



Improving Student Learning in Maine: Etna-Dixmont K-8 School

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Etna-Dixmont Elementary School Case Study

Approximately 20 miles west of Bangor on Interstate 95, sit the communities of Etna and Dixmont, Maine. The center of Etna is to the north of the Interstate and Dixmont to the South. If you stand at the front double doors of Etna-Dixmont Elementary School, you can be in two places at once, literally—one foot in the town of Etna and the other in the town of Dixmont. The school was built right on the boundary.

The two communities are supportive of their schools, but economic conditions have had an impact. The mills, tannery, and a large MBNA calling center in Belfast have left the area and, with them, many of the jobs. There are a few remaining small businesses and those with reliable transportation work in Newport and Bangor, but unemployment in the area is high, as is the overall poverty rate in both communities.

Etna-Dixmont has been a part of Regional School Unit #19 for five years, serving approximately 256 students in grades PK-8 in 2013-2014. Enrollment has remained steady over the last 5-10 years. Most students come from the communities of Etna and Dixmont, with a few from neighboring Plymouth. Sixty-eight percent of students qualify for free or reduced priced lunch, a number that has been on the rise in recent years. Approximately 17% are identified as needing special education services (the school houses a district life skills class that instructs students from throughout the school district), with only one or two ESL students, depending on the school year.

Student performance has improved dramatically in several subject areas and grade levels in recent years. Table 1 provides performance data on the New England Common Assessment Program (NECAP) from 2010 to 2012 in math, reading, and science. Percent Proficient/Advanced and percent Advanced exists for each subject area at different grade spans. Notable data in Table 1 includes:

- Performance in Reading Grades 3-5 has increased from 65% to 83% Proficient/Advanced. The Advanced category more than doubled from 11% to 28%.
- Performance in Reading Grades 6-8 has increased from 78% to 85% Proficient/Advanced. The Advanced category more than doubled from 19% to 43%.
- Performance in Science Grade 5 has increased from 64% to 82% Proficient/Advanced. The Advanced category more than doubled from 9% to 19%.
- Performance in Science Grade 8 has increased from 46% to 68% Proficient/Advanced. The Advanced category has increased by more than a factor of five from 3% to 16%.

Table 1
Etna-Dixmont Performance (2010-2012 NECAP)
All Students

Subject and Performance Level	2010 NECAP	2011 NECAP	2012 NECAP
Math			
Grade 3-5			
Proficient/Advanced	63%	64%	66%
Advanced	11%	15%	19%
Grade 6-8			
Proficient/Advanced	63%	72%	69%
Advanced	10%	24%	33%
Reading			
Grade 3-5			
Proficient/Advanced	65%	73%	83%
Advanced	11%	11%	28%
Grade 6-8			
Proficient/Advanced	78%	76%	85%
Advanced	19%	25%	43%
Science			
Grade 5			
Proficient/Advanced	64%	61%	82%
Advanced	9%	4%	19%
Grade 8			
Proficient/Advanced	46%	62%	68%
Advanced	3%	19%	16%

Table 2 exhibits the same information for students identified as economically disadvantaged. These performance indicators exhibit exceptional gains in certain subcategories of the NECAP assessment. Table 2 gives details on the movement of performance scores for ED students from 2010 to 2012 and shows the following:

- Performance for ED students in Reading Grades 3-5 has increased from 55% to 80% Proficient/Advanced. The Advanced category tripled from 9% to 28%.
- Performance for ED students in Reading Grades 6-8 has increased from 79% to 87% Proficient/Advanced. The Advanced category almost tripled from 11% to 32%.
- Performance for ED students in Science Grade 5 has increased from 58% to 77% Proficient/Advanced.
- Performance for ED students in Science Grade 8 has increased from 42% to 64% Proficient/Advanced.

Table 2
Etna-Dixmont Performance (2010-2012 NECAP)
Economically Disadvantaged Students

Subject and Performance Level	2010 NECAP	2011 NECAP	2012 NECAP
Math			
Grade 3-5			
Proficient/Advanced	49%	51%	55%
Advanced	9%	8%	18%
Grade 6-8			
Proficient/Advanced	56%	63%	59%
Advanced	2%	12%	26%
Reading			
Grade 3-5			
Proficient/Advanced	55%	67%	80%
Advanced	9%	10%	28%
Grade 6-8			
Proficient/Advanced	79%	69%	87%
Advanced	11%	21%	32%
Science			
Grade 5			
Proficient/Advanced	58%	64%	77%
Advanced	8%	0%	12%
Grade 8			
Proficient/Advanced	42%	44%	64%
Advanced	0%	17%	9%

This case study provides information regarding how Etna-Dixmont achieved such increases in academic performance. The case is based on written documents as well as fall 2013 interviews with the principal and key staff. The case is part of a study of the Maine school funding system being conducted for the Maine Legislature by Lawrence O. Picus & Associates. The case has the following eight sections: School Staff, Goals, School Schedule, Curriculum and Instructional Program, Assessments, Interventions, Professional Development, and School Culture.

