

Dee-Mack Intermediate School

An Illinois school uses data to identify high-performing students – and to lift them even higher

The rows of corn and soy beans begin right across the road from Dee-Mack Intermediate School and stretch on for miles in every direction. In this central Illinois farming community, children from throughout the surrounding rural area attend this 4-6 grade school in Deer Creek, and the elementary and high schools in nearby Mackinaw — a system collectively called the Deer Creek-Mackinaw Community Unit School District. In fact, most students here graduate from high school alongside the same group of kids they first encountered in their pre-K years.

Frank Reliford, the Principal at Dee-Mack Intermediate since 2005, is familiar to almost every child in the community. His own children think he's famous, he says, because of all the attention he gets when they go grocery shopping at the local IGA. Roughly 260 students attend Reliford's school, and their status is a point of pride: Dee-Mack Intermediate is consistently one of the highest performing schools in the state.

In the past two years, there has been a surprising change at Dee-Mack Intermediate. The number of students meeting state proficiency standards has increased significantly – a jump of over 5%. The change in student performance correlates to the introduction of NWEA's Measures of Academic Progress® (MAP®) assessments at the school, Reliford points out. But the ways they chose to use their assessment data has made all the difference.

"We were looking for something that would help us for placement purposes," Reliford says, "and as a screener for students who needed RTI services. Because grades are very subjective and we thought that MAP was objective. We felt like this would give the staff a good representation of where a student was." With the MAP tool in place, intervention proved effective, and percentile scores for struggling students went up. At Dee-Mack Intermediate, the achievement gap was closing.

But at the same time, their MAP data revealed a problem area that had previously gone undetected: growth scores for high achieving students were dropping. "We were not challenging all of our students," says Reliford. "All the focus was being placed on the kids who weren't meeting expectations, and we were making some differences, but with our top students the percentile was going down." Reliford also tracked the school's achievement against national norms, and saw that "our kids were slowly slipping back, and the rest of the nation was catching up."

Reliford's solution was a new mandate for differentiated instruction throughout the school. He recognized that MAP data could be used to identify learning levels and guide instruction for high achievers – just as they had done with struggling Dee-Mack students.

"At my school," says Reliford, "it's not uncommon for us to have students within the same classroom who have seven grade levels difference between them, abilitywise, according to their RIT score. Can you imagine

trying to teach to that? When you have such wide ranges of ability within the same class, you can't teach to the whole and expect that your top kids are going to continue to grow. You have to differentiate, and MAP provided the data we needed that shows where they were instructionally."

Reliford led his staff in the establishment of "Center Stations" within the class – an ability-grouping based primarily on MAP data. The centers essentially split the class into groups of 4 or 5 students, with each group working on the same skill, but at the level appropriate for that group. Teachers rotate between the groups. In this way, students follow the same mainstream curriculum, but reach their level of understanding in different ways.

For example, in a 4th grade class learning about cause and effect, one group was tasked with reading an article and answering questions about George Washington Carver; another group was given cards and asked to match up the appropriate cause and effect — an easier task. "So instead of teaching to the whole class, the teachers are able to challenge them at the level that the DesCartes [NWEA learning statements] is showing within that skill set," says Reliford. "And MAP scores form the baseline. It's the first of several data points used to determine where they are instructionally on that skill."

Reliford also promoted student growth by establishing "Intervention/Enrichment time" – a half hour at the end of each day during which students receive individualized instruction or targeted learning tasks from the core classroom teacher, depending on their level. During any given week, there may be multiple math interventions in the same classroom – some students working on computation, and others focused on story problems – or multiple enrichment plans in reading, with gifted students reading books outside of the curriculum, and focusing on higher order skills.

"And MAP is part of this too," says Reliford. "Of course, teacher recommendations and informal formative assessments play a part in identifying student levels as well, but we've used MAP to determine what interventions and enrichment are appropriate for every student."

Reliford saw results quickly. At the end of the 2010-11 school year, the percentage of his students meeting standards in reading and math was above 90%. In 2011-12 they exceeded even that, with 94% of Dee-Mack Intermediate students meeting standards in reading, 95% in math, and 96% in science. It is the highest ranking performance ever for any school in the district's history.

The Illinois State Board of Education recognized these accomplishments by awarding Dee-Mack Intermediate the Academic Excellence Award, an honor given to schools that have 90% or more of their students meeting or exceeding math and reading proficiency standards over three consecutive years. Adding to this achievement is the fact that the school has the highest percentage of low income students (21%) among all award recipients in the county. It's the first time in school history that Dee-Mack Intermediate has received this award.

"It's many different things we're doing," Reliford says.
"I think I have the best faculty and staff that I've had since I've been here. And you can't dismiss the fact that the students we have are higher achieving students.
So there are many factors – no one thing by itself. But MAP certainly played a huge part."

Reliford adds, "A small community is really neat. In a small rural setting, the schools are the focal point for the community. That's their identity. So when things like this happen, it's something the whole community can celebrate."

Recommended reading • Click on links to access content

Do High Flyers Maintain Their Altitude? Performance Trends of Top Students (Research Study). The Kingsbury Center at NWEA: Robert Theaker, Yun Xiang, Michael Dahlin, John Cronin, Sarah Durant, September 20, 2011.

Do High Flyers Maintain Their Altitude? (Data Gallery). An interactive companion to the NWEA Research Study, September 20, 2011.

When High Flyers Go Bad (Descend) (Blog). Author: John Cronin, Director, Kingsbury Center at NWEA, September 22, 2011

Summer Growth Patterns in Gifted Students (Research paper). Author: Karen Rambo, School of Education and School of Teacher Education and Principal Preparation, Colorado State University, October 28, 2011.

