

North Frederick Elementary School Case Study

Prepared for
The Maryland State Department of Education
Study of Adequacy of Funding for Education in the State of Maryland

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Executive Summary

North Frederick Elementary School is an example of the fourth category of schools – those significantly reducing the achievement gap between low-income students and their more affluent peers.

North Frederick Elementary School serves an economically and racially diverse population of learners. It has received targeted Title I funds since 2009 and became a school-wide Title I school in 2014-15. It has also been designated as one of the gifted and talented magnet schools for Frederick County Public Schools. Between the 2007 and 2012 school years, the school experienced a steady increase in student performance on the Maryland School Assessment (MSA) and a significant reduction in the performance gap between students eligible for the free and reduce-priced meals program (FRPM) and non-FRPM students. The average percentage of students scoring proficient or advanced grew from 77 percent in 2007 to 92 percent in 2012. In 2007, the difference between the percentage of FRPM and non-FRPM grade three students scoring proficient or advanced in reading was 29.7 percentage points, but by 2012, the difference was reduced to 6.3 percentage points. In grade five math, the difference in performance decreased from 47.4 percentage points in 2007 to 3.1 percentage points in 2012. Gaps between the overall student population and the subgroups of limited English proficient (LEP) and special education students were also reduced during these years.

Many factors have contributed to this success in improving student performance. The school staff and administration maintain high standards for themselves and for the students, and resources are deliberately used to help students, teachers, and the school as a whole meet their goals. For teachers, these resources include a well-designed, comprehensive curriculum that provides abundant instructional material choices. Collaborative planning time enhances planning and instruction. Teachers receive purposeful professional development on curriculum, data analysis, and pedagogy. Much of this professional development (PD) is delivered during weekly in-school sessions. Instructional coaches are available to support teachers as well.

A variety of supports are available to meet students' academic and behavioral needs. The school uses funding from several 11-month positions to run an Extended Learning Opportunity program in which targeted students meet in small, club-like groups after-school for extra help in reading and math. Along with classroom teachers, a staff of reading and math intervention teachers, special education teachers, LEP teachers, speech teachers, and instructional aides provides extra help, delivers specialized intervention, and makes sure each student receives the support he or she needs to succeed.

As a Positive Behavior Interventions and Supports (PBIS) school, North Frederick uses a variety of incentive programs to motivate students to achieve high behavior and attendance standards. School-wide expectations for behavior are established and reviewed regularly. A student support teacher and community liaison help keep parents informed and involved, and work with students

on behavior, attendance, and emotional support. The school also has a one-to-one mentoring program that pairs targeted students with a teacher mentor for regular check-ins and meetings.

North Frederick's teachers use data to inform their instruction. Data are collected through classroom, district, and state assessments, and teachers meet regularly to analyze data. At quarterly progress meetings, they develop specific teaching goals based on the data and report back on these goals at the next meeting. Teachers also use a variety of key instructional strategies, shared across grade-levels, to strengthen instruction. This school-wide emphasis on key pedagogies and best practices builds continuity across classes and grades.

North Frederick receives strong leadership from the principal, and teachers, specialists, and aides work as a team to meet the needs of students. This school is characterized by collaborative problem solving, professionalism, individualized instruction and intervention, and data-driven decision making. The result is a positive school culture where students are supported and successful.

Introduction

North Frederick Elementary School is located within the city limits of Frederick, Maryland and is part of the Frederick County Public Schools system (FCPS). North Frederick is a neighborhood school with most of the students living nearby. It is also one of three gifted and talented magnet elementary schools in the district, so some students are bused from other areas of the district. The school is characterized by both economic and racial diversity. This is a Positive Behavior Intervention School (PBIS) and has been recognized as a Gold Banner PBIS school for the past three years.

In fall 2014, the newly constructed North Frederick Elementary School building opened its doors. The new school is situated on the same property as the old building, which was built in the 1950s and has since been razed. The modern, new school features spacious classrooms and up-to-date technology in every room. Perhaps because of the attraction of the new building, new students have been enrolling each week. Student enrollment reached 590 in January 2015. Over the past decade, enrollment has ranged from 568 to 655 students.

The average class size at North Frederick is approximately 22 students. Average class sizes by grade-level are presented in Table 1. There are four to five sections of each grade in grades kindergarten through five. In addition, there are two half-day prekindergarten classes. Magnet classes are capped at 26 students per district policy. Class sizes have increased across the district, in large part due to reduced staffing, and the principal at North Frederick noted this school is experiencing the same trend, but has managed to keep classes fairly small through the use of federal Title 1 funding for staffing positions. The district also has provided a differentiated staffing model for schools with higher levels of poverty.