School Staff

Etna-Dixmont employs 25.4 full time certified staff, 11.0 paraprofessionals (8 of whom are special education technicians), and 5.0 classified staff. Staff FTE are listed below:

- 1.0 Principal
- 15.0 Core Classroom Teachers (for an overall class size average of 17)
- 3.0 Specialist Teachers
 - 1.0 Music
 - 1.0 French
 - 1.0 Physical Education
- 1.0 Literacy Coach
- 1.0 Extra Help Staff
 - 1.0 Reading Recovery Teacher
- 2.4 Pupil Support
 - 1.0 Social Worker
 - 1.0 Speech Teacher
 - 0.4 Nurse
- 2.0 Special Education Certified Staff
 - 1.0 Self-Contained Life Skills Teacher
 - 1.0 Special Education Teacher (pull-out)
- 8.0 Special Education Technicians
 - 4.0 Special Education Technicians
 - 4.0 Special Education Technicians (self-contained)
- 2.0 Title 1 Instructional Technicians
- 1.0 Library Technician
- 1.0 Secretary
- 2.0 Cafeteria staff
- 2.0 Custodians

In addition to the school principal, one teacher takes on the additional duties (with a stipend) of a part time assistant principal and athletic director, as needed. The amount of time spent on these additional duties varies throughout the school year.

The district has one ESL teacher that is available on an “as-needed” basis to Etna-Dixmont, depending on the number of ESL students and student need.

Although enrollments have remained stable, the school has lost 2.0 Teacher FTEs in the last two years due to budget cuts. This has increased class sizes—typically 12-17 per teacher—in some grades. However, two classrooms are necessarily small (about 12 students) because the classroom itself is too small to accommodate a larger number of students.

School Goals

Until recently, the school goals for Etna-Dixmont have been the same as the district-wide goals for improvement. With the introduction of the newly state-mandated teacher evaluation system, the principal and teachers have begun work on a set of draft goals for themselves, with the school goals ultimately becoming the principal's evaluation goals. Their aim is to create a set of goals that use a common language with, and are aligned with, the Common Core and the teacher evaluation system.

School Schedule

The school day at Etna-Dixmont begins at 7:50 a.m., ends at 2:50 p.m., and includes a 10-minute homeroom/attendance check first thing in the morning and a 25-minute lunch and 20-minute recess scheduled in the middle of the day. The elementary grades K-4 are in self-contained classrooms, while the middle grades 5-8 see different teachers for the different content areas throughout the day.

The elementary grades all have 2-hour literacy blocks each day and math blocks that are 60 minutes in Kindergarten, average 75 minutes in all grades 1-4 and 90 minutes in grade 5. These blocks are sometimes configured differently, depending on the day of the week. For example, the second grade has three 80-minute, one 75-minute, and one 60-minute math block during the week.

The middle grades have seven 55-minute periods during the day. Courses in the middle grades include reading, writing, math, science, social studies, with French, music, health, and PE as specials. With reading and writing as two separate classes, students have nearly two hours of English Language Arts during the day. However, students do not take all special classes every day, and there is some overlap in the subjects teachers teach. For example, the science teacher teaches a couple of sections of health and library study during the week.

Teachers have one duty-free recess period (25 minutes) per week and one period 4 times a week for planning through specialist teachers taking their class. In addition, all teachers have 50 minutes a week to meet with each other in their Professional Learning Communities.

Curriculum and Instructional Program

In 2000 Etna-Dixmont became part of the Maine Partnerships in Comprehensive Literacy at the University of Maine College of Education and Human Development and over the years has leveraged the training and professional development provided by the partnership into a school-wide instructional model that extends beyond literacy.

From their website: "Maine Partnerships in Comprehensive Literacy (MPCL) is a professional development model focusing on literacy education in grades K – 6. Each affiliated school has a full-time literacy coach who supports teachers as they continue to refine their literacy teaching. The support takes the form of on-site graduate-level courses, continued professional development sessions, one-on-one coaching with teachers, and demonstration lessons."

