

Bridge to Excellence Master Plans

# Best Practices

Programs or Factors that Consistently  
Produce Positive Results



*Division of Student, Family, and School Support  
February, 2009*

# Best Practices

## Programs or Factors that Consistently Produce Positive Results

### Purpose

The Maryland State Department of Education has produced this document, *Best Practices: Programs or Factors that Consistently Produce Positive Results*,<sup>1</sup> to :

- Provide leaders and teachers with a common framework around which to engage a diverse cross-section of stakeholders in the hard work of continuous improvement in teaching and learning in our public schools, and
- Model themselves after the educational practices identified by MGT as *critical educational practices that make a significant impact on improving student proficiency levels*.

---

<sup>1</sup> This document is comprised of information (in italics) extracted from the MGT Final Report (2008): An Evaluation of the Effect of Increased State Aid to Local School Systems Through the Bridge to Excellence Act.

# Best Practices

## Programs or Factors that Consistently Produce Positive Results

### Introduction

*In the few years following the passage of the Bridge to Excellence in Public Schools Act of 2002 and the full implementation of the Maryland School Assessment program, proficiency levels have improved dramatically for all students and for No Child Left Behind groups. Schools and local school systems (LSSs) have focused most of their additional resources on strategies to improve the proficiency levels of elementary school students. In the last four years, this focus has closed more than half of the proficiency gap that elementary students statewide had in 2004 to reach the NCLB goal of 100 percent proficiency by 2014.*

*Although student proficiency levels in all 24 LSSs have improved, some schools and LSSs are progressing at a much faster rate than others. MGT has identified reasons for these differences, presented below.*

### Programs or Factors that Consistently Produce Positive Results

*The MGT Evaluation confirmed that investing more dollars per pupil resulted in increased closure of student proficiency gaps. The evaluation also showed that student proficiency levels improve faster in schools that have higher percentages of classes taught by highly qualified teachers. Further, MGT found that strong leadership practices infused throughout the schools and school systems strongly contribute to improvements in student achievement.*

*Additionally, there are critical educational practices that the MGT Evaluation found make a significant impact on improving student proficiency levels.*

### Best Practices

*These “best practices” include five intensively and highly interrelated planning and support activities. When more of these educational best practices are in place in schools and when their operational frequency increases, students make more progress toward elimination of proficiency level gaps. The educational “best practices” must operate within a supportive and positive school environment with effective leadership and include aligned, individualized, and inclusive instructional processes.*

## Recommendation

*Among several recommendations, the MGT Final Report includes the following:*

***Schools that are having less success at improving student achievement should model themselves after the educational best practices that this evaluation identified as contributing most to improvements in student academic proficiency as implemented in high performing schools.***

# Table of Contents

	Page
I. Overview of Best Practices	1
A. Planning and Support System	3
1. Team Strategic Planning	5
2. Data Analysis	6
3. Professional Learning Communities	7
4. Teacher Specialists	8
5. Targeted Professional Development	9
B. Aligned, Individualized, and Inclusive Instruction	10
1. Core Curricula	11
2. Student-Centered Approach	12
3. Inclusion	13
C. Positive School Environment of High Expectations and Effective School Leadership	14
II. Evaluation Mandate	15
A. What MGT Did	17
1. Survey of Educational Best Practices	18
2. 2008 Site Visits	20
B. Statistical Analysis	
1. Improvements in Achievement and Educational Practices in Schools	21
2. Practices in Schools with Different Demographic Characteristics	22
3. Highly Qualified Teachers and Proficiency Gap Closure	23
4. Total New Expenditures Per Pupil and Proficiency Gap Closure	24

## Table of Contents (continued)

	Page
III. Case Studies	25
Worcester County Public Schools (case study 1)	26
Snow Hill Middle School (case study 2)	29
Snow Hill High School (case study 3)	32
Allegany County Public Schools (case study 4)	35
Cresaptown Elementary School (case study 5)	39
Westmar Middle School (case study 6)	42
Calvert County Public Schools (case study 7)	45
Appeal Elementary School (case study 8)	48
Patuxent High School (case study 9)	50
St. Mary's County Public Schools (case study 10)	52
Dynard Elementary School (case study 11)	55
Esperanza Middle School (case study 12)	57

# Best Practices

## Programs or Factors that Consistently Produce Positive Results

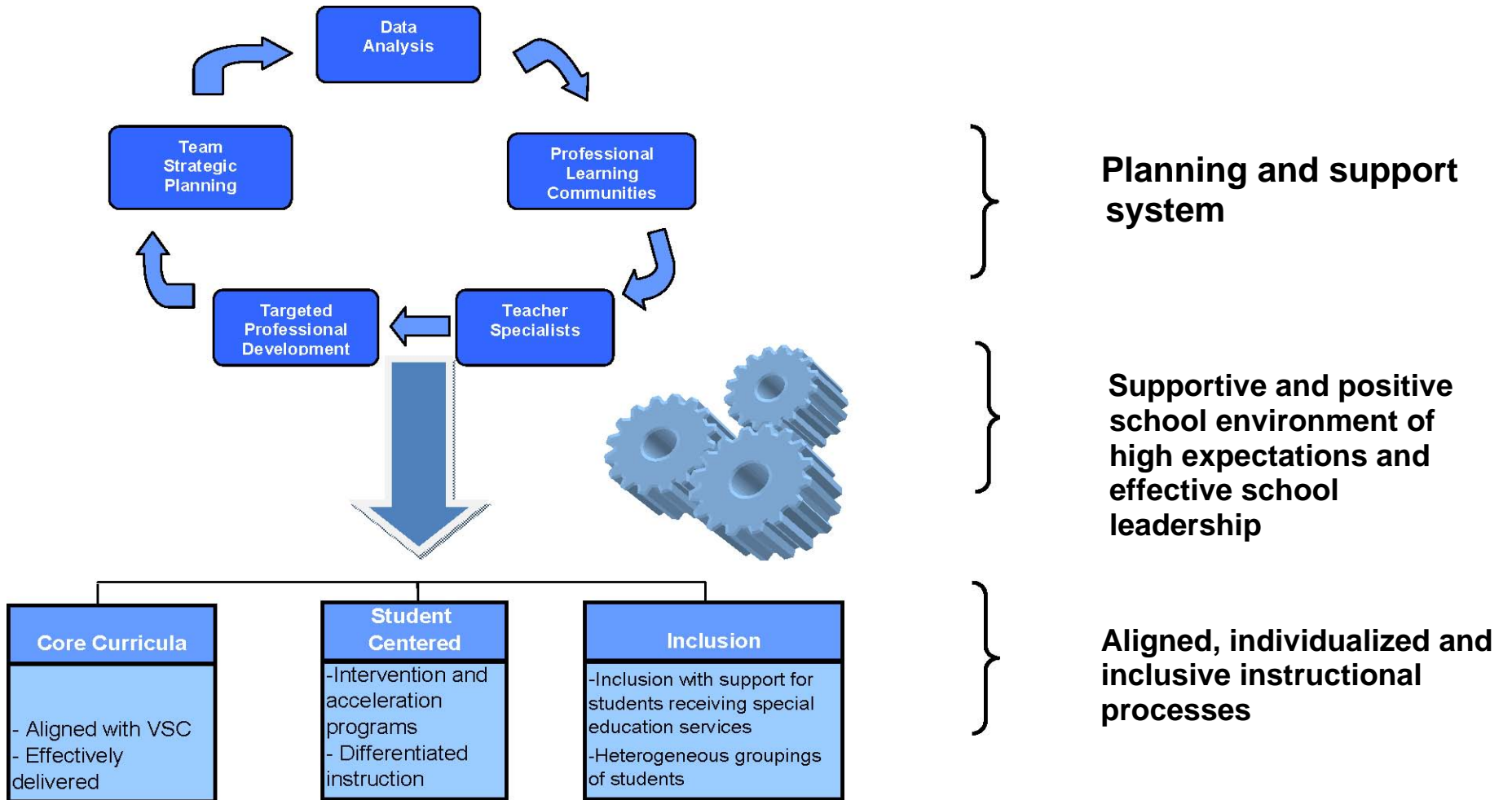
### Overview of Best Practices

*Analysis of the data that MGT collected in 2008 site visits showed that all best practices that MGT studied can be grouped into three distinct categories that are deeply interrelated.*

1. ***Planning and support system*** for teachers with emphasis on weekly (or more frequent) meetings of teacher teams to plan, and discuss student-level data and instructional processes.
2. ***Aligned, individualized and inclusive instructional process*** that includes systematic assessments and adjustment of instructional delivery.
3. Supportive and ***positive school environment of high expectations*** from administrators, teachers, and students established and maintained by ***effective school leadership***.

*The diagram on the next page shows how these categories of practices relate to each other.*

# OVERVIEW OF BEST PRACTICES



# Planning and Support System

## Best Practices

*Planning and support system best practices are the basis for improving student academic proficiency.*

*This system is characterized by the following: **team strategic planning; data analysis; professional learning communities; teacher specialists; and targeted professional development.** According to MGT, these five best practices are interrelated not only in their common purpose of planning and modifying instruction to improve student achievement, but also in their implementation.*

*The first three are delivered through a single vehicle: Instructional Team Meetings.*

## Instructional Team Meetings

*During team meetings, instructional staff work together to develop strategic plans for their grade (at elementary school or middle school level) or subject area (high school level). Throughout the year, they revisit and adjust their plans using the most recent student assessment data. Some of the meetings are devoted to instructional processes and/or professional development when teachers brainstorm or learn from external sources how to address specific instructional challenges. Team meetings are also instrumental in ensuring that the grading criteria are comparable and that regular education and other teachers (i.e., special education and Limited English Proficient, etc.) are working together effectively. Both site visit data and statewide survey data showed that teacher team meetings are effective when they occur weekly or even more frequently.*

*Teacher specialists<sup>2</sup> provide support to classroom teachers throughout the process of data analysis, strategic planning, developing instructional strategies, and targeted professional development. They guide teachers in using data to develop their grade or subject level strategic plan, and/or to develop specific strategies to address specific students' needs. Teacher specialists assist teachers in differentiating instruction, and providing interventions to struggling students. In many schools, and LSSs, teacher specialists are responsible for providing or facilitating targeted professional development.*

*Collaboration was reported as a central attribute of all five best practices in the support and planning system. An on-going professional dialogue among educators informs strategic and instructional decisions and is supported by school and district leadership.*

---

<sup>2</sup> A "teacher specialist" refers to a support position. It is a teacher who models instructional strategies for regular education teachers, analyzes data, provides guidance with strategic planning, collaborative instructional decision-making and provides targeted professional development. The position and its role is defined differently from LSS to LSS, including "staff development specialist," "learning specialist," "resource teacher," "coach," among others.