Table 1
North Frederick Elementary School Class Sizes
2014-15 school year

Grade	Class Size
Prekindergarten (2 classes)	20.5
Kindergarten (4 classes)	20
First (4 classes)	22
Second (5 classes)	18
Third (5 classes)	18
Fourth (4 classes)	24
Fifth (5 classes)	21

North Frederick Elementary has received targeted Title I funds since 2009, and in 2014-15 it became a school-wide Title I school. The percentage of FRPM students has increased over the past decade from 27.4 percent in 2004 to 47.0 percent in 2014. Many middle class and affluent students also come from nearby neighborhoods and from across the district if they are involved

in the magnet program. The result is great economic diversity among the student body. There is also racial diversity. The school is 23.4 percent African American, 23.6 percent Hispanic, and 41 percent white. Approximately 14 percent of students are limited English proficient (LEP), and 6.1 percent of students receive special education services. Table 2 shows the school’s student characteristics. There was an 18.2 percent mobility rate in 2013-14, which is higher than the 12.8 percent average for elementary schools in the district.

Table 2
North Frederick Elementary School Student Characteristics 2014-15 school year*

Student Characteristics	Percentage of Student Population
Race/ethnicity	
American Indian/Alaska Native	0.3
Asian	7.8
Black/African American	23.4
Hispanic/Latino	23.6
Native Hawaiian/Pacific Islander	0.2
Two or more races	3.7
White	41
Students eligible for free or reduced-price meals (FRPM)	47.0
Limited English Proficient (LEP) Students	13.9
Special education students	6.1

*Based on January 2015 enrollment.

North Frederick Elementary was selected for this case study because of the progress it has made in reducing the achievement gap between students in poverty and the rest of the student body. This study is based on data from interviews conducted in February 2015 with the principal, assistant principal, teachers, and specialists in the school. Information was also collected from the school website, the School Improvement Plan, and scheduling and staffing documents provided by the principal.

The case has 11 sections: 1) school performance, 2) school staffing, 3) school goals, 4) collaborative planning time, 5) curriculum and instructional program, 6) assessments, 7) extra help for students at risk of academic failure, 8) professional development, 9) school culture and leadership, 10) the summary, and 11) alignment with the EB funding model.

School Performance

North Frederick experienced a steady increase in student performance on the MSA between 2007 and 2012. The average percentage of students scoring proficient or advanced grew from 77 percent in 2007 to 92 percent in 2012. In addition to the increase in the performance of all students, there was also a significant reduction in the performance gap between FRPM and non-FRPM students. For example, in 2007, the difference between the percentage of FRPM and non-FRPM grade three students scoring proficient or advanced in reading was 29.7 percentage points, but in 2012, the difference fell to 6.3. In grade five math, the difference in performance decreased from 47.4 percentage points in 2007 to 3.1 percentage points in 2012. Gaps between the overall student population and the subgroups of LEP and special education students were also reduced during these years.

Table 3 shows the composite data used to select North Frederick Elementary for this case study. The percentage of students who are proficient or advanced across all subjects (reading and math in grades three through five, and science in grade five) was averaged to produce a number – percent proficient or advanced – for each year from 2007 to 2012. For 2013 and 2014, only “All Students” scores were available. During this latter two-year time period, the state’s curriculum standards changed, but the MSA tests did not. To be identified as a school that reduced the performance gap between low-income and more affluent students, the criteria called for a reduction in the gap of FRPM to all students by at least two standard deviations (approximately 14 percentage points) over the six-year period.

**Table 3
North Frederick Elementary School Performance,
Maryland School Assessment (MSA), 2007-2014**

Average School-Wide Percent Scoring Proficient/Advanced in Reading, Math and Science								
Performance Level	MSA 2007	MSA 2008	MSA 2010	MSA 2009	MSA 2011	MSA 2012	MSA* 2013	MSA* 2014
All Students	77	80	87	87	88	92	90	84
Free and reduce-priced (FRPM) Students	53	59	74	75	78	87	NA	NA
Limited English Proficient (LEP) Students	45	59	82	89	96	89	NA	NA
Special Education Students	33	47	63	52	57	77	NA	NA

*Assessment data by student subgroup for 2013 and 2014 were not available at the time this report was written.

School Staffing

The administrative staff at North Frederick includes the principal, an assistant principal, a school support specialist, and school counselor. The school support person is a behavior specialist, and she is assisted by an aide who is also a trained guidance counselor. Together, these two help teachers develop Response to Intervention (RTI) Tier 1 behavior interventions, handle discipline calls and proactive breaks, check in with students, and run weekly behavioral update meetings. A community liaison works to bridge the gap between home and school, monitors attendance, and calls home when a student is absent. In the past, the school has had two assistant principals, but the school lost one assistant principal position beginning with the 2014-15 school year. Table 4 shows the school's staff by full-time equivalent (FTE) position.

North Frederick hosts a prekindergarten program with two half-day sessions that is staffed by a certified teacher and an instructional aide. There are 27 core kindergarten through grade five teachers who provide content area instruction in math, reading, writing, science, and social studies. Four of these teachers serve students in the gifted and talented magnet program. At the time of the site visit, the magnet teachers were in the following grades: three (one teacher), four (one teacher), and five (two teachers). The school has five full-time and three part-time (0.6 each) elective teachers for art, music, instrumental music, and physical education. There is also a full-time media teacher/librarian, who is assisted by a full-time aide. The full-time aide in the media center also supports the school in other ways, including working with small groups in kindergarten during math instruction.