The MPCL uses an Integrated Instructional Framework, which Etna-Dixmont teachers refer to as the ‘workshop model’, in which teachers begin a lesson with a stated goal for the lesson and move on to a mini-lesson, independent student work, and a wrap-up lesson. Teachers work with the literacy coach throughout the year to refine their teaching practices, participate in courses and professional development taught by the literacy coach or university faculty, and collect and analyze data to inform their classroom teaching.

The workshop model is applied to all subject areas and can be used in conjunction with any curriculum materials teachers choose. Much emphasis has been placed on the use of a common language throughout the school that helps teachers collaborate with each other. This common language also creates a consistent vocabulary and set of expectations for students as they move across grades and subjects. All teachers in the school have been trained in the workshop model and new teachers are required to participate in the training. The expectation at Etna-Dixmont is that all teachers use the workshop model.

For the most part, teachers choose their own curriculum materials and they use a variety of resources. Outside of math, there is no set of district prescribed textbooks, though teachers tend to make use of existing materials and books previously purchased by the district or the school, so there appears to be quite a bit of consistency. The school currently uses Pearson’s *Investigations* (elementary grades) and *Connected Math* (grades 6-8) to teach mathematics, along with supplementary materials. In reading, teachers are using the workshop model in conjunction with the *Fountas and Pinnell* leveled reading books and materials gathered through their professional development. Teachers also use the *Six plus One Traits* of Writing for writing instruction.

One teacher mentioned trying a different writing program for a brief period of time, but realized that the approach was too teacher-led and the instructional materials did not have enough examples of good student writing. Because the writing program was not as well aligned with the workshop model, she returned to the *Six plus One* method and accompanying materials. This example illustrates clearly that although there is a consistent expectation that all teachers use the workshop model, there remains some latitude in the instructional materials to be used.

When asked about the transition to the Common Core, the principal and teachers expressed confidence that the workshop model lends itself well to the more rigorous expectations of the Common Core. Teachers are re-aligning, with each other and other district teachers, existing materials to the new standards. Although they stated a need to “reshuffle” or “reorganize” the grade level in which some materials and lessons are used, they did not mention the need to purchase new curriculum materials.

However, there is some trepidation that the new assessments (Maine is set to adopt the Smarter Balanced Assessments) will prevent students from demonstrating what they know. The school participated in the pilot administration of the new tests and experienced some problems. The format of the assessment and the reliance on technology—technology the school does not have—are seen as potential challenges to the school demonstrating continued improvement.

Assessments

Table 3 shows the core elements of the reading and math programs at Etna-Dixmont, including assessments used throughout the year. The primary summative assessment used is the state assessment, NECAP, administered in the fall of the school year to students in grades 3-8. In addition to the state assessment, Etna-Dixmont uses the Northwest Evaluation Association's *Measure of Academic Progress (MAP)*, a set of online computer adaptive tests, as benchmark assessments to monitor progress over the course of the year. Pearson's *aimswEB*, a web-based universal screening tool, is used to identify students for interventions and for progress monitoring.

Table 3
Core Elements of the Reading and Math Programs, Interventions, and Assessments

	Reading Program	Math Program
Core Curriculum/Program	Fountas and Pinnell	Investigations (grade K-5)
	Six plus One Traits of Writing	Connected Math (grad 6-8)
Core Program Augmentation	Reading Recovery	
	Read 180 (new)	SuccessMaker
	Before and after school extra help	Before and after school extra help
		MobyMax (new)
Assessments	AimswEB (K-1)	AimswEB (K-1)
	NWEA's MAP (2-8)	NWEA's MAP (2-8)
	Fountas and Pinnell (K-8)	
		Investigations Unit Assessments (K-5) Connected Math End of Unit Assessments (6-8)
	NECAP (3-8)	NECAP (3-8)

Teachers also administer the Reading Recovery Observation Survey in first grade and the Developmental Spelling Analysis at the end of kindergarten and then again at the beginning and end of grades 1-8. There's also a running record of reading for each student in K-2 and for children receiving interventions in the other grades.

In addition to the assessments listed, teachers use a number of classroom assessments to monitor student progress and the identification of students in need of additional instructional interventions.