## Team Strategic Planning

### Best Practice

Site visits to four local school systems (**Worcester, Allegany, Calvert, and St. Mary's**) revealed the following key features of the strategic planning process:

- *Strategic planning is a process, not a product. Schools benefit greatly when planning becomes an integral part of the school routine and the school improvement plan is treated as a working document by both teachers and administrators.*
- *Strategic planning is teacher-driven. For strategic planning to be an effective process, it needs to substantially involve the teachers and other members of the instructional staff. Teachers are more likely to use the strategic plan that they contributed to and was informed by the interests and needs of students that they teach.*
- *Teachers and administrators should be trained in their strategic planning process model. Strategic planning is not an intuitively obvious process and different schools and school systems follow different models. What is the difference between a goal and an objective? What should the action plan look like and how many strategies should it have? To be effective at planning, teachers and administrators must understand how their planning model works.*
- *Strategic planning includes both horizontal and vertical planning. Vertical planning addresses cross-grade articulation and alignment to assist in curriculum focus, student preparation for the next grade and/or school level. Horizontal (by grade or subject level) planning improves instructional quality, consistency, pacing, and comprehensiveness. These two types of planning address different needs of students and teachers.*

## Data Analysis

### Best Practice

*While the “data-driven” approach has been a buzz word for years now, the site visits revealed great variation in student data availability and utilization across the LSSs and schools. Data analysis made possible by a “data warehouse” produced the best results when approached as a system with the following elements:*

1. *Data is made available to teachers:*
  - *Data points are leading, not lagging (i.e., assessment results are available to teachers immediately so that instructional decisions could take results into consideration).*
  - *Data points are regular and start as early as possible (e.g., beginning of school year and/or from previous school year) to evaluate student skills and knowledge.*
  - *Data is available at the individual student level.*
  - *Data is available in a user-friendly form.*
2. *Data is aligned with the Voluntary State Curriculum (VSC). The VSC shows what the State expects students to learn, and data points aligned with the VSC help teachers focus in the necessary instructional areas to prepare students in accordance with State standards.*
3. *Infrastructure is in place to support data analysis:*
  - *Teachers and administrators are trained routinely in how to analyze the data and use the results for instructional decision-making.*
  - *Teachers have friendly and accessible support in schools to assist them with data analysis. Such support can come from a designated position of “data specialist,” from teacher specialists, or from school administrators.*
  - *Teachers discuss data in team meetings and work collaboratively to modify instruction based on the data.*

# Professional Learning Communities

## Best Practice

*A “Professional Learning Community” (PLC) is an organizational arrangement where instructional staff works collaboratively to increase their instructional effectiveness and assume collective responsibility for learning. This typically involves the following activities:*

- 1. Plan instruction in teams, by grade or subject level, to ensure alignment with goals and consistency across classrooms.*
- 2. Collaboratively analyze data and determine instructional priorities.*
- 3. Share instructional strategies and collaboratively develop new strategies to address ongoing instructional challenges.*
- 4. Learn new approaches and best practices and discuss how to infuse them into daily instruction.*
- 5. Discuss factors that provide the context for learning (for example, discipline issues, cultural sensitivity issues, parental involvement, etc.) and develop strategies to address challenges.*

*During MGT’s site visits, collaboration was frequently named as the key factor in improving student achievement. Principals, teachers, and administrators called it “paramount”, “key”, and the “center piece”. As described above, the PLC provides the structure for collaboration.*

*However, interviewees commented on the difficulties of the process of establishing the structure to support collaboration as well as overcoming resistance of those who are used to working in isolation. Providing teachers with common planning time requires difficult financial and scheduling decisions.*

*Further training was reported as very important in helping instructional staff learn how to build a constructive professional dialogue. LSSs that make collaboration a priority have established professional learning communities outside of school buildings, as well: principals, assistant principals, and teacher specialists are provided with opportunities to collaborate on a regular basis. When collaboration permeates the whole system, more decisions are made from the grassroots level and fewer come as directives from the central LSS administration. This approach makes implementation of decisions more efficient.*

## Teacher Specialists

### Best Practice

*Maryland schools have had teacher support positions for many years now. In different LSSs these positions have different designations: “resource teachers”, “learning specialists”, “curriculum specialists”, and “reading or math coaches” among other names. Over the years their responsibilities evolved to providing more instructional guidance, curriculum support, and assistance with data analysis.*

*The role of “teacher specialist” varied in each of the LSSs that MGT visited. While the responsibilities of Instructional Resource Teachers (IRTs) in **St. Mary’s County** are well articulated and the LSS leadership provides clear evaluation parameters, **Worcester County** lets principals decide how best to utilize their curriculum resource teachers. Learning specialists in **Calvert County** focus on targeted professional development while in **Allegany County** the school improvement specialists lead collaborative efforts to improve student achievement. Additionally, LSSs have other support positions, like intervention specialists and subject area specialists who work directly with students.*

*Despite variations, teacher specialists in all studied school systems have very similar core responsibilities in providing support to instructional staff in the following areas:*

- 1. Provide guidance in instructional planning and delivery by ensuring curriculum alignment and monitoring fidelity of its implementation.*
- 2. Analyze student data and assist teachers in making data-informed instructional decisions.*
- 3. Provide support in instructional delivery by modeling lessons, coaching teachers in new instructional strategies, and mentoring new teachers.*

*Additionally, teacher specialists assist with student assessments, participate in team planning, and assist instructional staff in other ways, including working with students.*

## Targeted Professional Development Best Practice

*Professional (staff) development underwent a quiet revolution in recent years in part resulting from the increased attention to student data and the necessity to modify instruction in response to student assessment results. MGT observed the following attributes concerning targeted professional development in successful schools and LSSs:*

- 1. School and LSS strategic planning and professional development planning are closely aligned. Both are guided by their specific student profiles and student needs concerning achievement. While LSSs were attentive to teachers' desires in terms of professional development, school and LSS leadership were also guided by the evidence of student performance results.*
- 2. Professional development is most effective when it is targeted and linked directly to the results from student achievement data. Even such traditionally "general" topics of professional development as cultural sensitivity, use of technology, and innovative instructional strategies can be tailored to meet student and teacher needs identified through data analysis.*
- 3. Teacher specialists are widely utilized to determine school and teacher needs through data analysis, classroom observations, and conversations with instructional staff.*
- 4. Teacher specialists are also utilized as a "quick response" system to meet the immediate needs of teachers by coaching teachers, modeling strategies, and mentoring new teachers.*

*Each of the four LSSs that MGT visited for in-depth study had a different philosophy regarding professional development. At a system level, **Allegany County** reported that it strives to minimize teacher "pull-out" from the classroom for professional development, instead offering site-based professional development activities where schools can structure them in a way that suits them. The cornerstone of the professional development approach in **Calvert County** has been focused on capacity-building of school leadership and support staff so that they could likewise build the capacity of their faculty. **St. Mary's County** leadership followed the "three-pronged approach", that is, understanding: (1) curriculum, (2) pedagogy, and (3) the learner. Finally, **Worcester County** built their professional development plans around their strategic planning goals: student achievement, character education, and technology.*

*Despite these differences, schools in all four LSSs reported that teacher-driven professional development in professional learning communities with ongoing support of teacher specialists to be most effective in addressing their needs.*

# Aligned, Individualized, and Inclusive Instruction Best Practices

*MGT's site visits identified three sets of best practices in the category of instruction:*

- **Core curricula** are aligned with the Voluntary State Curriculum and are effectively delivered.
- Emphasis on a **student-centered approach** results in more differentiated instruction, small group learning, flexible grouping, and targeted interventions and acceleration.
- Students are scheduled into **heterogeneous classes that include students receiving special education services**.

*All three of these categories are informed and reinforced by the planning and support best practices described above.*

## Core Curricula

### Best Practice

*Productive use of instructional time is a key challenge that teachers and administrators face. Teachers work to maximize time on task, but also to make sure that they teach in accordance with the State standards. LSSs provided teachers with extensive professional development on the utilization of the Voluntary State Curriculum (VSC) and/or their own internally developed curricula. Through a student data warehouse, teachers use benchmark assessments to track students' progress and identify groups of students that need additional instruction in specific curriculum objectives.*

*Some LSSs were successful in using curriculum maps and pacing guides as tools to ensure that instruction was aligned with the local or State curriculum. However, pacing guides can become counter-productive when they do not allow flexibility that teachers need to meet the unique needs of their students. As the principal of highly achieving **Cresaptown Elementary (Allegany County)** pointed out, "the State has determined what youngsters need to know by the end of a certain grade level. It does hold people accountable to what they need to be doing in the classroom, but that's not to take away their freedom or their creativity. That is to give them a focus and keep them moving in the same direction."*

*Administrators and principals of elementary schools also indicated the importance of early childhood programs for future success of students, especially student subgroups such as Limited English Proficient (LEP) and students participating in the Free and Reduced Meals (FARMS) program. As the superintendent of **Allegany County** put it, "the sooner we can get our hands on those kids and can guide and direct them in the ways that we want them to be prepared, the better chance we have of them being successful when they get to school age and get in the assessment cycle."*

## Student-Centered Approach

### Best Practice

*With increased accountability for performance of student subgroups, LSSs dedicate more resources to the student-centered approach to instruction. Local school systems targeted for in-depth study (**Worcester, Allegany, Calvert, and St. Mary's**) reported having trained their teachers in such types of student-centered instruction as differentiated instruction, collaborative learning, and flexible grouping. They also provided differentiated material for teachers to use with students at different levels. Nevertheless, schools and LSSs reported that the process of change from teacher-centered to student-centered approach has been slow.*

*Availability of student-level data made it possible for schools to use their resources more effectively, for example, by grouping students from multiple classes who demonstrated similar weaknesses from an assessment for additional targeted instruction. Teachers used collaborative planning time to discuss individual students and develop plans to help each struggling student. For example, in **Allegany County** educators used Instructional Consultation Teams to develop individual intervention plans for struggling students, and in **Worcester County** educators developed “success plans” for all at-risk students.*

*To accommodate the need to provide more individualized instruction to struggling students, schools and LSSs are experimenting with scheduling. Some schools reported success with incorporating a class period designated for interventions or enrichment into the school schedule, to ensure that students who need interventions receive them. Other schools moved to scheduling double periods of math and reading to provide teachers with sufficient time to differentiate instruction. Typically, leadership in the LSSs that MGT studied allowed schools the flexibility to determine which scheduling arrangement works best for successfully meeting the needs of their students.*

*LSSs reported facing substantial challenges in moving toward a more student-centered approach. One of the major problems they cited was large class sizes. Those local school systems that could afford to have smaller class sizes reported greater success with moving toward student-centered approaches than school systems with larger class sizes. Another challenge was rising transportation costs for afterschool programs.*

## Inclusion

### Best Practice

*Improving student achievement of students receiving special education services was another of the challenges reported by the local school systems (LSSs). The LSSs that MGT visited had been working to include students receiving special education services into regular education classes. Special education teachers and other instructional support staff assist not only students with Individual Education Plans (IEPs), but all struggling students. This occurred, for example, through co-teaching or their participation in collaborative team meetings or professional learning community meetings.*

*The process has not always been easy. According to the superintendent of **Worcester County**, “it takes a tremendous amount of staff development and a tremendous amount of trust and mutual respect to really make it work for kids. [...]. If we can have more adults working with students in the classroom then we can differentiate instruction more, we can provide for individual needs more, and we can improve student achievement. We have been working very hard on helping special education teachers and the regular education teacher work together.” This work has been paying off, and **Worcester County** has seen steady improvement in the achievement of their students receiving special education services.*

*Availability of resources remains the biggest challenge in implementing the inclusion/co-teaching model. Schools and LSSs reported needing more qualified staff to work with students requiring special education support.*

# School Environment and Leadership

## Best Practices

*MGT's site visits to LSSs and schools brought to the forefront the significance of a positive school environment and effective school leadership for the best practices to function well. School observations and interviews with educators by the MGT site visit team suggested the following aspects of school environment are most favorable for implementation of best practices:*

- 1. Successful schools and LSSs make building positive relationships with students and among staff their top priority by modeling/communicating it as a core value, training staff on "how to-s", and ensuring its consistency through policies and procedures.*
- 2. All personnel at school are involved in maintaining a positive and supportive environment, from principal to cafeteria worker to school bus driver.*
- 3. Leadership development throughout the LSS and schools is proactively implemented for staff as well as students.*
- 4. High expectations from students and teachers make them believe that they can be successful.*

*A shared commitment to a positive and supportive school environment was reinforced with teachers and administrators involved in setting academic and behavioral standards. Many schools use behavior modification programs as a formal vehicle through which they regulate the school environment for their students. Behavior modification programs help schools set up a common language system, clarify behavioral expectations, and ensure consistency with discipline practices. Such programs are particularly valuable since they allow for recognition of students for non-academic achievements. Most schools also had innovative programs targeting "at-risk" students that included academic mentorship, character development, leadership, and/or social support.*

*School as well as LSS leadership was seen as critically important in establishing the right school environment and empowering teachers to respond to the toughest challenges. First and foremost, school and LSS leadership were responsible for "putting the right people on the bus": hiring and retaining qualified staff that care about students and are highly motivated to do their absolute best for their students. Having the right people in place, the leadership ensures that instructional staff have the necessary skills and tools to teach students and the infrastructure in place to support them.*

*At the LSS level, accountability paired with bringing decision-making process closer to the student made student outcomes more successful.*

# Best Practices

## Programs or Factors that Consistently Produce Positive Results

### Evaluation Mandate

*The Annotated Code of Maryland, Education Article Section 5-402 set forth the parameters of MGT's review and evaluation of the effect of increased state aid to LSSs through BTE on student, school, and LSS performance.*

*The scope of work identified in MSDE's request for proposals appears below. Phrases in underlined font were added by the General Assembly for clarification during the second year of the evaluation.<sup>3</sup>*

- 1. A comparison of school systems that show significant improvements in student and school performance to school systems that do not show significant improvements in student and school performance*
- 2. A list of programs and factors that consistently produce positive results for students, schools, and school systems*
- 3. An assessment of the extent to which county boards are successful in implementing the comprehensive master plans (CMPs) required by §5-401 including whether the CMPs have successfully aligned school system budgets with articulated school improvement strategies*
- 4. An analysis of the amount of funding local governments provide for education each year*
- 5. A detailed description of how LSSs are using State aid including:*
  - a. A list for each school system of the substantial educational enhancements that have been implemented by each school system since the enactment of BTE together with the general issues that each enhancement is attempting to address*
  - b. An estimate of the amount spent to implement each substantial educational enhancement*

---

<sup>3</sup> Senate Bill 907 amended §5-402 by requiring the submission of an Interim Report in December 2007 and added the requirements shown in underline font for evaluation mandates 3 and 5.