Table 4
Staffing in North Frederick Elementary School

Category	FTE
<u>Administration</u>	
Principal	1.0
Assistant Principal	1.0
School Support	1.0
Clerical	2.0
<u>Prekindergarten Program</u>	
Licensed Teachers	1.0
Instructional Aides	1.0
<u>Main Program</u>	
Core Teachers (Includes 4 Gifted/Talented Magnet Teachers)	27
Elective Teachers (Art 1.6; Instrumental Music 2; Music 1.6; Physical Education 1.6)	6.8
Special Education Teachers	3.0

Category	FTE
Reading and Math Intervention Teachers (Targeted Intervention)	3.0
Speech Teachers	0.8
LEP Teachers	2.0
Librarian	1.0
School Support Teacher	1.0
Instructional Coaches (One Reading Coach, One Math Coach, One Technology/Assessment Coach)	3.0
<i>Aides</i>	
Instructional Assistants – Special Education	8.0
Instructional Assistant – Media	1.0
Behavior Support/Instructional Assistant	1.0
Instructional Assistant – General	1.0
Technology/User Support	1.0
Student Support	1.0
<i>Pupil Support</i>	
<i>Licensed</i>	
Guidance Counselor	1.0
Nurse	0.5
<i>Non-licensed</i>	
Community Liaison	1.0
Health Tech	1.0
Custodial Staff	4.5
Lunchroom Staff	4.0

There are a number of full-time and part-time specialist teachers who provide inclusion and pull-out support for students. This specialist staff includes three special education teachers, two LEP intervention teachers, and two part-time speech intervention teachers. Three full-time teachers provide reading and/or math support. Additionally, the specialist staff includes three instructional coaches who lead professional development and instructional support efforts in reading, math, and technology. The instructional coaches are content area experts who assist with diagnosing students' needs, planning instruction, and identifying resources. The technology coach also provides coaching for formative assessment, using technology for assessment, and data analysis.

The support staff members are important parts of the school community, providing instructional, logistical, and behavior support. Eight special education instructional aides and one LEP aide provide individual and small group support in inclusive settings. Two general instructional aides provide additional support where needed, including providing coverage for meetings, clerical

support, and behavior intervention. Finally, a technology aide provides user support and technology problem-solving help.

Some support staff are shared with other schools in the district. The school psychologist visits the school weekly to attend individualized education program (IEP) meetings, meet with students, and provide support as needed. A special education specialist visits one-to-two times per month to meet with the special education team, and a district director meets with the principal biweekly to provide support and professional development to the administration.

North Frederick Elementary is a Professional Development School (PDS) for Hood College. The school regularly hosts interns for field experiences and full-time student teaching. When possible, interns attend regular school-based meetings with specialists and grade-level teams so they can participate more fully in supporting students. The school values the extra help interns provide in the classroom and one of the instructional coaches serves as the coordinator of intern placements. She meets regularly with interns and communicates with Hood College personnel.

Scheduling

The school day begins at 8:20 a.m. and ends at 2:45 p.m. with student dismissal. Breakfast is available in the classrooms for all students. There are a variety of before- and after-school programs, but the main school day is comprised of 330 minutes of instructional time, including transitions, and 55 minutes for lunch and recess. Core teachers are responsible for instruction for 285 (86.4 percent) of these minutes, and elective teachers for the other 45 (13.6 percent) minutes. Core teachers have common grade-level planning time while students attend their daily elective. A standard formula for the number of elective teachers is to have the number equal to 20 percent of the number of core teachers, which would equal 5.4 positions for this school (0.2×27). The total at North Frederick is above this level at 6.8 FTE.

School Goals

North Frederick Elementary has articulated goals for student achievement, school culture, and technology use. All goals are based on data analysis and articulated in the annual school improvement plan. There is a school-wide common focus on the annual goals and each teacher's student learning objective (SLO) reflects the school-wide focus for the year. The principal noted that the staff had been setting goals, collecting data, and assessing progress consistently even before the SLO process was required.

The school-wide English/language arts goal for 2014-15 focuses on using key ideas and details to increase text comprehension. According to the school's Continuous Improvement Plan, "Teachers will on a daily basis, incorporate higher level key idea/detail questions, which include theme and author's purpose. Students will use a school-wide consistent coding method to help identify the key idea/detail when reading a story in print or digitally." The staff has developed and implemented the coding method that is used across grades. The goal is for student performance to increase from 86 percent (fall 2014) to 95 percent (spring 2015) of students

performing at or above grade-level on the Global Scholar Performance Series, a standardized assessment used by FCPS. Furthermore, the school aims to improve scores for student subgroups from 75 percent to 90 percent for African American students and from 73 percent to 90 percent for FRPM students.

In math, the school's goal is to improve students' ability to solve two-step math problems. A research-based, four-step Problem Solving Process (Understand, Plan, Implement Plan, Reflect) was developed, and all teachers were trained on using it. The Problem Solving Process program guides students through the problem-solving process and provides a common framework across grades. The goal is to increase the number of students performing at grade-level on the Global Scholar Performance Series Assessment from 91 percent to 95 percent for all students, from 75 percent to 86 percent for African American students, and from 73 percent to 83 percent for FRPM students.

