

TERC | Using Data Case Study

Dennis-Yarmouth School District, Yarmouth, MA



Cape Cod School District Builds Collaborative Culture, Transforms Student Achievement With “Using Data”

Innovative Program From TERC Delivers on Promise of Data to Improve Teaching and Learning.

Dennis-Yarmouth Regional School District in Cape Cod, Mass., may not be one of the country’s largest school districts, but this district serving 3,500 students in seven schools is a microcosm of the challenges facing all school districts today. Located in the heart of one of the nation’s most popular tourist regions, the district serves a community that is somewhat transient, with a wide variety of income levels – nearly 40 percent of all students are eligible for free and reduced lunch. In addition, Dennis-Yarmouth is grappling with educating a growing population of English Language Learners (ELL) – a situation that nearly every district in the country seems to be facing.

However, through an innovative program called “Using Data,” Dennis-Yarmouth Superintendent Carol A. Woodbury in collaboration with her team of administrators, teachers, parents and students, has transformed the district from seven independent silos to a collaborative learning environment that is a model for districts nationwide.

Changing the District's Culture

Gloria Lemerise, the district’s Director of Instruction, described what Woodbury faced when she arrived more than four years ago. “When Superintendent Woodbury arrived, she discovered she was leading a district of schools that pretty much operated on their own. She knew that for our district to succeed, the environment had to become more collaborative.”

Woodbury set about looking for a way to completely change the culture of Dennis-Yarmouth Regional School District.

After learning about the Using Data process at a meeting of Massachusetts superintendents, Woodbury believed

Highlights

- Teacher-leadership positions established
- Data literacy skills developed and put into practice
- Data-driven approach applied to expanding learning opportunities for a diverse student population
- Empowered, strategic staff meetings

that this process was what the district needed to make real systemic change and returned home to begin to work with her team to implement it.

Developed by TERC, a leading educational research and development organization, with a grant from the National Science Foundation and evaluated by independent researchers, Using Data has documented gains in student achievement in mathematics, science and other content areas and has been successful in narrowing achievement gaps between economic and racial groups, as well as increasing collaboration, data use and instructional improvement. The Using Data process takes teachers beyond the “why” and “what” of data-driven decision-making to the important question of “how.” Teachers learn how to use data to inform their day-to-day practice and to put every student on the path to success.

Using Data’s unique systemic approach to changing the way educators look at data and work in collaboration with one another was recently highlighted in an Alliance for Excellent Education Policy Brief as a program that can help educators deliver on the promise of using data to improve teaching and learning.

Empowering Teachers

The leadership team at Dennis-Yarmouth worked closely with TERC facilitators as they designed a Using Data process that would fit the needs of the district. A first step was to empower teachers and provide them with the information they needed to begin to rely on data to

drive every aspect of the education experience for their students. The district established teacher-leader positions and allocated funding for multiple years to ensure that the process would continue to grow and develop, no matter what budgetary issues arose.

The Importance of Professional Development

In collaboration with TERC, Dennis-Yarmouth's leadership team of administrators, principals and teachers participated in professional development on the Using Data process – first in an intensive professional learning retreat. At this retreat, they began to build their collaborative culture based on data analysis by developing data literacy skills, learning how to understand and respond to multiple data sources. They also developed cultural proficiency and discovered ways to expand learning opportunities to diverse students based on data and monitoring. They participated in a data-driven dialogue where they reviewed race, class and equity issues.

An important part of the Using Data process is embedded professional development, and the Dennis-Yarmouth team returned home to participate in weekly meetings of 40 minutes or more.

These meetings are now an important part of principals' and teachers' schedules district-wide and provide an opportunity for them to discuss data, as well as to collaborate to make decisions about how the data should inform instruction and the school environment. TERC consultants provided support for Dennis-Yarmouth at every phase of the adoption while allowing the district to own the process.

"I think the best part for us is the balance between external support from TERC and our ability to develop our own internal culture around Using Data," said Lemerise. "TERC provided direct professional development and made sure we really paid attention to the norms of collaboration and how a group needs to be respectful and work together in order to become a team. That has been one of the best benefits for us. We look at data, but through TERC's support, we have developed a process for making that happen and for having those hard discussions that sometimes result from looking at data critically."

Best of all, said Lemerise, she sees the ways that the whole culture of the school district has been transformed by the Using Data process. "A few weeks ago, I sat in on a meeting of first-grade teachers. They were looking at assessment data, and their process followed a set of protocols that just came naturally. First they asked, 'What do we see with the data? Let's compare boys and girls. Is there a gender-specific issue? How many students are ELL? How many are new to our school? What do we want to investigate further to verify the assumptions we are making? What are some creative solutions to issues we have identified?'"

And at that school, the changes aren't just in how the teachers work together. The process is working – student achievement is improving.

It wasn't an easy conversation. Teachers don't like to be critical of one another. Yet, with the Using Data process, they were able to take the data and talk about it. It wasn't about 'us' or 'them.' It was about 'this is where our students are, so what do we need to do to help them bridge the achievement gap, and what changes do we have to make in instructional practice to get there?'

*Gloria Lemerise, Director of Instruction
Regional School District, Cape Cod, MA*

Dramatic Differences in Assessment Scores

"That school has seen a dramatic difference in its scores on the state assessment," she said. "It is only one year so we can't call it a trend, but it is really gratifying to see that they went from a school two years into a 'School in Need of Improvement,' with subgroups not meeting Adequate Yearly Progress (AYP), to a school where every student and every subgroup met AYP. That is change."

Another school found that its Title I students weren't doing as well as they anticipated and that the interventions they were using weren't as successful as they had hoped. Yet,

their special-needs students were making significant gains. The leadership team compared the data and then had some hard conversations about how services were being delivered to the Title I students versus the special-needs students.

Improving Our Instructional Practice

“It wasn’t an easy conversation. Teachers don’t like to be critical of one another,” said Lemerise. “Yet, with the Using Data process, they were able to take the data and talk about it. It wasn’t about ‘us’ or ‘them.’ It was about ‘this is where our students are, so what do we need to do to help them bridge the achievement gap, and what changes do we have to make in instructional practice to get there?’”

Less than two years after adopting the process, Using Data has become a part of life at Dennis-Yarmouth every single day. It is used in the district’s planning process, to develop district and school professional development programs – “in practically everything we do,” said Lemerise.

“At our district, the process of gathering and using data and how we talk about data with one another has really become a part of our culture. Now we see it spreading out into a lot of different areas,” said Lemerise. “We no longer have staff meetings that are about a field trip, but instead we have staff meetings where we talk about achievement gaps and flexible groupings, or we look at student work or discuss ways to increase community involvement.”

She concluded, “Using Data has changed the whole way of communicating in our district. Everyone now asks if we have the data to support what we think. Today, we have an environment – a culture – that will allow us to take the steps forward to bring all of our students up to the achievement levels we expect.”

For more information about Using Data, visit <http://usingdata.terc.edu/>

About TERC

Founded in 1965, TERC’s mission is to improve math, science and technology teaching and learning. Each year, TERC’s programs and products reached more than 3.5 million students in the United States and abroad. For more information, see www.terc.edu.