- c. An estimate of the number of new positions, if any, that have been added to execute each enhancement
- d. A classification of each substantial educational enhancement in terms of being targeted to the general student population or to a specific student population, specific schools, or specific grade levels

This section focuses on evaluation mandate 2: *A list of programs and factors that consistently produce positive results for students, schools, and school systems.* It emphasizes the following:

- *Methods that MGT used to gather and analyze information, and*
- *MGT's summary of the findings and conclusions from the application of those methods to address evaluation mandate 2.*

# What MGT Did

## Methodology

*Through surveys conducted during the first year of this evaluation, MGT obtained initial indications of programs or factors that school and system administrators perceived to be highly effective. Survey results were presented in the Initial Report (Year 1 of this 3-year evaluation).*

*During the second year of the evaluation, MGT visited all 24 LSSs and a sample of 150 schools to observe and further identify “potential best practices” that consistently produce positive results.*

*In the final year of the evaluation, MGT used the findings from their sample of 150 schools as presented in its Interim Report (2007) to develop and conduct a survey in which educators in every public school in Maryland could identify their best practices and provide their perceptions about the impacts that these practices were having on students through 2008.*

*MGT also visited an additional 24 schools or school systems and developed case studies to supplement the information described above.*

*In order to conduct statistical analyses to provide additional evidence of those educational practices that are most effective, MGT used the 2008 survey data and Maryland School Assessment data showing the improvements that schools made since 2004 toward the goal of attaining 100 percent proficiency in reading and mathematics.*

*Finally, MGT used hierarchical linear modeling to study the relationship between increases in total per pupil expenditures and increases in student proficiency gap closures.<sup>4</sup>*

---

<sup>4</sup> MGT used this metric, which was specifically developed for the current evaluation, that compared the progress that students made statewide and in every LSS toward reaching the No Child Left Behind (NCLB) 100 percent proficiency goal in reading and mathematics by the year 2014.

# Survey of Educational Best Practices

## Key Findings

*A large majority of teachers representing core subjects and instructional programs in 85% of Maryland's public schools (i.e., 16,432 educators in 1,201 schools) responded to a survey concerning the extent to which the following nine categories of best practices were being implemented in their schools:*

- 1. Team Strategic Planning*
- 2. Data Utilization*
- 3. Professional Learning Communities*
- 4. Targeted Professional Development*
- 5. Teacher Specialists*
- 6. Individualized Approach to Teaching and Learning*
- 7. Research-based Core Programs*
- 8. Inclusion and Co-Teaching with Support for Special Education and LEP Students*
- 9. Supportive School Environment and Effective Leadership*

*The major finding of the survey is that respondents in a large majority of Maryland's schools are reported implementing many of the potential best practices that MGT identified after visiting a sample of 150 schools in 2007. However, there are notable variations in the implementation of these best practices:*

- More of best practices are being implemented in elementary and middle schools rather than in high schools.*
- The frequency and intensity of best practice implementation varied across schools of all levels (elementary, middle, high schools) as well as across local school systems.*
- Two of the best practices as perceived by educators (having teacher specialists and data utilization through an electronic data warehouse) have been in place in many schools for only one or two years.*

*Maryland educators perceive that the following practices are most effective for improving achievement of all students in their schools:*

- 1. Class periods or blocks of periods scheduled for academic enrichment or intervention*
- 2. Team strategic planning at the grade/subject level*
- 3. Math specialist in the school*
- 4. Use of student-level data for planning instruction*
- 5. Use of technology in instruction*
- 6. Targeted staff/professional development*
- 7. Data-based differentiation of instruction*
- 8. Discussing instructional practice during team meetings*

*The most common supports to implementing best practices that educators cited were:*

- Time for team planning and data analysis*
- Smaller class sizes to enable individualized instruction*
- Resources to provide quality interventions to all students who need them*

## 2008 Site Visits

### Key Findings

*The list of preliminary best practices derived from MGT's visits to 150 schools in 2007 and examined further in MGT's spring 2008 statewide survey was uniformly endorsed and validated by educators during the 2008 site visits.*

*Analysis of the data collected from the 2008 site visits showed that all studied best practices can be grouped into three distinct categories that are deeply interrelated:*

1. ***A planning and support system*** for teachers with emphasis on weekly (or more frequent) meetings of teacher teams to plan and discuss student-level data and instructional processes.

*Planning and support best practices work most effectively when implemented as a system, when they are teacher-driven, and when they are adequately supported by training and materials. The planning and support system best practices include:*

- ***Grade/subject level and vertical team strategic planning***
- ***Data analysis***
- ***Professional learning communities***
- ***Teacher specialists***
- ***Targeted professional development***

2. ***An aligned, individualized, and inclusive instructional process*** that includes systematic assessments and adjustment of instructional delivery.

*Practices include aligning curricula and assessments with the Voluntary State Curriculum (VSC), a variety of student-centered instructional strategies, and the inclusion of students receiving special education services into the regular education program with support.*

3. ***A supportive and positive school environment of high expectations*** from administrators, teachers, and students established and maintained through effective school leadership.

*School-level as well as school system leadership is critically important in establishing this school environment and empowering teachers to respond to the toughest challenges.*

## Improvements in Achievement and Educational Practices in Schools Findings

To assess the impact on students of what elementary and middle schools identified as effective instructional practices, MGT examined the relations between the percentage of student proficiency gap closure in reading and mathematics and 23 established practices identified by Maryland educators.<sup>5</sup>

MGT performed multiple regression analyses of educational best practices and their impacts on student achievement by subject area. The results revealed that there is a statistically significant cumulative effect of **five intensively used planning and support practices on student achievement**. These five practices are:

1. Grade/subject area team meetings for planning
2. Use of student-level data for planning instruction
3. Discussing instructional practices in team meetings
4. Reading and math teacher specialists
5. Targeted, embedded professional development

Additionally, **teachers' perceptions of the quality of leadership provided by their principal** was found to be the most important individual factor influencing the extent to which schools closed their students' proficiency gaps in both reading and mathematics.

---

<sup>5</sup> Although MGT's survey asked educators about the presence or absence of each of 27 "potential best practices" in their schools, 4 of these practices were implemented by a vast majority of schools (95% or more). Thus, there was an insufficient number of non-implementing schools that could be used to compare their students achievement with that found in the schools that implemented some or all of these 4 practices. Appendix B-4 of the Final Report (2008) displays a definition of each of the 27 potential best practices and identifies the 23 that were used in the analyses described in this section of the paper.

## Practices in Schools with Different Demographic Characteristics Findings

MGT's analyses of data for schools with high versus low percentages of economically disadvantaged<sup>6</sup> students revealed that **intensively used planning and support practices** are more powerful in explaining the increases in student achievement in schools with high percentages of economically disadvantaged students.

In addition to planning and support practices identified as effective in improving student achievement, **differentiated instruction** is statistically significant in predicting higher percent of gap closure in reading in schools with high percentages of economically disadvantaged students.

---

<sup>6</sup> The percentage of Maryland School Assessment-tested students in a school who were eligible for free and/or reduced price meals was used as the indicator of economically disadvantaged students in that school.

## Highly Qualified Teachers and Proficiency Gap Closure Findings

The *percentage of classes taught by highly qualified teachers*<sup>7</sup> also was found to be an important factor related to proficiency gap closure. This is especially seen at the middle school level as the percentage of classes taught by highly qualified teachers are generally lower at the middle school than at the elementary school level.

---

<sup>7</sup> Highly Qualified Teachers is defined by No Child Left Behind (NCLB) as those classes that are taught by teachers who are certified to teach the grade levels or subjects of those classes. A teacher may be highly qualified to teach some classes, but not qualified to teach other classes. NCLB requires reporting of the percentage of classes taught by teachers who are not highly qualified teachers.

## New Expenditures Per Pupil and Proficiency Gap Closure Findings

*To examine the relationship between total new expenditures per pupil and percent proficiency gap closure, MGT used hierarchical linear modeling (HTM).<sup>8</sup>*

*The increase in total new expenditures per pupil was found to be associated with positive proficiency gap closures. **An increase of \$1,000 in total new expenditures per pupil is associated with a four percent proficiency gap closure at the elementary school level and eight percent at the middle school level** for a school that has the average percentage of FARMS, LEP, minority students, classes taught by highly qualified teachers, average number of best practices, and average effectiveness rating for its leadership.*

*Finally, an increase in total new expenditures per pupil significantly improved the negative relations between school percentage of minority students and gap closure at the elementary level. That is, higher percentages of elementary school FARMS students and minority students are typically related to lower proficiency gap closure. MGT's statistical findings showed that an increase in total new expenditures per pupil was related to reducing these inverse relationships.*

---

<sup>8</sup> Lee, V.E. (2000). Using hierarchical linear modeling to study social contexts: the case of school effects. *Educational Psychologist*, 35(2), 125-141.

# Best Practices

## Programs or Factors that Consistently Produce Positive Results

### Case Studies

*In the spring of 2008, subcontractor REDA International, with assistance from MGT, conducted 24 site visits to select LSSs and public schools in Maryland to collect additional in-depth information on implementation of educational best practices. The purpose of the visits was two-fold: first, to confirm and refine the list of potential best practices that resulted from MGT's site visits conducted in 2007, and secondly, to study implementation of the identified best practices.*

*The sites for visitation were determined through an extensive process of data review and analysis that is detailed in Chapter 2: Methodology of the Final Report (2008). The following local school systems (LSSs) and schools were visited for in-depth studies of implementation of best practices:*

- 1. **Worcester County:** LSS administrative offices, Snow Hill Middle School, and Snow Hill High School*
- 2. **Allegany County:** LSS administrative offices, Cresaptown Elementary School, and Westmar Middle School*
- 3. **Calvert County:** LSS administrative offices, Appeal Elementary School, and Patuxent High School*
- 4. **St. Mary's County:** LSS administrative offices, Dynard Elementary School, and Esperanza Middle School*

# Worcester County Public Schools

## Case Study 1

### Student Achievement Gains

*In the period between 2004 and 2007, Worcester County Public Schools achieved the best overall results in the state in closing the proficiency gap of its students as well as moving the students from “proficient” to “advanced” between 2004 and 2007 for grades 3 through 8 in combined reading and math. In overall achievement, Worcester County students are among best performing in Maryland. They also had impressive achievement results among three NCLB student subgroups: economically disadvantaged students, students with limited English proficiency (LEP), and students receiving special education services. For all three subgroups, Worcester County Public Schools students were among the best achieving in the state.*

### Planning and Support System Best Practices

*The Worcester County Public Schools administration believes that it owes its success in improving student achievement in part to its strategic planning process. Worcester County has followed the Middle States Accreditation for Growth (AFG) model for nearly ten years. The LSS administration had become dissatisfied with the lack of teacher involvement in the planning process. As the assistant superintendent Dr. Walker recalls, “We all had school improvement plans. As those school improvement plans evolved, it was getting clearer and clearer to me that it was nothing more than a state department requirement. Frequently, the school improvement plans were developed by some one individual or maybe two individuals. Often classroom teachers didn’t have a clue what was in their school improvement plan. You would say something at meetings to them, ‘well is that in your school improvement plan?’ - you would get this deer in the headlights look.” This led to the LSS identifying a strategic planning model where teachers would be more involved in the planning process. The LSS leadership selected two models of strategic planning and engaged stakeholders (e.g., principals, teachers, parents, etc.) in choosing which one would best address their needs. The decision to select the AFG model was reached collaboratively.*

*The model was first piloted in one of three school clusters. During the first two years, the LSS leadership engaged in the “marketing” of the model to teachers, school administrators, and the community at large. They also provided extensive training and technical assistance to teachers and administrators on the model utilization. Once the model became well established in the first cluster, the LSS leadership rolled it out in the second cluster and then in the third. Educators from different clusters visited each other “to hear what planning structure was set up there and the kinds of ideas that were floating around. We had a community of folks who were trying to learn from each other about improvement in their schools.” The Worcester County Public Schools currently has three main goals for its schools: student achievement, character education, and technology. Title I Schools have a fourth goal of parental involvement. Each school has an AFG committee, and action and implementation teams that determine specific objectives for their school within each goal. Each school has an internal AFG coordinator who coordinates the process. All teachers are involved in the process through action teams.*

Four years ago Worcester County purchased the Edusoft data warehouse system which now houses all test data, including locally developed benchmarks. In addition to training all instructional staff and administrators, teacher specialists continuously provide support and assist teachers in using Edusoft. As superintendent Dr. Andes explains: "Edusoft allows a teacher to monitor individual students' development. It's a tool for us to use to really look at individual student achievement. It expedites the process so the teachers don't have to spend time filling charts and so forth and so on. As soon as the benchmark is scanned through the machine, the scanner reads it, the data is dumped, and we immediately know how our students are doing in each of the indicators." Data is not only used for planning instruction, but also for planning targeted professional development. In their professional learning communities, teachers go through the test data and brainstorm ideas on how they might rectify some of the problems. The focus on the targeted professional development sessions is on what is happening in the classrooms, what works and what does not. According to Dr. Andes, professional learning communities are ever evolving: "I don't know if you can eventually get to a point in time and put up a flag and say we've arrived, we are now a professional learning community, we're here, isn't it terrific. It's ongoing. It's collaborative. It's working with each other, as instructional teams. Really taking a look at what best practices are, reflecting on those best practices, how we can infuse these best practices into our daily teaching. Having that ongoing professional conversation about what works, what we need to do differently... I see that as an evolutionary process."