To enhance school culture, North Frederick plans to continue the PBIS work that has shown positive results. In addition, the school has set goals to reach the "excellent" (96 percent) attendance rate; increase attendance at family involvement events, especially of subgroups; and to increase the positive perception of its work to reduce bullying. With a 95.6 percent attendance rate in 2013-14, the school is very close to achieving its attendance goal. The school has achieved an average attendance rate of 95 percent or above since 2004.

The newly built school is technology rich. Based on data from a technology inventory completed by the staff, the administration plans to include the following topics in professional development sessions: using interactive activities during instruction, using technology to administer formative assessments and to analyze assessments to drive instruction, using technology for collaboration, and using technology to express learning.

Collaborative Planning

The administration's commitment to regular collaboration includes the deliberate scheduling of time for common planning time, providing instructional coaches to plan with teachers, and linking professional development to instruction and collaboration. These are all critical elements in the level of instructional effectiveness North Frederick teachers.

North Frederick uses a team model to promote collaboration among teachers. Teachers have common grade-level planning time every day while students attend electives. Several years ago, the principal noted the need for more collaboration and that teams did not always plan together, even when given common planning time. She trained team leaders on how to lead collaborative planning sessions and required teams to plan together every Friday. She said this mandated collaborative planning helped teachers develop the habit of team planning, and now teams and grade-level peers plan together regularly – on Fridays and throughout the week.

Intervention teachers and special education teachers often join team planning sessions or plan with individual teachers to ensure student needs are being met. When these specialists cannot attend team planning, they communicate via email with the teachers to discuss plans and supports.

Teachers receive additional support for planning instruction, exploring resources, and implementing strategies during weekly professional development sessions and quarterly progress meeting, both of which are described below. Instructional coaches collaborate with individuals and teams to provide additional support.

Curriculum and Instructional Program

At North Frederick, several key elements of the curriculum and instruction program contribute to student performance. These elements include a rich, well-organized, and easily accessible central curriculum; common pedagogies across grades; data driven instruction; organization of instructional time; and individualized instruction.

Central Curriculum

Teachers follow the Frederick County Public Schools' curriculum, which has been revised to align with Maryland's Common Core based College and Career-Ready Standards (MCCRS). The fully online Curriculum Now system houses standards, a curriculum map, assessment schedules, lesson suggestions, and links to suggested resources that correlate with each standard. Teachers noted that the curriculum is well organized, easy to access from school or home, and offers a wide range of resources. One teacher said the integrated, online curriculum was a "great achievement" of the district. Teachers have the freedom to select the texts and resources that are appropriate for their students and to adapt materials to meet the needs of their classes. For example, the curriculum might indicate that a lesson includes a "short literary text" or "long literary text," and then provides a list of options from which teachers might choose.

There is no textbook series for reading, math, or science. Instead, teachers rely on the online curriculum to guide their long-term and daily planning. They select instructional materials from the resources included in the curriculum, and they also create or find their own materials so that instruction is tailored to students' needs and interests. A well-stocked book room provides many text choices and resources. The central curriculum provides continuity across grade-levels so teachers know how their goals and materials relate to the goals and materials for other grades.

Common Pedagogies and Strategies for Success

The consistent use of key pedagogical strategies provides continuity and reinforcement of ideas across classrooms and grades. Teachers said that this consistency helps students understand expectations, learn concepts, and transition smoothly to new classes.

While teachers have a great deal of flexibility to modify curriculum and tailor instruction, they also receive professional development on key strategies that are implemented school-wide. For example, the school’s four-step Problem Solving Process is a part of math instruction in every grade. Bookmarks and posters remind students of the steps, and the process is modeled by every teacher and used by every student. Similar tools have been developed to help students in writing and reading.

A list of key “Strategies for Success” created and shared by the staff highlights pedagogies that encourage continuity and rigor. For example, teachers across grade-levels use the “hot seat” method and running records to conduct daily, informal assessments one-on-one with students during small group reading instruction. Teachers in the primary grades focus on assessing phonemic awareness and explicit teaching of phonics, vocabulary, comprehension, and fluency into their small group lesson plans. Teachers in the intermediate grades continue with small group work and “hot seat” assessments, shifting the focus to comprehension, reading strategies, and text-dependent questions. Other common instructional strategies include the following:¹

Math

- Purposeful instruction in math vocabulary;
- common formative assessments completed in a journal that follows students through each grade-level;
- verbal and written math reasoning activities;
- progression from concrete to visual to abstract manipulative/representations for math concepts;
- daily opportunities for mental math; and
- four-step Problem Solving Process.

Reading

- Daily read aloud/think aloud with complex text (whole class);
- text-dependent questions;
- extend comprehension beyond the literal;
- focus on vocabulary, fluency, and phonics in primary grades (must be explicitly included in lesson plan);
- explicit instruction in reading strategies;
- daily independent reading time with reader response journals;
- classroom libraries with appropriate text choices; and
- annotating text using FCPS poster/techniques.