Interventions

Etna-Dixmont utilizes the Reading Recovery intervention strategy for struggling students. Students are identified through the use of data in the Professional Learning Communities and teachers work to “flag early and intervene often.” Reading Recovery is a short-term intervention of one-to-one tutoring, some push-in and some pull-out, for students who are not reading at appropriate levels. Students work with the Reading Recovery teacher (paid by Title 1 funds) and do a lot of guided reading. Reading Recovery is focused on the early elementary grades, specifically first grade, but the Reading Recovery teacher works with students in all grade levels. The school has begun using Read 180, an online reading intervention, for the middle grades beginning in the 2013-2014 school year.

There is intervention time, right now dedicated to mathematics help, through *SuccessMaker* and *MobyMath* in grades two through eight. These are adaptive programs on the computer that students are participating in with help and the support of their teacher. Grades five through eight work on these interventions for 30 minutes daily. Grades two through four dedicate three half hour sessions per week.

The school offers voluntary summer school for students who have been identified as needing extra help and are eligible for Title 1 services. Last year, 18 students registered for summer school and the district provided busing and lunch and breakfast. Summer school was for 4 weeks, 4 days, with about 3 hours of instruction per day. Two teachers provided instruction in literacy and math.

Although not a structured intervention, teachers also work with struggling students through the widespread use of extra help time before and after school. Teachers are available on a regular basis to meet with students who require additional instruction. One teacher did mention that attendance at her after school extra help time has declined since the district did away with the second after-school bus due to budget cuts. She noted that it is the students who most need the additional help that cannot remain after school without school-provided transportation.

There are study halls built into the school schedule that allow time for students to do homework or catch up when they fall behind in their class work. There is a teacher available to help students in study hall, if needed, but it is not the same kind of direct instruction provided before and after school.

Professional Development

It is evident that school leadership and teachers at Etna-Dixmont place a great emphasis on professional development and credit much of their students’ achievement on this investment. Professional Learning Communities and the workshop model form the basis of the professional development at the school. The school schedule provides the structure for PLCs to meet and the workshop model provides the structure for instructional improvement.

Table 4 shows the time allowed for professional development of teachers at Etna-Dixmont. Teachers have one planning and preparation 50-minute period four days a week, a 50-minute

block per week for collaborative work with their PLC, and five early release days throughout the year. In addition, the district calendar includes two workshop days available for collaborative work with other teachers.

Table 4
Professional Development for Teachers at Etna-Dixmont

Type	Time Allocated
Individual planning	50 minute period 4 times per week
Collaborative Work with other teachers	Professional Learning Communities, 50 minutes per week
Pupil-free days for PD	5 early release days and 2 workshops days

PLCs are grouped by grade level spans with all specialist teachers assigned to a PLC. For example, one PLC includes Grade 3 and 4 teachers and the music teacher, with the literacy coach and principal participating regularly. They meet for 50 minutes once a week, while other specialists are instructing students. The agenda is set up ahead of time with agenda items coming from any PLC member. The PLC meeting takes on different forms, depending on the agenda, but often includes the review of data or a book study around some facet of instruction. It can also be a demonstration of a sample lesson with the group providing feedback. Because teachers share many of the same students, especially in the middle grades, reviews of data lead to plans for interventions for struggling students or groups of students. PLCs can also have a yearlong emphasis as they did in the 2012-2013 school year, when they focused on Common Core math.

The Literacy Coach works with teachers directly throughout the year and provides feedback on instruction. The Literacy Coach herself is involved in professional development through the literacy partnership and received coaching on her own coaching. In subject areas, such as math, teachers also get feedback from the principal, a former math teacher, or other colleagues who have the content-specific knowledge.

Teachers also participate in district-level teacher groups currently working on the district's transition to the Common Core. As content specific teachers, a few of the middle grade teachers expressed that a particular benefit of participating in these district-level groups is that it allows them to collaborate with other teachers who are also teaching that particular subject at the middle grades.

As part of the teaching contract the district will pay for 9 credit hours (equivalent to 3 courses) at a university and teachers at Etna-Dixmont make full use of it. Teachers noted that the provision was suspended because of budget cuts in 2012-2013, but they were happy to see that it has been restored in the current school year. New teachers use the credit hours to go through the workshop model class and many teachers work towards a graduate degree. Although neither the district nor the school approves course choices, there is an implicit expectation that teachers are using these credit hours to improve their instructional practice.

The school recently secured a small grant available to Reading Recovery schools to be used for coursework and materials for the literacy coach and a few teachers at the school. Etna-Dixmont is the only school in the district that is part of the literacy partnership and with a new Superintendent who is supportive of their work, it's possible the district may look to implement some of the professional development strategies across other district schools.