Teacher specialists (called "curriculum resource teachers") are closely involved in the processes of strategic planning, data analysis, professional learning communities, and targeted professional development. However, the LSS leadership leaves it to the individual schools to determine the extent of their involvement and specific role in each process: "As a system, we don't say, principal you need to have your curriculum resource teacher do these five things. We don't do that. We are not top down. This is what I say to principals: improve student achievement," says Dr. Andes. This approach summarizes the LSS leadership philosophy: give schools support and flexibility, and hold them accountable for student achievement.

## **Aligned, Individualized, and Inclusive Instructional Process Best Practices**

The LSS leadership has been working toward a more student-centered approach to instruction over the past several years. "We have worked very hard to provide staff development and training in the area of differentiated instruction," said Dr. Andes, "We encourage teachers to look at data points and identify what students need, and within the classroom form flexible groups, that students can float in and out of, to provide support and assistance they need." Teachers are also encouraged to develop "success plans" for all students who are having difficulties at school, not just students receiving special education services. Dr. Andes says that large group instruction still happens maybe more than he would like to see, but they are on the right track. He believes that the easy availability of student-level data to teachers is essential in this process. Through routine benchmark assessments, the leadership ensures that the instructional process is aligned with the curriculum and that teachers are aware of what curriculum indicators need to be re-taught.

The system leadership has invested resources in establishing an inclusion model for students receiving special education services. Dr. Andes admits that breaking down the old system of

*sending the students to the resource room is a huge challenge for any school system. But they feel they are steadily moving forward in establishing a collaborative model of co-teaching between special education teachers and regular education classroom teachers.*

*One of the key factors to which the superintendent attributes the success of Worcester students is that the LSS leadership makes a small class size their top priority. The system also allocates resources for afterschool programs and transportation for all interested students. Dr. Andes estimates that across the system about 40 percent of students currently participate in the afterschool intervention and enrichment programs.*

## **System Leadership and Environment**

*The system has had outstanding leadership for years. Superintendent Dr. Andes has assembled a team of dedicated professionals who share their mission and provide a consistent message to schools and the community. According to the Assistant Superintendent Dr. Walker, stable and consistent leadership is so important because it helps provide a context in which best practices are implemented. “You can adopt a best practice but if there isn’t a consistent message to implement it and find ways to refine it then it isn’t going to work. People sometimes just go off and buy a program which is a best practice and I think it’s much more than that. I think there needs to be a great deal of consistency in implementation and in guidance in helping people understand, you need to continually refine what you’re doing. [The superintendent] entitled his budget presentation to the commissioners, ‘The Journey to Greatness.’ I think that’s really that consistent kind of message coming out from the superintendent’s office is very important.”*

*The LSS leadership’s central principle is “maximizing people’s input into decisions.” The AFG strategic planning process has been very helpful in achieving this goal. Through this process, instructional staff are involved in the decision making process on a regular basis. The LSS leadership feels it works best when schools and instructional staff are given flexibility and autonomy to figure out ways to improve student achievement. They see their role as ensuring the every child has everything needed to learn and to be successful: “When I’m making decisions I think, what does that child need in that second grade or fourth grade classroom, and that high school kid need in that Government class? What do they need to be successful? They need a room, furniture, books, and those kinds of things. What else do they need? They need a small class size for individual attention, I think. They need a teacher who cares about them. They need someone who is monitoring what they’re doing and challenging them each and every day. They need other services like art, music, physical education. They need a guidance counselor when they need some extra support and help in some issues that they may have. If they need help they need an afterschool program that provides enrichment and support to them. They need a summer school program that’s going to help them. When I think of a system I don’t think of Worcester County Public Schools. I think of that individual sitting in that chair and that desk” (Dr. Andes). The result of such a leadership approach is a school system where infrastructure is in place to support both students and teachers, and that is responsive to the changing needs of schools.*

# Snow Hill Middle School

## Case Study 2

### Student Achievement Gains

*In the period between 2004 and 2007, Snow Hill Middle School students closed the proficiency gap in reading by 43.7 percent and in math by 56 percent. In 2007, 81 percent of Snow Hill Middle School students scored proficient or above on their reading exams, and 81.5 percent of students scored proficient or higher in math exams.*

### Planning and Support System Best Practices

*The school strategic planning process is based on the county-wide Accreditation for Growth (AFG) planning model. Like other schools in Worcester County Public Schools, Snow Hill has three strategic goals: student achievement, character education, and parental involvement. The fourth county-wide goal – technology—is integrated into the first three. The school strategic planning committee meets monthly to discuss and update their school improvement plan. The plan lists specific objectives and action steps for each goal. Additionally, the school has an action and implementation team for each strategic planning goal and every teacher participates on one of those teams. Teachers and administrators meet on a regular basis to make decisions for the students and the school as a whole. For example, last year teachers on the student achievement team determined that the achievement of minority students must be their focus. They established a mentoring program, “Great Expectations,” for minority students at-risk, as part of the solution.*

*This year, they added a parental involvement element to this program to increase its success. According to a school administrator, “the biggest thing about the planning is that it’s completely data-driven. We are looking at the MSA data. We are looking at anecdotal data. We are looking at qualitative, quantitative—we look at everything to make this plan better. We are talking to teachers. Teachers are talking with their teams and bringing it to the AFG meetings to make sure that this plan is evolving. We are using it. It’s a working plan. Not something that just sits on the shelf.”*

*Snow Hill Middle School administrators and teachers use data regularly to spot patterns and assess results. Teachers receive professional development on data analysis and data utilization in instructional decision-making. According to the school principal, Mrs. Janet Simpson, the LSS administration is very responsive to their needs: “If we realize that there is a trend in the data—strong or weak—we can call them and they will provide professional development on a particular topic. They collaborate with us to make sure that teachers get targeted professional development and materials that they need based on the data.” The LSS administration regularly surveys teachers regarding their professional development needs and triangulates the survey data with assessment data to determine professional development topics.*

*They look not only at the quantitative data (class test scores, MSA data) but also at more qualitative measures such as anecdotal evidence and teacher observation. All of the data, in its many forms, is brought to the table during strategic planning sessions, committee meetings and summer meeting sessions.*

## **Aligned, Individualized, and Inclusive Instructional Process Best Practices**

*All teachers, including special education teachers, can create “success plans” for any student they deem to be at-risk, not only academically but socially or for health reasons, as well. The teachers “go overboard” in making sure their students have the tools they need to be successful students. Some students may get a “success plan” developed for them to help deal with various issues, including non-academic ones that can impact their achievement. The principal estimates that as many as 50 percent of the school’s students have had these individualized “roadmaps to success” at one time or another. In addition, the teaching staff reported that students with problems are receiving assistance right in their own classroom as opposed to being pulled out for additional instruction. Teachers group students into flexible groupings for targeted instruction. Double periods of core subjects allow enough time for differentiation and targeted instruction. The school has an intervention/enrichment period build into school schedule. Teachers credit small class sizes as part of the reason for their success in closing the proficiency gap. On average, the class size is 14 students, and some classes are as small as 11 students. Small class sizes allow ample opportunities for individualized instruction.*

*Snow Hill MS is adjacent to a school serving severely disabled students and frequently has joint activities for students from both schools. Students at Snow Hill MS who receive special education services are fully included in the regular classroom. Like other schools in Worcester County, Snow Hill MS has a co-teaching model in place, where regular education classroom and special education teachers co-teach during the regular instruction time. They also have common planning time when they work on lesson plans and instructional strategies (in addition to the grade/subject level collaborative planning time). Both regular teachers and special education teachers reported substantial benefits to all students from this arrangement.*

## **System Leadership and Environment**

*Consistency in the LSS and school leadership was praised by both administrators and instructional staff as positively impacting the working environment in the school. After having several principals in a short amount of time, the teaching staff is enjoying the reliability of the current administrative team. In addition, the county supervisor provides the resources to assist the teachers with their jobs. As a school administrator said, “Our county supervisor is always on [top of things and] asking what they can do for us.”*

*The school administrators expressed a commitment to providing a nurturing environment for all of their students but in particular those students who are living in poverty. In Snow Hill Middle School, 42 percent of their students are eligible for free and reduced meals. Many of the instructional staff grew up in this community and have used this common history as a way to reach out to these students. As a school administrator said: “We’ve found that once we make a relationship and bond with these kids, we can really go and take them where the need to go.” The teachers echoed the administrators’ perspective that Snow Hill Middle School is a place with*

*a nurturing environment and where the students actually like to come to school. The school administration particularly emphasized the role that holding high expectations for all students in the school plays. Teachers and students are expected to succeed and perform at the highest level. To help promote a positive school environment, the school follows the Positive Behavioral Interventions and Supports (PBIS) program – a successful behavior management approach.*

# Snow Hill High School

## Case Study 3

### Student Achievement Gains

*In the period between 2004 and 2007, Snow Hill High School students closed the proficiency gap in English 2 by 40.2 percent. In 2007, 70.1 percent of Snow Hill HS students scored proficient or above on their English 2 state test.*

### Planning and Support System Best Practices

*Snow Hill High School teachers identified a key to success in their school as their continuous focus on their strategic improvement plan (SIP) through teacher workgroups and committees. The increased accountability with High School Assessment (HSA) testing and benchmarks set the bar. The staff know of the high stakes of the HSA testing and “they are on board with it.”*

*The school’s teacher specialist (“curriculum resource teacher” or CRT) leads student data analysis activities to plan strategically and, according to the principal, is well-versed in using their data warehouse (Edusoft). She is the liaison between the Worcester County Public Schools content area supervisors and Snow Hill High School teachers, emphasizing the HSA areas.*

*The school also participates in the “Citi Schools that Work” program (sponsored by CitiBank through the leadership division of the Maryland State Department of Education) to better use benchmark data. The principal, Tom Davis, identified the eight member team from the school working with the initiative, as a professional learning community (PLC). He described them as a coaching/change management team helping the faculty access and analyze student data to modify instruction.*

*The school has a vertical articulation team, most in-depth in English, led by the Worcester County Public Schools central office that has been developing curriculum maps. The school uses a brand new master schedule committee to discuss student centered issues for articulation with the next grade level.*

*The school’s leadership team meets weekly, but currently there are not regularly held teacher content and/or grade level meetings. The teacher specialist said she would like to see an “evolution” of regular teacher planning meetings in the school.*

*Targeted professional development is driven by teacher requests for assistance following their review of student data. The LSS provides time during county wide professional development days for school-based scheduling of content.*

## *Aligned, Individualized, and Inclusive Instructional Process Best Practices*

*The teacher specialist pulls students' benchmark data and reviews it with teachers to coordinate student interventions. The school is moving to further involve the teachers in the use of the data warehouse to access/analyze their own student's data.*