¹ These strategies are articulated on a “Strategies for Success” handout.

Writing

- Daily writing instruction beginning the first week of school;
- daily independent writing;
- mini-lessons that model the central concept of each lesson and unit;
- use of Quick-Words Books, leveled handbooks of high-frequency words and phrases; and
- Writing about reading posters and strategies.

Data Driven Instruction

Instruction at North Frederick is strategically driven by data. Teachers use data from a variety of assessments to plan instruction, create groupings, and differentiate instruction. Teachers prioritize individual instruction and seek to use “good teaching strategies for every student.” The principal noted that the district provides easy access to data through a system called Ed Performance. Teachers are trained on how to access, organize, and interpret data within this system.

Teachers regularly analyze data throughout the school year, but special emphasis is placed on data analysis during quarterly progress meetings when the special education teachers, intervention teachers, and principal meet with grade-level teams. They focus on data disaggregated by subgroups and individual students. Based on this data, each teacher identifies specific standards that students are struggling with and develops a plan to address those needs. Teachers leave these progress meetings with deep understanding of their students’ performance, a plan to support further learning, and specific goals to work toward for the next meeting. Between meetings the specialists and instructional coaches support teachers in implementing the plans and achieving these goals.

Organization of Instructional Time

Each grade’s math block is between 75- and 90- minutes per day, with higher grades having slightly longer blocks than lower grades. The math block includes whole group instruction with students then dividing into two groups (or three in kindergarten) for further instruction and practice. All students come back together for closure at the end of the lesson. Teachers noted that this closure time was important for reviewing key concepts and conducting informal assessments. At the end of each math block, before the closure, there is a 10-minute block designated for enrichment and intervention. Teachers described this time as “very valuable,” because it gives them an opportunity to reinforce and expand instruction. Sometimes they have students do a project to apply the math concepts they have studied, and other times they might use it for re-teaching or to provide additional practice.

The time allotted for daily instruction in reading and writing varies from grade to grade. For example, the 110-minute reading block in kindergarten includes 10 minutes of whole-class instruction, 75 minutes of small group instruction, and 15 minutes of phonics/vocabulary. Grade five students have the longest reading block – their 85 minutes includes 20 minutes of whole-

class and 65 minutes of small-group instruction. Grades kindergarten through two include phonics, fluency, and vocabulary instruction in the reading schedule.

The reading block is divided into whole-class and small group time, with time for individual reading. Students of similar ability levels are placed in of three homogeneous groups. Whole-class instruction is based on the grade-level curriculum and standards; this content is then differentiated to meet the needs of each small group. The use of flexible small groups in reading allows teachers and specialists to more closely monitor student learning, differentiate instruction, and work with individual students to provide enrichment and additional support.

All students have a daily writing block that ranges from 40- to- 60 minutes. This writing focus helps prepare students for the writing demands of MCCRS and PARCC assessments.

Individualized Instruction

In both reading and math, teachers use grouping strategies and differentiation to individualize instruction. They work individually and with their team to select and modify activities strategically to support the learning of each student. The district's curriculum offers a variety of resource suggestions, including embedded links to materials, which facilitate differentiation. This easy access to a rich variety of vetted instructional materials that are aligned with the curriculum is key to teachers being able to meet the needs of all of their students. Intervention teachers, special education teachers, and instructional assistants lead small groups in reading and math, provide individual support, and co-teach. Students receive more individualized attention because there are additional teachers and aides in the classroom.

Reading Intervention

The school's instructional coach for reading works with teachers to identify and support struggling readers. The reading intervention teachers use a wide variety of research-based resources and programs to meet individual needs, both in the classroom and in pull-out sessions for small groups and individuals. A variety of intervention resources are used to address needs at every grade-level. For example, young and beginning readers who need extra help might use SIPS (Systematic Instruction in Phonics), a structured program focused on phonemic awareness and site words, and Sound Partners, a one-on-one curriculum that emphasizes decoding, sounds, and phonemic awareness. Other reading interventions include Soar to Success, a comprehension program for students in grades three to five, Read Naturally, a program to improve fluency, or Making Meaning, a literature-based vocabulary and comprehension curriculum for LEP students. These and other resources are used to supplement the regular curriculum for students needing extra help.

Math Intervention

There is no pull-out intervention for math, so math intervention teachers work in the classroom co-teaching, leading small groups, and working with individuals as needed. Teachers like to use

the “hot seat” method to sit one-on-one with individual students to offer a few minutes of direct instruction or guided practice. Data analysis helps teachers identify individual students’ needs. While there are no specific math intervention programs used in the school, teachers reported using a variety of strategies and resources, including online programs, to differentiate instruction for students. Teachers also do target pre-teaching and re-teaching with students.

