plan will be perfect from the get-go. Most teachers will need time to adjust to collaborating with each other and with frequent measurement of their students against the learning objectives. Everybody should keep in mind that when done properly all teachers will have a mix of high-, middle-, and low-performing students at the beginning of the semester.

## Quick Key for Data-Driven Instruction

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**Walter Duncan**

Co-Founder, Validated Learning Co.

*"In my fourteen years as a teacher and school leader I relied on student feedback to engage my students in their learning and help them get the most from their education. It is my pleasure to help other teachers and leaders do the same with a technology that makes data-driven instruction easy and accessible for any school and all students."*



*"Improving Student Engagement and Outcomes using Data-Driven Instruction: a Human-Centered Approach"*

By

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