*Snow Hill High School provides a multi-subject academic support period staffed by a teacher and education assistant. This period is also supported by special education teachers when needed. The school has scheduled HSA intervention labs throughout the year for the core HSA subjects: government, algebra, English 10, and biology. The students participate in the labs through a pull-out approach with the schedule reviewed by the principal. The school has two intervention specialists: one for math and one for the other HSA subjects. However, teachers reported that they have concerns about the amount of student "pull-out time" for interventions and the impact on missing instructional time in content areas.*

*Students are identified through the data warehouse for the HSA labs described above as well as an afterschool program and summer academy. Over 75 percent of the school's students are involved in some form of afterschool programming such as content area, HSA interventions, athletics or clubs. The LSS has helped remove barriers to participation by providing a bus to support the afterschool programs for both academics and athletics. Teachers reported that they "push" students to stay after school when they need help. There is a personal relationship between adults in the school and the students, "We want to help you and we will help you." The staff show their students that the expectation is that they will pass and there is a plan to make it happen.*

*There are also numerous acceleration opportunities for students ranging from a Junior ROTC leadership program to a government acceleration class, dual enrollment, and Advanced Placement classes.*

*The school has used an inclusion model for their students receiving special education services for about six years. Regular education and special education teachers plan together collaboratively. There is some co-teaching with special education teachers – the school administration reported they have learned that you cannot force this and some co-teaching team teachers work better than others. The administration hand schedules their students receiving special education services with both push-in and pull-out support by special education teachers and/or education assistants.*

## *System Leadership and Environment*

*Snow Hill High School instituted the Positive Behavioral Interventions and Supports (PBIS) system last year. They took about a year to collect data and research to set up this behavior management program. According to the principal, they "took time to study and implement the program to do it right." This included open dialog with the teachers during a professional development day. As part of this process, the PBIS team identified that teachers most wanted consistency in discipline and behavior standards. The school provided professional development for a small core of teachers who then trained the remainder of the instructional staff. These strategies ensured that the PBIS program planning and implementation was staff-driven.*

*Several afterschool clubs target at-risk students including “Women on a Mission” for young African American females involving character development and the “Young Men United” club. This club has targeted about 40 African American males for extracurricular activity. Further, once a week during Freshman Seminar, small groups of nine to ten students are pulled for 45 minutes to work on goal-setting, study skills, values, and character using a packaged curriculum.*

*Snow Hill High School received grants for multiple initiatives such as the “Nexus Symposium” where they bring in African American adults to speak to targeted students. There is also a LSS-wide honors reception and annual banquet funded by a local business that over 40 percent of their student population attended last year.*

*The principal subscribes to “having the right people on the bus” management approach which works well with Worcester County’s site-based management system. He wants the teachers to come up with solutions for which they feel ownership. When asked what has made the school successful, he said, “definitely the teachers, the faculty: communication, willingness, dedication – all are very willing to find a solution.”*

*Teachers reported that they feel supported from the LSS superintendent on down to the school. They described that the expectation is “we will get our students to succeed” and this is communicated to the students -- “you can do it and the teachers sincerely care.” According to the teacher specialist, “Collaboration is paramount -- we collaborate on every step we take, meeting, discussing, focusing together.” Other teachers echoed this sentiment through stating of their close support of each other -- a “very strong team and great attitude.” They further described “their sense of caring about each other and the students and the community - - we know 90 to 95 percent of the students -- the school/community/environment/climate are all best practices.”*

*Teachers reported that the principal has set the school’s tone and expectations, and provides trust and respect to the faculty, considering everyone a leader. Teachers are called upon to “step up” and their response is “if you need me, I’m there.” They described the school’s atmosphere as “safe,” “caring,” “supportive,” and “dedicated.”*

# Allegany County Public Schools

## Case Study 4

### Student Achievement Gains

*Allegany County Public Schools (ACPS) had the second highest overall results in the state in closing the proficiency gap of their students between 2004 and 2007 for grades three through eight in combined reading and math, as well as moving their students from “proficient” to “advanced.” Allegany County had a higher than average percentage of economically disadvantaged students and students receiving special education services, and has made great strides in improving achievement in these subgroups.*

### Planning and Support System Best Practices

*The ACPS administration sees strategic planning as a bottom-up process. The system master plan is a “compilation of what school improvement plans have indicated” (Superintendent), and each school improvement plan is composed of grade-level plans developed by teacher teams. Strategic planning begins with a needs assessment where teachers review the assessment results from the previous year, determine areas of needed improvement, select strategies to use to improve student performance in problem areas, and determine targeted professional development needs. Strategic plans serve as a road map and are revisited following each benchmark assessment. Assessments are aligned with the curriculum that is linked to the Voluntary State Curriculum (VSC). The LSS’s data warehouse system is instrumental in this process. While Allegany County has the second lowest per-pupil wealth in the state, it boasts a state-of-the-art data warehouse system. Having understood the importance of data analysis for meeting new achievement standards, Allegany County school system leadership looked for ways to make data easily available to instructional staff shortly after the passage of the BTE legislation. With the commercial data processing systems out of reach for many smaller systems because of their steep price tags, Allegany County Public Schools utilized their available informational technology resources and developed an in-house assessment management system (AMS). The new system was ready by 2006 and has the following key components:*

- *The AMS is linked directly to the VSC indicators. According to the principal of Cresaptown ES, “it shows you the skill that was to be taught, and it shows you the percentage of kids who understood that skill, kids that did not understand. It’s very specific and you can actually see that when kids answered a question [that is an indicator of] a specific skill, you can see how many of them gave the wrong answer and you can figure out exactly why they gave the wrong answer. It’s really interesting. It’s very specific. It really doesn’t leave a whole lot of guessing anymore. You can see exactly who understood what and why they didn’t understand it. It’s been a huge help.”*

- *The data is made immediately and easily accessible for teachers. While the LSS administration is working to get more scantrons into schools, teachers at times still have to enter their own data. But in either case, the turnaround is instantaneous. The system is online, which means that teachers can access it at home or at school. The AMS allows data manipulations at an individual student level. Teachers reported that they regularly utilize data to group students for re-teaching and interventions.*
- *The AMS is a single system that houses all student assessment data that teachers and administrators need.*
- *Users received training on how to utilize the system. Schools have technology coordinators and data analysis specialists in the LSS central office who are available to come to the school when needed. They were reported to be accessible and responsive by AMS users. Teacher data specialists assist teachers with data analysis and data-driven instructional decision making. Teachers routinely discuss data during team meetings.*

*Data is also used to plan professional development. Data is used in ACPs for planning professional development, as well. The administration's philosophy regarding professional development is two-fold. First, professional development is need-based and very specific and targeted. To ensure that the professional development is targeted, the system allows teachers and principals to craft their own professional development plans. "Most school systems have done staff development based upon the latest trend, the latest idea, the latest program, instead of focusing on what you need to do to improve student achievement." (Superintendent) Second, the LSS makes efforts to minimize teacher pull-out from the classroom for the purpose of professional development by scheduling most of it during non-instructional hours. According to the superintendent, it is essential that highly qualified teachers<sup>1</sup> teach students, and not substitute teachers: "While we recognize the need for staff development, we are working toward trying to individualize that process and get away from what I call 'mass executions' where we pull groups of people together and give them all the same dose of medicine whether they need it or not."*

*The LSS uses a complex approach that includes qualitative and quantitative data analyses and evaluation processes to determine individual teacher needs and design professional development plans. To deliver individualized, targeted, professional development, the LSS relies on math and reading teacher specialists who are trained in their content area curriculum, instructional delivery, and also in coaching and co-teaching models. The LSS professional development coordinator describes their role, "We spend a lot of time now working on the coaching model, it involves working with a teacher one-on-one, sitting down and figuring out where help is needed, how to better plan lessons, how to use data, etc." In addition to delivering targeted professional development, teacher specialists analyze data, help teachers to adjust instruction based on the most recent assessment data, attend teacher team meetings, and help teachers develop individualized intervention plans for struggling students. While professional learning communities as a professional development tool are still being developed in Allegany schools, the level of collaboration across the entire system is very high. The central administration sees the development of the professional learning communities as a linchpin to bring all current elements of the professional development approach together.*

## *Aligned, Individualize, and Inclusive Instructional Process Best Practices*

*According to the Assistant Superintendent, Bridge to Excellence funding allowed Allegany County to standardize materials of instruction across the county which was beneficial for alignment and consistency of instruction. The central piece of the alignment is the data warehouse that provides information to teachers about VSC objectives. The LSS leadership encourages teachers to use data for planning daily instruction and provides support with re-teaching concepts when needed, through the curriculum that is available online and that is linked to the VSC. While the LSS provides curriculum pacing guides, teachers are given substantial flexibility regarding their use. The LSS and school leadership place emphasis on individualizing instruction, including differentiation and flexible grouping of students. Some schools have daily intervention/enrichment periods which can be used depending on the current need. Schools provide afterschool and tutoring opportunities for struggling students.*

*Elementary schools use the Instructional Consultation Team (ICT) approach for developing intervention plans for struggling students. Allegany County Public Schools has universal pre-kindergarten and kindergarten programs for all age-eligible kids. According to the LSS central office staff, these programs are very effective in preparing children for early grades.*

*The LSS adopted a full inclusion model where students receiving special education services are placed within regular education classrooms. Special education teachers or instructional assistants provide ongoing support for these students. The system has been using the homogeneous student grouping approach for many years, but is now moving toward a mix of heterogeneous and homogeneous student scheduling.*

## *System Leadership and Environment*

*The Allegany County LSS Superintendent described his leadership philosophy as “surround yourself with good people, give them responsibility, give them authority, [then] get out of their way and let them do the work and hold them accountable for the result.... Don’t second guess them, don’t sit and look over their shoulder and tell them every move to make because if you do that, you don’t need them.” During administrative meetings, he promotes the atmosphere of trust by encouraging principals to “hang out their dirty laundry” and to argue with him if they disagree. The LSS administration makes school administrators as well as instructional staff a part of their decision-making process, and they listen and respond to the concerns. For example, this year the system started a Teacher Advisory in response to growing teacher workload and concerns that teachers expressed about it. Elected teacher representatives from each school participate in monthly meetings to develop strategies to “clear teachers’ plates.” The Teacher Advisory communicates with the LSS central office directly resulting in specific action steps to reduce workload through eliminating redundancies and inefficiencies. Most importantly, the Advisory serves as a venue for a productive dialogue among LSS administrators, school administrators, and teachers.*

*In implementing new programs or changing the way different elements of the system are structured, the LSS leadership uses a collaborative approach to create ownership of the change among all LSS staff. As Dr. AuMiller put it, “If you can convince people that what it is you want to do is a good idea and be willing to listen to them tell you why it’s not and propose alternative*

*solutions to it, two heads are better than one. When you have 850 teacher heads, it's obviously better than one. ... The quickest way to doom a new program or initiative to failure is to let teachers think it was developed in the central office." The system leadership approaches parents and the community in the same collaborative manner, listening to them, trying to engage them and make them a part of the process.*

# Cresaptown Elementary School

## Case Study 5

### Student Achievement Gains

*In the period between 2004 and 2007, Cresaptown Elementary School students closed the proficiency gap in math by 57.9 percent and the proficiency gap in reading by 62.4 percent, which is in the top 10 percent of all elementary schools in the state. In 2007, 84.6 percent of Cresaptown Elementary School students scored proficient or above on their math assessment and 88.8 percent of students scored proficient or above in reading.*

### Planning and Support System Best Practices

*Cresaptown Elementary School was nominated for and awarded the National Blue Ribbon award in 2008. The school has a high percent of economically disadvantaged students who perform very well on state assessment tests. The school administration emphasizes strategic planning. The school improvement team consists of representatives from all grades as well as parents, and works to identify weaknesses and develop strategies to address them, including planned professional development. The resulting school improvement plan is used by teachers for planning instruction. However, the principal Mrs. Reuse, understands that the document provides guidance rather than a prescription: "There are teachers who will have used activities [from the plan], but they have come up with some activities of their own also. I think it's important to give them that flexibility. I actually think that's why the teachers in this building are as successful as they are, because they are given that latitude to not only do [strategies from the school improvement plan], but to also move onto some things that they think would work even better for their youngsters."*

*In addition to school-level strategic planning, teacher teams meet regularly to collaboratively plan instruction. According to the instructional staff, the tradition of collaboration has long been in the school: "We have been here for many years, and colleagues have become friends. We plan together every day, we work with each other's children, we know each other's kids. We have collaborated here for many, many years." Teachers also meet as professional learning communities, to work on specific issues, like improving student achievement or building partnerships.*

*Student data from various assessments is used throughout the planning process. The school is in its second year of utilizing a data warehouse system to assist them in their data analysis. Having this resource has really helped the teachers instantly analyze how their students are doing based on their benchmark data. The system is very specific and provides information down to the test-item level. As the principal says, "you can see exactly who understood what and why they didn't understand it." The Allegany County Public Schools central office has been very helpful in providing technical assistance in the use of this new technology.*

The Allegany County Public Schools central office has provided the teachers with more opportunities for targeted professional development, typically embedded in their schools. To minimize teacher pull-out time, most of this professional development occurs either before school or after school hours. For example, the LSS central office purchased PD 360°, an online program that allows teachers to log-on for professional development on a number of topics. In addition, math and reading teacher specialists work directly with Cresaptown teachers to help improve instruction. Teacher specialists coach teachers, model lessons, help teachers develop individual intervention plans for struggling students, and introduce new strategies and best practices.