Assessments

North Frederick uses a variety of state, district, and school/classroom-based assessments to monitor student progress and identify individual learning needs. Data from these assessments guide instruction and determine goals for individual teachers and for the school as a whole

Quarterly benchmark data for math and reading are collected from the district-wide Performance Series Assessments. First quarter data are used to establish a baseline, second quarter data help set benchmarks, and third quarter data allow teachers to assess how students are progressing toward the standards. Data are analyzed individually, at grade-level team meetings, and at quarterly progress meetings. Data from the district’s reading assessment identify students for reading intervention and help the reading specialist determine which intervention program is needed. School-based, online reading assessments provide supplemental data to monitor progress between the quarterly assessments. In math, common unit assessments provide grade-level, classroom-level, and individual student data. Common formative assessments are completed in a notebook that students take with them from grade to grade in order to help track progress across the years.

A school-wide emphasis on data-driven instruction shapes teaching and assessment practices. Teachers receive regular training on accessing and interpreting data. The school employs a formative assessment/technology specialist who coaches teachers, both individually and during professional development sessions, on developing and using classroom-based formative assessments and using the school’s rich technology resources to support assessment and data collection. Teachers use tools such as Google Classroom, along with traditional methods such as exit slips and wipe boards, to give daily formative assessments. Students in grades three through five have individual tablets, so teachers are creating more and more online activities to assess students, provide feedback, and collect data.

Teachers noted that PARCC assessments will provide new data and, potentially, some new challenges. They expressed uncertainty about how their instruction aligns with the new assessments. They expressed the need for ongoing professional development to understand how PARCC assessments will shape curriculum.

Extra Help Strategies for Students at Risk of Academic Failure

There are a variety of programs and supports in place for students who struggle with academics, behavior issues, attendance, and social/emotional issues. Resources to support students at risk of

academic failure include a strong support staff, readily available materials and resources, an Extended Learning Opportunity program, and a student-mentoring program. In addition, a number of specialized teams meet regularly to address the needs of students at risk of academic failure and many teachers participate on at least one team or committee beyond their grade-level team. There is strong school-wide communication and collaboration around supporting students.

Staffing and Resources

Intervention teachers provide support for special education students, LEP students, and students who need extra help with reading, math, speech, or behavior. Instructional aides also work with small groups and individuals. The intervention teachers use assessment data to identify learning needs and determine appropriate interventions. They also work with classroom teachers to plan and modify instruction for subgroups and individuals, and to monitor students' progress. Strategic grouping facilitates the work of the specialists. When creating classes, the administration groups students with similar intervention requirements so that specialists can more effectively deliver the necessary supports.

The reading intervention teachers work with groups and individuals in grades prekindergarten through five. Early intervention is an important part of this work, and the school draws from a variety of resources to support struggling readers. Specific reading interventions are described above, but it is important to note again that the school had access to a wide variety of intervention materials so that students receive targeted support. Reading support is provided both in the classroom, with intervention staff and aides leading small groups and working with individuals, and also in pull-out settings, when students leave the classroom for extra help while the rest of the class works on independent reading activities.

Almost all math support is provided in the classroom, rather than in pull-out settings. Math intervention teachers co-teach with grade-level teachers, lead small groups, and work with individuals. There are no math intervention programs used; rather, teachers and specialists select or design resources to meet individual needs through a process facilitated by the district's curriculum and the expertise of instructional coaches. In classrooms with a large number of students who need support, there are as many as four adults (teacher, intervention teacher, and aides) present for the math lesson. This extra help maximizes individual instruction.

Behavior and Attendance Support

North Frederick has concentrated efforts in maintaining high student attendance. The principal noted that the staff places such a high value on attendance because "students cannot learn if they are not in school." As such, there are a variety of supports and incentives in place to increase attendance. The community liaison calls the home of any absent students who have been identified to be chronically late or absent. She will work with students and families to address problems that affect attendance. For example, the community liaison might help coordinate rides for a student or provide an alarm clock to help a child wake up on time. The school's attendance

team meets weekly to review data and address attendance issues. The district's pupil personnel worker visits the school weekly and provides follow-up support for students with poor attendance. Teachers also call home if a student misses more than two days in a row.

In addition, individual students and whole classes can earn rewards such as pins, certificates, and movie-showings for good attendance. Before-school programs are offered to targeted students, and students are invited to fun morning workout sessions on days when there is a two-hour delay to increase attendance.

As a Positive Behavior Interventions and Supports (PBIS) school, North Frederick implements the tenants of the PBIS framework. The school rules are simple and consistent: "Be ready. Be respectful. Be responsible. Embrace rigor." These four R's constitute "Freddy Ready" behavior and are reinforced on posters, in curricular activities, and in the daily announcements. A token economy, award assemblies, and recognition for good behavior all support a positive school culture. In addition, the school support specialist, guidance counselor, school support aide, and behavior intervention aide form a team to address the needs of students who need extra help to meet behavior expectations.

Extended Learning Opportunity Program

North Frederick has been allotted a number of 11-month positions by FCPS. The number of positions varies from year to year. At the time of this visit, there were 10 teachers funded for 11 months. The extra instructional time created by these positions is used to provide after-school support through the Extended Learning Opportunity (ELO) program. Targeted students gather in a club-like atmosphere, meeting after-school three times a week for one hour. Many of the students identified for the program are the "fence sitters," according to one teacher. In other words, students who need just a bit more help to be successful rather than those who require intensive intervention. The ELO teachers design fun and engaging activities to ensure that students are eager to attend. Groups are kept small, with only eight students per teacher, so students receive individual attention, and the school provides transportation.