School Culture

Teachers and leadership at Etna-Dixmont have high expectations of students and of each other. They also have a commitment to improvement in achievement and doing the things that help students improve such as Reading Recovery, the workshop model, and their professional development. They often used words like “committed,” “driven,” “motivated,” and “pride” to describe their work and each other.

“Supportive” is another word that came up frequently when talking about school culture at Etna-Dixmont. Teachers expressed feeling supported by their colleagues, the school principal, the literacy coach, and most parents and members of the community. A first year teacher reported receiving lots of assistance as a new teacher. “People look out for each other,” said another. Although the work of teaching is challenging, there is a sense that the challenges are collective, with no one bearing all of the responsibility. “These are all our kids.”

One teacher put it this way, “We support each other however we need to because it is so vital. I’m not looking for another job because what I get from [Etna-Dixmont] is so much more important than a shorter commute...” Another teacher enrolls her own children in the school because, “This is where I want my children to be and where I want to work.” Teachers also indicated that they see each other socially, something they have not always experienced in other schools. “We’re not colleagues, we’re a community,” is how another teacher summarized it.

“Students are what makes it work, too.” Teachers feel that most students take pride in doing their best and that it shows in their performance. The school is a Positive Behavioral Interventions and Supports (PBIS) school. PBIS provides a framework for teaching students behavioral expectations. As in other curriculum areas, the school is working on improving, or “tightening up,” their use of PBIS so that students have a consistent set of behavioral expectations across all grade levels.

Although there are few “discipline issues” at Etna-Dixmont, teachers did talk about the instructional challenge that one or two disruptive students can create in a classroom. These students are often emotionally troubled due to their home circumstances (e.g., abuse, neglect, in

and out of foster care) and can become disruptive in school. The school social worker and the principal provide support to teachers in dealing with these students, but there is a sense that the number of students coming from troubled home environments is increasing. Despite these challenges, one teacher expressed the expectation that whatever the home environment, “you make up for it in how you instruct.”

Teachers feel that most parents are supportive of their children and supportive of the school and teachers, and some parents volunteer in the school. Community support, in general, is strong. The school has a strong Parent Teacher and Friends Committee that does a lot of fundraising for the school. The group is very supportive of students, according to the school principal, even if they do not always see eye to eye with school and district leadership.

Summary

A major theme to come from Etna-Dixmont is consistency. The teaching staff is very stable at Etna-Dixmont, with an average of 10 to 12 years of teaching at the school, and a few teachers having as many as 20 to 25 years teaching at the school. The student population is also very consistent—the school has little student mobility—which means that teachers and students know each other and have the opportunity to build rapport. Middle grade teachers, for example, see students for grades 5 through 8, which means that by the time the student is in the 8th grade, he or she will have had the same science or math teacher for four years. Teachers say that knowing students so well allows them to know what students need and adapt their instruction more readily.

Teaching staff has also maintained a consistent approach to instruction for over ten years. The workshop model, which began as part of a grant-funded literacy partnership with the University of Maine, has been leveraged into a school wide instructional framework used in all classrooms. It provides a common vision of instruction and the platform for the school’s professional development efforts. The consistency in staff and instructional approach has allowed the workshop model to become so much a part of the school culture that it has survived changes in school and district leadership and even Etna-Dixmont’s change in school districts.

The workshop model’s survival has a lot to do with results. Teachers and leadership have and use data that tells them that the model works and no one wants to change that. They also see the positive results in professional development, teachers meet in formal and informal collaborative groups, and despite the considerable investments to date, they continue to prioritize PD efforts for teachers and the literacy coach, looking for any available resources to keep it going.

The expectations teachers have for themselves extend to their students and they focus on the use of data from screening and monitoring assessments to provide interventions to students who are struggling. The help for struggling students takes the form of one-to-one and small group work, before and after school extra help, and summer school interventions. Furthermore, the culture at Etna-Dixmont is one that places a high value on supporting each other—teachers support students and each other, leadership supports teachers and students, and teachers support school leadership.

Though the focus on professional development and on identifying students for interventions is paying off, there is still more work to be done. There is a new teacher evaluation system in place and the school is approaching that as another opportunity for teachers to reflect on their practice. The transition to the Common Core is on the horizon and the school is now adjusting to the more rigorous standards while keeping the workshop model. Students continue to come to school with challenges outside of the school's ability to control, but the principal and teachers see it as their responsibility to adjust and refine their instructional approaches to serve all students. Clearly, Professional Learning Community is a very appropriate way to describe Etna-Dixmont.