## **Aligned, Individualized, and Inclusive Instructional Process Best Practices**

The school's curriculum is closely aligned with the Voluntary State Curriculum (VSC) and the school utilizes several tools to assess how their students are progressing and meeting expected goals such as utilizing benchmark data. Looking at the benchmark data on a regular basis helps the teachers to know where they need to build up individual student skills and judge how their students are progressing overall. Both teachers and school administrators credit their user-friendly data warehouse (AMS) for improved alignment of instruction and increased data utilization for instructional decision-making.

Cresaptown utilizes 90-minute block periods that incorporate differentiated instruction. The blocks are followed by 30 minutes of flexible grouping with targeted instruction when the teacher breaks the class out into groups for either intervention or acceleration. Following this model has allowed the school to build intervention and enrichment activities into the normal schedule on a daily basis. Teacher specialists work with teachers to help them group and regroup students. The school also uses the Instructional Consultation Team (ICT) model to address individual needs of struggling students. The school includes special education students into regular education classrooms, with some interventions in reading and math using a small group pull-out method.

## **System Leadership and Environment**

The school administration and instructional staff work continuously to make Cresaptown Elementary School a pleasant place to be, not only for the students, but for the parents and staff as well. The school utilizes the Positive Behavioral Interventions and Supports (PBIS) program, and informs everyone, staff and students alike, to make them aware of the goals and expectations for behavior and academics. The school administration has put several programs in place to assist students with a wide variety of issues they may be facing such as poor attendance (Cheers), a death or divorce in their family (Sunshine group), and conflict/bullying (Peacemakers). The Good Finder reward program recognizes students for doing a good deed. All of these programs are designed to make the school a positive and safe place for students.

School administration and instructional staff have high expectations of their students, and communicate those expectations to both students and their parents. Parents are a big piece of the puzzle and every effort is made to include them in the process. The school staff maintains open communication with the parents through notices sent home, phone calls, and in-person communication.

*“It’s important for parents to know they should have high expectations for their youngsters”, says the principal. Parents are invited and included in most meetings, and planning that goes on in the school. Allowing parents to see how much the staff cares about their children not only academically but personally, increases parent buy-in and support.*

# Westmar Middle School

## Case Study 6

### Student Achievement Gains

*In the period between 2004 and 2007, Westmar Middle School students closed the proficiency gap in reading by 37.9 percent and by 83.4 percent in math. In 2007, 90.1 percent of Westmar students were proficient or advanced on the Middle School Assessment (MSA) math test, and 77.0 percent were proficient or advanced on the MSA reading test.*

### Planning and Support System Best Practices

*Westmar Middle School closely follows their school improvement plan (SIP) for strategic planning. Within the Allegany County Public Schools, goals are set by each school and Westmar's are in math, reading, and attendance. They start strategic planning with last year's test results – by doing a retrospective and prospective review by grade level teams. Then, they work on the SIP with vertical teams, especially focusing on achievement gaps. The discussions are very data based. A team from the LSS administration comes to the school at the end of October or early November to review their SIP in a “give and take” session.*

*The school administration has scheduled daily grade level team meetings for planning as well as daily individual planning periods for teachers. Each are 40 minute periods in the school's nine-period day. Westmar has effectively used this team planning period for targeted professional development and especially for analyzing student data.*

*The school's teacher specialists (“school improvement specialist” or SIS) in reading and math lead student data analysis activities. The school has used the LSS developed data warehouse (“assessment management system” or AMS) for several years. The teacher specialists attended AMS training provided by the LSS central office and then trained the school's instructional staff. They have led afterschool professional development for the teachers on the data warehouse and data analysis, and reported that Westmar's teachers have come a long way and are becoming more comfortable with AMS. Although teachers currently enter student assessment data into the system, the school is moving to use scantrons for benchmark testing. The teacher specialists' role has grown to include embedded targeted professional development plus managing the county assessments and benchmarks. They work with the curriculum pacing guides, which continue to develop and be refined. The teacher specialists have worked with the Increasing Proficiency for All Students/Challenge Grant (I-PAS) initiative (for falling behind schools) and used a root cause analysis approach to help identify issues. They have also provided instructional leadership and coaching capacity in reading and math.*

*According to the principal, the school had received training on how to develop professional learning communities (PLCs) three years ago and subsequently developed a mission statement about PLCs. The grade level meetings are their PLC structure. These are interdisciplinary which*

*facilitates the team to know the whole student and fosters relationships between teachers and students.*

*Initially the teacher specialists had a stronger role in leading the PLC meetings, but now the grade level team leaders play a more active, leadership role. The team leaders had two to three training sessions on how to effectively use the PLC team planning time. Published material from the National Middle School Association was used describing, for example, the structural roles of the meeting and a list of what to accomplish during meetings. Teams also keep a log book of the meetings, reviewed by the principal who also meets with the team leaders biweekly. The PLC meetings are used to “share ideas,” gather information about students, analyze data, discuss instructional strategies such as flexible grouping, collaborate on parent communication and involvement, and conduct some administrative matters. Teachers reported that team planning is now more focused and goal oriented – it was challenging before. There is more opportunity now to talk about their struggling students. Teachers specifically cited the effectiveness of the targeted professional development in these areas. The teacher specialists described the evolving use of the PLC structure as “baby steps,” and that the PLC structure allows the school to support planning and to provide needed interventions for students.*

*In addition to the imbedded professional development built into the PLC structure, the LSS has provided cultural sensitivity training on poverty issues which, according to teachers, really opened eyes. The LSS has also provided the “360 On-Line Safari Montage” for teachers’ use. According to teachers, this material is very tangible and has particularly helped in their work with lower level students.*

*Teachers reported that the school’s structure, focus, and pressure to meet standards aligned with the Voluntary State Curriculum and pacing guides has made the school successful.*

## ***Aligned, Individualized and Inclusive Instructional Process Best Practices***

*Westmar Middle School monitors student data using a root cause analysis technique. Using benchmark testing, students are grouped for targeted and individualized instruction during the daily student intervention/enrichment period. The school has used this intervention/enrichment period structure for five to six years for both math and reading interventions. The teacher specialists take the lead in setting up student groupings as well as planning the instructional material. The student groupings are changed two to three times per year, but students can be flexibly moved based on their individual needs and performance. During the intervention/enrichment period, grade level and special education teachers use assorted intervention and acceleration programs. According to a math teacher, all the math teachers use a similar structure with their students and all have high expectations that every student can do it. The pace may vary – and whether the students receive enrichment or targeted instruction. Westmar Middle School has an afterschool program targeted to “on the fence” students (i.e. students whose scores indicate they are just below proficiency) involving targeted instruction such as reinforcing and re-teaching.*

*In the 2007-08 school year, the school focused on special education, especially 6th grade. They emphasized co-teaching between the regular education and special education teachers. Although the inclusion approach has been used for five to six years and co-teaching was already*

*in place, it was enhanced in 2007-08 with targeted professional development. Teacher specialists reported that having special educators as part of the regular education teaching team “has been hugely helpful.” The regular education teachers have learned some teaching strategies from the special educators. Some teachers are more involved than others – another area that was described as proceeding through “baby steps.”*

*The school has several additional programs targeted to at-risk students. One key example is that the school initiated a breakfast program where students eating school breakfast can eat in their homerooms. Now, these students no longer miss the beginning of school day orientation. Once a week there is a morning “Boys Club” where men from the community come to the school and have the opportunity for one-on-one interactions with targeted male students. These community members are also involved in other school activities such as dances. Westmar Middle School also participates in the LSS’s Youth Experience Success (YES) program for eighth graders involving outside school activities and some programs involving parents.*

## **System Leadership and Environment**

*According to the principal Toby Eirich, the LSS has provided support for principals through peer mentorship and collaboration. Leadership training has been provided during the summers and LSS central office supervisors are accessible to explain new programs and provide support. The teacher specialists echoed that the school is well-supported by the LSS central office content supervisors. The LSS also provides professional development for grade level team leaders as well as practicums for teachers to continue leadership training.*

*In general, the school’s principal encourages constant dialog in the school, “surround yourself with the best people and conflicting opinions/dialogs brings good results.”*

*The Positive Behavioral Interventions and Supports (PBIS) system was introduced last year (resulting in the school’s motto ROAR which stands for respect, organization, achievement, and responsibility) accompanied by professional development. It has provided concrete reinforcement for positive behavior and, according to the principal, referrals were reduced by 25 percent. There was immediate buy-in from the teachers, who especially like the “achievement” portion, and parents support it as well.*

*The principal described the school as, “very much a community school. The community is invested in the school and it is central to the community.” Teachers further described the school’s environment as “focused on instruction and the students,” “dedicated – both teachers and students,” and that “we care about the students.”*

*Westmar recently underwent a leadership transition during which the school “did not miss a beat.” The current school administrative team is well-regarded, teachers described it as – “strong and fair,” “kid-first,” “high expectations and lets you know them,” and “the complete package.” Likewise the school’s principal validated the high level of staff commitment. He described the staff as “so together” and “student-centered.”*

*The school administration has provided the structure “to bounce ideas and trust the educators to come up with best practices.”*

# Calvert County Public Schools

## Case Study 7

### Student Achievement Gains

*Calvert County Public Schools demonstrated the third best overall results in closing the proficiency gap of their students between 2004 and 2007 for grades three through eight in combined reading and math. While Calvert County Public Schools has fewer than Maryland's average of economically disadvantaged students, students with limited English proficiency (LEP) and students receiving special education services, these student subgroups have been among the fastest in closing the proficiency gap in the state. Calvert County students overall were also among the highest achieving in the state.*

### Planning and Support System Best Practices

*The Calvert County Public Schools planning process has undergone substantial changes in recent years. The LSS leadership worked to identify and eliminate infrastructural barriers to learning. Many system processes, policies, and tools were revamped. The process of strategic planning on the system level was reorganized from discreet planning by school level to a single PK to 12 planning model. In addition to grade and subject level planning, vertical planning across grades and school levels is used to enable communication between elementary, middle and high school divisions.*

*According to Mr. Smith, the system superintendent, flexibility is an important aspect of the Calvert County Public Schools strategic planning process. Their flexible planning process recognizes and respects that schools have varied needs and require different strategies to address those needs.*

*Data analysis has long been one of the administration's priorities. Administrators and teachers have been repeatedly provided training on use of student data as a tool for instructional decision making. In addition to direct training, the system utilizes its teacher learning specialists to continue the training on an embedded and ongoing basis: "Our learning specialists have been a critical part in this process as far as really coaching teachers through the process of sitting down and looking at the data, analyzing the data, being able to make sense of it, and talking about what do you need to do in a classroom regarding the data." (Assistant Superintendent). Learning specialists meet regularly as a group, facilitated by the central LSS office, and discuss ways to improve data analysis. The process for instructional staff to reach a comfort level in using the data for instructional decision-making has taken several years.*

*When the LSS first acquired the data warehouse, Performance Matters, the easy availability of the data became a catalyst for the development of a collaborative approach to planning instruction and targeted professional development. As Mr. Smith recalled, "The data really gave them something to talk about. One of the greatest dangers is if they all get together and complain about kids or parents. So suddenly, we had a screen and we could put it up on the*

Smart Board, or an overhead, and they could look at the data and make sense of it.” Out of data conversations and collaborative planning activities, professional learning communities began to take shape in Calvert schools.