The ELO program provides students with structure and resources for completing homework and practicing and extending learning. Younger students focus on reading and other students on math. Teachers collect data to monitor students' progress. Teachers and administrators identified the ELO program as a leading factor in reducing the achievement gap for LEP and FRPM students. The intensive, individualized instruction has resulted in significant improvement in student achievement.

Student Mentoring

Another example of the North Frederick's commitment to reaching every student is the student mentoring program. This program allows teachers to work with and support students one-to-one. The administration and guidance counselor identify students for the program. These may be students who are experiencing distress due to a family situation or students with behavior or

emotional issues. The teacher-mentor checks in with the child several times a week and can arrange to meet with him or her for conversation, lunch, or extra help. About 75 percent of the staff is involved in the program, which emphasizes the value of building and maintaining relationships. Students feel cared for and come to know that there is someone they can talk to and ask for help.

Specialized Teams

Teams address topics such as content-area learning, community outreach, behavior and school culture, and school improvement. For example, the Attendance Committee meets weekly to review attendance data and plan strategies to maintain high attendance. The School Support and Community Liaison staff members work with the Attendance Committee to provide support for students who struggle to get to school. Attendance interventions include incentives for good attendance, daily calls home when a student is absent, letters at parent conferences, discussions at each IEP and 504 meeting regarding attendance, and assistance with transportation. Another example is the reading intervention team, which is composed of the reading, speech, and LEP specialists. This team was assembled because the administration realized that many students who struggled in one of these areas also struggled in others. The team can work together to review data and plan interventions for students who struggle with language and literacy. Every team, from the ELO teachers to the Attendance Committee, relies on a careful review of data to inform their work.

Other groups meet formally and informally to continually assess students' needs and provide targeted support. There is heavy emphasis on meeting the needs of each student, building relationships with students, and involving families and parents, and these teams are responsible for implementing strategies for meeting these goals.

Professional Development

The principal noted that North Frederick teachers are learners and that they receive extensive school-based and district-sponsored professional development. The strong commitment to ongoing, relevant, and structured professional development positively impacts school culture and student learning.

District-wide professional development sessions have included training on using the FCPS curriculum and data sites. At the school-level, the administration identifies needs and designs professional development accordingly. For example, teachers have attended sessions about the PBIS framework and cultural/diversity awareness training² that they described as “very valuable” for building understanding and strategies for teaching a diverse student body that includes a large percentage of FRPM students.

² This training was based on Ruby Payne’s work “A Framework for Understanding Poverty.”

The school's commitment to professional development is apparent in the scheduling of weekly grade-level professional development meetings. These sessions are in addition to daily planning time. Topics for these sessions are guided by the School Improvement Goals and include exploring curriculum, analyzing data, and learning about best practices. Each session includes a "bridge to practice" assignment that teachers use in their classroom and report on the results the following week. Reading and math specialists are trained to lead these sessions and set the weekly agenda.

School Culture and Leadership

There is a culture of high expectations and hard work at North Frederick Elementary. Teachers reported that the administration sets a high bar for them and provides supports for them to reach their goals. They also noted that teachers hold high, uniform expectations for students from prekindergarten through grade five. These expectations are supported by the school's rules: "Be ready. Be respectful. Be responsible. Embrace rigor." The "four R's," as the rules are called, are reinforced through daily announcement, posters, and class activities.

The administration has also been proactive in promoting a school culture that embraces diversity and encourages relationships. The staff has completed professional development based on the work and research of Ruby Payne, which emphasizes multicultural understanding, understanding poverty, and the importance of relationships in students' success. Teachers noted the impact that this training had on their work with students, especially low performers, and families. They acknowledged it as an important factor in promoting a positive school culture.

The teachers and administration strive to make school a positive, welcoming place for parents and students. Many of these efforts are led by the parent involvement committee. Parental involvement is encouraged through frequent and regular communication, family activity evenings, website and email updates, and calls home. During the first month of school, teachers are required to have a positive interaction with all parents in order to set the tone for the year. This usually involves a call or letter to tell parents about positive behaviors and achievements. The school's family involvement committee works to promote communication and invite parents to attend school activities such as the annual parent breakfast or evening events. They also develop ways to help parents understand the curriculum and provide tips for how parents can assist in their children's learning.

Summary

North Frederick has made significant progress in reducing the achievement gap between subgroups within the student body. The following factors have contributed greatly to the school's success:

1. Data driven instruction. North Frederick staff and administration regularly collect and review data to set all goals and to monitor progress toward achieving those goals. Data analysis is central to the planning and instruction of all teachers, including in the

Extended Learning Opportunity program. Data also inform school policy and practice on attendance, behavior, and school goals.