The superintendent in Calvert County Public Schools believes that “a collective IQ is stronger than any single person’s” and this belief helped him make Calvert County School System one of the highest achieving school systems in the state. To encourage collaboration among teachers, the LSS leadership gave schools more autonomy to design the most effective way for their instructional staff to collaborate. On the system level, they started with 6th and 9th grade teachers since these two transition grades were seen as the most vulnerable,, and also most important in setting students on the right track. The LSS leadership set clear expectations for principals: “they need to have teachers talking together about student progress, about instruction, about how to meet the needs of students who aren’t succeeding.” (Mr. Smith) The system leadership also models the collaborative approach at the level of the system administrators and the focus on the end result of all these collaborative efforts – improved instructional process and improved school environment for the students. To support the process of establishing professional learning communities, the LSS administration provided training opportunities to teachers and administrators on collaborative decision making models. The biggest challenge was to ensure that teachers use common planning time productively. The LSS leadership provided schools with tools and procedures to help instructional staff collaborate effectively.

In their professional development approach, the LSS leadership focuses on building capacity of key instructional and administrative staff via various vehicles, including summer training, weekly meetings for teacher specialists, and targeted training for various key positions. Sometimes, they leave it up to the school to decide who would be the best person: “We say send the person who is best able to do this for you. One principal will send a vice principal, and another will send a librarian. I think this kind of flexibility is critical.

People have different skills and abilities.” (Mr. Smith) Such expansion of the leadership base at the schools is effective in improving communication, increasing collaboration, and ultimately improving student achievement. This is the deliberate strategy on the part of the LSS leadership: “We want to remove barriers, remove inhibitors of capacity and figure out what enlarges capacity and also increases the sense of advocacy so that people say well, you know, I don’t like this circumstance but I can do this, we can get this done.” (Mr. Smith)

## **Aligned, Individualized, and Inclusive Instructional Process Best Practices**

The system’s emphasis on collaborative teaming and alignment is reflected in the instructional process. The LSS curriculum is aligned, user-friendly, and amenable to differentiation. It is also supported by sample lesson plans, regular assessments, and backward mapping. Teachers participate in developing the curriculum and writing benchmark assessments.

The system’s goal is to build teachers’ capacity to improve the instructional process. Currently, regular classroom teachers work alongside “interventionists” – teachers who assist them in delivering targeted and differentiated instruction. During collaborative planning meetings,

teachers assign students to flexible groups for targeted instruction. System-wide, there is also emphasis on acceleration and enrichment.

*“We want to remove barriers, remove inhibitors of capacity and figure out what enlarges capacity and also increases the sense of advocacy so that people say well, you know, I don’t like this circumstance, but I can do this, we can get this done.” (Mr. Smith) The schools schedule students heterogeneously for general instruction. This is a shift for the system since only ten years ago classes were mostly homogeneous groupings of students. Most students receiving special education services are currently fully included in regular education classrooms and supported by special education teachers. The system also works to promote co-teaching models for special education and regular classroom teachers. In schools, special education teachers work together and with regular classroom teachers to improve the instructional process for all students.*

## **System Leadership and Environment**

*The LSS leadership has made improving school and system-wide environment one of their top priorities. “It’s all focused on making the schools more inviting to students and at the same time making sure that they are well structured. Students don’t learn well in environments that aren’t structured” (Mr. Smith). At the school level, the system promotes behavior management programs that bring structure to schools, like Positive Behavioral Interventions and Supports (PBIS.) At the system level, the LSS leadership pays attention to changing contextual factors and their impact on schools and education. These include, for example, changing demographic characteristics, changing family patterns, and rapidly developing technology. The LSS provides professional development to teachers and administrators on contextual factors that impact learning, giving them tools and procedures to address new challenges.*

*The LSS leadership models collaborative approach to decision making throughout the system. According to the superintendent, Mr. Smith, “You have to create understanding in the heads of the people who are involved. You can’t just tell them. You listen to them and you talk to them.” Collaboration involves sharing leadership responsibilities, too. The system invests in building shared leadership by training a wide variety of people at the school and system levels to assume leadership responsibilities, and develops tools and policies that support infrastructure for shared leadership.*

# Appeal Elementary School

## Case Study 8

### Student Achievement Gains

*In the period between 2004 and 2007, Appeal Elementary School students closed the proficiency gap by 35.4 percent in reading and 43.7 percent in math. In 2007, 87.7 percent of Appeal Elementary School students scored proficient or above in reading assessment and 88.4 percent scored proficient or above in math.*

### Planning and Support System Best Practices

*Appeal Elementary School's strategic planning is focused on SMART<sup>9</sup> goals and the "greatest area of need" (GAN) that are determined through a collaborative strategic planning process. Strategic planning meetings also involve curriculum alignment, discussions of strategies to improve instruction, and topics for professional development. Over the past few years, Appeal's teachers have begun to use common planning time to collaboratively plan instruction, analyze student assessment data, and for development of their professional learning community (PLC). Before moving to a more integrated planning format of grade level team strategic planning meetings, the planning activities were a solo or "isolated activity." But once the teachers saw the benefit of collaborative team planning, they "bought into" the idea. As the teachers became responsible for planning the use of their time during their PLC meetings, they began to feel empowered to bring on topics and ideas that were of special interest and importance to them. PLC meetings serve as a professional development tool where the teachers decide what they need to learn in order to be successful in addressing the school's "greatest area of need."*

*Additionally, teachers receive targeted professional development in a variety of ways including regular faculty meetings and county level professional development meetings. Teacher professional development is a dynamic system that includes not only additional education, but also hands-on activities like site visits to other schools involving teachers in school walk-throughs and peer-observation of teachers having particular success with a specific strategy. Weekly professional development focuses on building teacher capacity and includes such topics as co-teaching with special education teachers and effective classroom practices. Teacher learning specialists coach teachers in instructional strategies and participate in PLC meetings.*

*The school administration and teachers monitor how their practices are working using various data sources, including classroom observations/notes, assessment data, and evaluation of progress toward meeting benchmark goals through constant data analysis. The school utilizes the Performance Matters data warehouse. The school's teachers also contribute to the development of county benchmark meetings. This has helped the teachers to learn and better understand the curriculum. The teachers now look at the student data as a whole, as opposed to only focusing on their specific students. Now all of the students are "their kids."*

---

<sup>9</sup> The acronym SMART stands for Specific, Measurable, Achievable, Realistic and Timely.

*The teachers and school administrators see planning, PLCs, data analysis, teacher support, and professional development as necessary elements of continuous efforts to improve student achievement: “All of them work together; it’s a circle, a merry-go-round. You jump on depending where the school is [at the time].”*

## **Aligned, Individualized, and Inclusive Instructional Process Best Practices**

*The teachers ensure that instruction is aligned with the county curriculum and the Voluntary State Curriculum (VSC) through the process of curriculum “backward mapping” accomplished in their strategic planning meetings. To maximize instructional time, the school eliminated all discretionary activities from the school hours and improved the efficiency of transition and dismissal times. To individualize instruction, the school uses a position of teacher-interventionist (especially to work with “at-risk” students), as well as flexible grouping of students for targeted interventions and acceleration.*

*With regard to students receiving special education services, Appeal Elementary School has moved to an inclusion model that utilizes co-teaching. These students receive specialized and additional instruction within their regular education classroom setting for reading and math. The local school system (LSS) provided the resources to make that happen. The school is also sending two general education teachers to a LSS professional development session for special education teachers. The goal is to facilitate these general education teachers to assist with the development of the inclusion model where special education and regular teachers co-teach.*

## **System Leadership and Environment**

*In their efforts to improve student achievement, the school administration first focused on building relationships of trust with and among the instructional staff and creating a welcoming, positive school environment for everyone. They beautified the school building and the grounds, decorated corridors, classrooms, and the faculty room. The administration introduced new elements of the school planning system gradually. For example, they started collaborative data analysis with aggregated data (e.g. by school and grade), until teachers felt comfortable discussing individual classroom student data. The administration has worked hard to foster an open environment where everyone feels welcome and safe in expressing their opinions. When the collaborative process is not working, they may shuffle around the different team members to find a fit more conducive to the collaborative process. Collaboration and communication have been a very important piece the Appeal’s success. All groups reported that they have ample opportunity to talk about their needs and have their needs met. Teachers have stated that their principal and school administrators look after them in this way and the principal and assistant principal have said the same of the LSS administration. The teachers are very comfortable with the principal, “She is a model of what she wants us to be. She makes us feel respected and appreciated.” The teachers described the school environment as “family-like, safe and caring.”*

# Patuxent High School

## Case Study 9

### Student Achievement Gains

*In the period between 2004 and 2007, Patuxent High School students closed the proficiency gap in English 2 by 62.1 percent. In 2007, 85.8 percent of Patuxent HS students scored proficient or above on their English 2 state test.*

### Planning and Support System Best Practices

*School strategic planning has changed since, in 2003, the local school system (LSS) introduced the 9th grade academy system with a common planning time for teachers. The discussions during the common planning time center on students, their weaknesses and strengths, and instructional practices that could best improve their achievement. Having common planning time resulted in “phenomenal progress” in student achievement.*

*Collaboration has now expanded into other grades, as well. Data analysis plays a large role in helping teachers to plan and modify instruction. The school utilizes the data warehouse system, Performance Matters (PM), to assist them with ongoing data analysis. This system has been reported to be “awesome and invaluable” by the staff as it helps them to target each student and their individual needs. Professional development training on the PM system has been provided to Core Leads--teachers appointed to lead their subject area instruction. The system is used in everyday school operations such as special education teacher meetings, remediation programs, and tracking individual and class test scores. Data analysis is also used for formative assessments (particularly for freshmen coming up from the middle schools), for class placement, and to identify students in need of remediation. Professional development is provided to all instructional staff during monthly administrative meetings. The teachers receive professional development on issues impacting the students such as race relations and the culture of poverty that is present in the community. The LSS utilizes “train the trainer” model and a lot of professional development occurs via school administrators and teacher specialists who are trained at the central office.*

### Aligned, Individualized, and Inclusive Instructional Process Best Practices

*With the introduction of 9th grade academy in 2003 and the data warehouse that provides student-level data, the teachers became more aware of the difficulties their individual students face. Student-level data analysis allows teachers to group students into flexible groupings for targeted instruction and to provide data-driven differentiated instruction. The teachers have been trained on the differentiated instruction model, however, the real catalyst came three years ago when regular and special education teachers began co-teaching to help struggling students pass their assessment tests. This inclusive approach led to increasing the level of co-teaching between regular and special education teachers and improved results for struggling students.*

*Teachers use every opportunity to provide individualized instruction to students. The school tries to schedule all interventions during the regular school hours to ensure that struggling students who cannot stay beyond the end of the school day receive the necessary interventions. In addition to differentiating and flexible grouping, the teachers provide individual remediation and interventions to students at-risk during the lunch hour. This program allows more opportunity for intervention and tutoring for struggling students. Students are identified for intervention through data analysis using the PM data warehouse system.*

## **System Leadership and Environment**

*According to the teachers interviewed, the spirit of collaboration and high expectations permeates the school. It starts with the common planning time for teachers and extends to create the supportive school environment for both students and staff. The school administration makes building relationships its first priority. To provide structure for positive behavior at school, the Positive Behavioral Interventions and Supports (PBIS) system was adopted two years ago. To improve relationships with students, the teachers instituted a new program where each teacher listed students with whom they had a special connection and identified students who were not on the lists. Teachers then made a special effort to reach out to the non-listed students and establish connections with them, as well. Teachers say about their school, “We are all friends here--and we want to be friends. We take pride in the school. It is easy to ask for help here.” The school also has special character education programs for students at-risk. For example, a lunch group for at-risk African American boys organizes visits from successful African American members of the community.*

*The teachers described the school leadership as “supportive and consistent.” The Calvert County Public Schools leadership is also supportive of the efforts made at Patuxent High School and the superintendent visits the school regularly. The school teachers say that “Patuxent’s success would not be possible without administrative support and the infrastructure provided by every level of the LSS administration.” The open communication between the school and the LSS administration makes for effective collaboration that is decidedly not “cookie cutter.”*

# St. Mary's County Public Schools

## Case Study 10

### Student Achievement Gains

*Saint Mary's County Public Schools had the fourth highest overall results in closing the proficiency gap of their students between 2004 and 2007 for grades 3 through 8 in combined reading and math, and the second highest results in moving their students from "proficient" to "advanced". St. Mary's County LSS was particularly successful with their students receiving special education services. While they have a larger than the state average percentage of students receiving special education services, they were very successful in closing the achievement gap of this subgroup for all grades in both reading and math.*