2. Extended Learning Opportunity program. This program provides additional after-school support for students who are performing below their peers. It is made possible by additional funding from the district.
3. Extensive, deliberate professional development. Regular, structured, and targeted professional development allows teachers to refine their practice by learning, collaborating, and reflecting on best practices.
4. Strong leadership. The principal sets high expectations and provides abundant support to teachers. She leads her team in identifying and implementing school-wide strategies that impact student learning and behavior, and she places strong emphasis on continuity and collaboration. There is mutual respect between the principal and staff.
5. Full support staff. The school's large support staff includes instructional specialists and aides, behavior support personnel, and instructional coaches. Teachers and students benefit from the expertise and assistance of the support staff, which provides academic and behavior intervention, instructional resources, extra hands in the classroom, and professional development. There is a collaborative team approach to educating students, improving instruction, and cultivating a positive school culture.
6. School-wide emphasis on meeting the needs of each student. Teachers use a variety of resource materials to differentiate instruction and engage students. Much of this individualized instruction is driven by regular data analysis at the individual student-level. Early and ongoing interventions have contributed to students' success.
7. Time for collaboration and communication. Grade-level teachers share common planning time every day and required weekly collaborative planning meetings facilitate communication. Specialist and aides regularly plan with core teachers.
8. Positive school culture. As a PBIS school, North Frederick sets high expectations for students and teachers. The staff strives to make school a safe, positive, and engaging place where students want to be. The high attendance rate is important to the school's success. Regular efforts to invite parents and community members into the school also promote a welcoming environment.

The principal and staff have worked hard to reduce the achievement gap. When asked about challenges that will affect continued improvement, they identified several issues:

1. Changing student population. The principal and staff anticipate growing numbers of FRPM students and students with behavioral or emotional needs. The principal noted that schools need to serve both the students and the families who struggle with poverty. Additional resources, both physical and personnel, will be required to meet these needs.

2. Funding. Resources such as the ELO program and the full support staff are vital to North Frederick's success. Any budget cuts would negatively impact these resources. Funding cuts would likely lead to larger class sizes, which if combined with fewer support staff, would increase teachers' workloads and reduce their ability to deliver individualized instruction. The principal noted that budget cuts affect every area of resources.
3. Evaluations systems and new assessments. Teachers expressed concern about how to best prepare students for the PARCC assessments. The data they receive from this year's test will be informative and help guide instruction, but there is a sense of anxiety about how the new exams will impact the students and the school. Teachers also noted that parents struggle to help their children with the new math curriculum. Recent changes in accountability and teacher evaluations also increase the workload and anxiety of teachers.
4. Time. New initiatives and curricular materials, increasing student needs, and larger class sizes place heavy demands on teachers' time. It is important to provide time for collaboration and professional development to balance these demands.

Alignment with the Evidence-Based Model

Many strategies implemented at North Frederick Elementary align with the EB model:

1. Clear measurable goals. School-wide goals and individual teacher goals relate to student performance. Data are used to measure progress.
2. Effective curriculum and instruction program. The comprehensive district curriculum, key pedagogical strategies, and effective organization of instructional time are factors that facilitate students learning.
3. Sufficient staffing. The school employs enough core teachers to keep class sizes fairly small and enough elective teachers to provide adequate student-free time for core teachers to plan and meet. The large support staff provides instructional support for students and extra help for teachers.
4. Collaboration. Grade-level teams routinely plan together. Teachers collaborate to address student needs (ex. progress meetings) and school-wide goals (ex. attendance committee). There is a spirit of collegiality and support within the staff.
5. Data-driven decision making. Teachers are trained and supported in using disaggregated data to inform instruction. Data inform all school policies and initiatives, including behavior programs, attendance intervention, and the ELO program.
6. Deliberate and ongoing professional development. Teachers at North Frederick are continually learning and studying their practice through regular, targeted professional development. Every teacher participates in weekly PD sessions during the school day.
7. Interventions for students at risk of academic failure. The school provides early intervention in reading through a wide variety of curricular programs and resources materials. The staff of reading and math specialists, intervention teachers, and instructional aides facilitates ongoing

support in reading and math. A school-wide commitment to individualized instruction promotes success for all learners.

8. Development of instructional leadership. Teachers are trained to lead their colleagues in data analysis, planning, and problem solving. Teachers are also leaders and members of a team that work on school improvement initiatives such as attendance or parent involvement. There is a feeling of partnership here, with teachers taking ownership of the success of the students and school.
9. Accountability. Teachers and administrators work together to meet school and student needs. Teachers set goals during quarterly progress meetings and must report on their efforts to meet these goals. Students are also instilled with a sense of accountability through the school's emphasis on the "Four R's:" Be ready. Be respectful. Be responsible. Embrace rigor.
10. Strong leadership. The principal sets high expectations for teachers and provides the supports they need to reach their goals. There is mutual respect between the administration and teachers.

Overall, many of North Frederick's features and resources are aligned with the EB model. These include fairly small class sizes, an appropriate ratio of core to elective teachers, instructional coaches, a full staff of intervention teachers and instructional aides, and additional programs and initiatives to support students at risk of academic failure.