### Planning and Support System Best Practices

*The St. Mary's County Public Schools administration views strategic planning as a funnel where the Voluntary State Curriculum (VSC) is on top with the St. Mary's School System curriculum aligned with it, while each school consistently delivers the curriculum to its students. To ensure this consistency and alignment, the LSS leadership allocates time for both grade level team planning and for vertical articulation across grades and school levels. Planning of instruction is meshed with discussions of instructional practices and data analysis and occurs during professional learning community meetings. The LSS administration recognized that the development of well functioning professional learning communities takes time and funding, and the process is not always smooth.*

*The change to this format has been gradual over the past couple of years. With improved student performance, teachers have seen the benefits of collaborative planning and data-driven instructional process. The administrators have their own professional learning communities which they use as a vehicle to collaboratively address the problems the LSS faces.*

*School improvement plans are peer-reviewed, where principals of schools with similar demographics sit down together and discuss the plans. Chief Academic Officer, Mrs. Dudderar, said it took time for principals to become comfortable having their plans discussed with their colleagues, "After enough time of doing that, they are now comfortable saying to somebody, you know, that seems like a great idea but I tried it last year and it did not work. Let me tell you what I am doing now. And then the other person instead of saying 'humph', now they say 'oh'. They feel safe sharing those ideas."*

*The LSS leadership underscores the importance of non-random, data-driven decision making in communication with schools and instructional staff. They acquired a sophisticated data warehouse in 2005 and invested resources into training staff to use it. Locally developed benchmark assessments are aligned with the VSC and administered regularly, starting early in the year. Teachers have the results of the assessments immediately available and easily usable for planning instruction.*

The LSS administration focused on supporting teachers and schools by providing the framework for the school-level strategic planning, data warehouse and continuous training for data analysis and additional time for teachers to hold collaborative planning meetings and professional learning communities. The LSS leadership also redefined the role of teacher specialists. Reading and math teacher specialists (Instructional Resource Teachers or IRTs) are now viewed as a formal instructional leadership position in elementary and middle schools. In high schools, this role is fulfilled by High School Assessment lead teachers. According to the LSS superintendent, “their sole job is to be someone who is highly schooled in curriculum and instruction, to be able to work with teachers to model lessons, to provide assistance in terms of data analysis, provide assistance in terms of actual interventions.” IRTs meet regularly with the director of staff development and with content supervisors at the LSS administration. IRTs typically specialize in a content area: math, reading, science or social studies. The LSS chief academic officer characterizes them as “the bridge between the district and the school, [and] the bridge between the principal and the teachers ensuring that things are happening the way they need to happen.” One of their key roles is provision of targeted professional development to teachers.

In schools, teachers noted that it took them some time to get used to the new role of the IRTs as the part of the faculty who are actively involved in daily instruction because in the past they were not a part of the instructional staff. Depending on the need, the IRTs shift their focus from modeling for teachers to intensive differentiated instruction to students. IRTs actively participate in team meetings and assist teachers with data analysis and planning data-driven instruction. Principals are given flexibility to decide how to use the IRT positions best to address the needs of their school. In addition to targeted professional development, data analysis and targeted instruction to students, IRTs also participate in school leadership teams, oversee the fidelity of implementation of intervention programs and the core curriculum in the their content area, run various programs in schools, manage testing, and may also be engaged in other activities depending on the needs of the school. The LSS leadership monitors their utilization through accountability procedures (the IRT-PAS tool).

The St. Mary’s County Public Schools leadership follows the “three-pronged approach” to professional development that involves understanding: (1) curriculum, (2) pedagogy, and (3) the learner. LSS-wide professional development activities revolve around these three topics.

## **Aligned, Individualized and Inclusive Instructional Process Best Practices**

In the 2007-2008 academic year, St. Mary’s students were taught by teachers 94.2% of whom were “highly qualified” by Maryland standards. Hiring and retaining the best qualified people is one of the key policies of the LSS administration. According to Dr. Martirano, “the one defining characteristic that makes a difference in is having the best teacher deliver the instruction. The one who understands pedagogy, curriculum, and kids”. System-wide focus on alignment in St. Mary’s County Public Schools affects every school and every teacher. The LSS central office involves teachers in the development of the “curriculum maps” that help teachers stay on track.

County assessments are regularly administered to evaluate students’ progress and the data warehouse allows teachers to easily access this data and adjust instruction as needed. Schools in St. Mary’s County Public Schools employ various models of interventions and individualization of instruction. Some schools have an intervention/enrichment period built in

the school schedule. Other schools schedule double periods of core subjects to allow time for differentiation of instruction and intervention programs. According to the Chief Academic Officer, Mrs. Dudderar, "Every school is held accountable for assuring that every child who requires the intervention gets it." The system superintendent, Dr. Martirano pointed out that increasing individualization is challenging to the system: "It's a tremendous challenge for us. It's very expensive [to shift] from overall students—one size fits all—to a very differentiated model. It recognizes that all children are not alike and they need that differentiated service." The system also provides support for teachers in the form of professional development. In recent years, teachers received professional development on differentiation of instruction. Teacher specialists (IRTs) also help teachers find ways to better individualize instruction.

St. Mary's County Public Schools adopted an inclusion model for most students receiving special education services. Special education teachers participate in team meetings and are more involved integrated into the school's instruction than previously. They co-teach classes with regular education teachers in addition to supporting students with Individual Education Plans (IEPs) and struggling students without IEPs.

## System Leadership and Environment

Since the current superintendent, Dr. Martirano, was appointed in 2005, the LSS leadership has worked to develop relationships with the county government leadership, the community, parents, and employees of the school system. Since 2005, the superintendent developed a new vision and mission for the LSS entitled "Charting a Course to Excellence" that highlights 15 priorities to improve student achievement. The LSS leadership style is hands-on, but without micro-management. When asked how the administration ensures accountability, the superintendent said: "That's the whole concept of science versus art. Teaching is a science that you do artfully, and so is the delivery in terms of leadership. We have provided a very prescriptive, clear set of expectations that now principals have the freedom to do artfully, as well as teachers. I am not saying [to them] 'On Monday, you do page one and on Tuesday...', none of that." Understanding the importance of clear expectations and support to meet them, the LSS leadership re-designed formal performance assessment tools for principals, teacher specialists, and teachers that allow them not only to receive evaluation of their performance, but also to reflect on their challenges and identify areas where they want assistance to improve their performance. The performance assessment system (TPAS) is designed to build educators' capacity and to encourage educators to come up with innovative ideas to improve achievement of their students. The TPAS also provides educators with a theoretical framework that clarifies expectations and provides guidance for their own professional growth.

Many St. Mary's County Public Schools educators credit the strong leadership of the current superintendent for their success in improving student achievement in recent years. Key features of his leadership style are focus, consistency and communication. According to the Chief Academic Officer, "The constant, constant, communication, we are around the table in this building everyday at some point, digging and talking and asking and questioning and looking at data and wondering and then determining and putting something out there and then going out to make sure it's happening." This emphasis on collaborative decision-making and accountability throughout the LSS appears to work very well in improving the achievement of St. Mary's students.

# Dynard Elementary School

## Case Study 11

### Student Achievement Gains

*In the period between 2004 and 2007, 85.6 percent of Dynard Elementary School students scored proficient or above on their math assessment and were able to close the math proficiency gap by 41.8 percent. In reading, 89.1 percent of students scored “proficient” or above on the state test. Dynard Elementary closed the proficiency gap in reading by 62.4 percent, which is within the top 10 percent of elementary schools in the state.*

### Planning and Support System Best Practices

*A high level of collaboration among instructional staff sets Dynard Elementary School apart. The principal, Kim Summers, chairs bi-weekly grade level team data meetings where the teachers discuss how their students are doing using assessment data, and what the action steps can be. This is also an opportunity for each teacher to share individual best practices and methods for teaching particular objectives. Teachers also meet every other week for collaborative planning. Additionally, the administration tries to schedule grade level teachers to have a daily planning period at the same time to enable further collaboration.*

*Availability of student-level assessment data through the Performance Matters data warehouse gave teachers an opportunity to “work smarter” by tailoring instruction to the individual needs of students.*

*The principal said: “I feel like we have evolved into a professional learning community (PLC).” With the resources and efforts that have been made toward data analysis and common planning time, the staff has become “fine tuned and [it allows us] to have such rich conversations.” Teachers have a high level of involvement in the development of their PLCs: “I think that professional learning communities are only going to work if the teachers are the ones who have selected the topic, have a buy in, and are interested.”*

*The principal used the PLC structure to introduce differentiated professional development for her staff. After deciding, based on teacher surveys, what topical areas teachers felt uncomfortable about, the school had professional development sessions in these areas and encouraged teachers to sign up for the groups where they needed to further improve their own skills (i.e., technology, science, etc.).*

*The groups then meet twice a month in an effort to bring everyone’s knowledge and skill level up to par. The principal oversees the professional development activities by requiring each group to plan their strategy for accomplishing various goals throughout the year. Groups make regular presentations on their findings to their grade level teams and to the entire instructional staff. Although attending these presentations is not mandatory, according to the school principal, nearly all teachers show up.*

## *Aligned, Individualized, and Inclusive Instructional Process Best Practices*

*Dynard Elementary School does flexible grouping and differentiated instruction with all of their students. The teachers received professional development from the Local School System (LSS) on how to effectively implement this. Teachers are constantly re-evaluating how their students are progressing and flexibly moving them into the groups where they will perform best. With the Maryland School Achievement (MSA) scores broken out into subgroups, it was easier to plan individualized interventions and instructions for struggling students. Teachers also see good results with the intervention programs that they are using.*

*In the principal's view, the LSS's focus on alignment with the Voluntary State Curriculum (VSC) pays off. The alignment of curriculum and assessments is particularly important: "Curriculum maps drive instruction and our Performance Matters [data warehouse system] is just unbelievable for guiding instruction."*

*The school has also worked hard to include students receiving special education services in regular education classrooms. A special educator commented on the importance of fidelity in implementing intervention programs, "I have discovered that using those [intervention] programs in the way they were intended in that systematic format is really important and it has really made a big difference. I have seen kids make two and three years growth in reading [in one year] because I have taken that program and used it as faithfully as I possibly can."*

## *System Leadership and Environment*

*The principal of Dynard Elementary School believes that her leadership style of cultivating relationships with and among staff as well as with and among students has enabled her to build a school environment that feels "like a family." "I think as a leader, you have to be a great listener and one of the prerequisites, perhaps, for principalship should be some sort of training in how to be a good listener, how to manage people", the principal reflected. "Teaching the leader how to empower their teachers is powerful. I think that goes a long way and I truly believe the key to the success in this building has been being able to get people on board with the vision and your idea of what's going to move your building forward." The principal said she has exceptionally high expectations for her instructional staff and is convinced that all of Dynard students can achieve at the highest level.*

*The teachers respect the principal's style and are comfortable with the school and their place in it. Each teacher is held accountable for their students' scores, and the teachers expressed that they are approached in a positive way aimed at helping and not scolding them. The principal said: "You talk about safe environment for students. Here it is a safe environment for teachers and so that leads to the safe environment for the kids."*

# Esperanza Middle School

## Case Study 12

### Student Achievement Gains

*In the period between 2004 and 2007, Esperanza Middle School students closed the proficiency gap for reading by 17.8 percent and by 28 percent for math. In 2007, 66.4 percent of Esperanza students were proficient or advanced on the Maryland School Assessment (MSA) test in math, and 78.1 percent were proficient or advanced on the MSA reading test.*

### Planning and Support System Best Practices

*All instructional staff engage in strategic planning on a regular basis. At least quarterly, they have a formal school planning meeting and then meet weekly in grade-level teams. At each planning session they use the assessment data to guide their next steps. "Practically every meeting, we touch on assessments." (Team Leader)*

*Like other schools in St. Mary's Local School System (LSS), Esperanza Middle School utilizes the Performance Matters student data warehouse to store their data in a teacher-friendly format. According to the school leadership, the 2007-08 academic year was the first year the teachers really started to use the data warehouse and they have found it to be helpful. Each week, grade level teams meet to discuss the data and ways to adjust instruction based on data. These meetings also serve as an opportunity to develop a professional learning community (PLC). Teams provide mini-professional development sessions to those teachers who are not as comfortable with student data analysis. Each grade level team decides as a group which objectives to focus on. In addition, teachers share strategies that they have used to teach a certain objective and discuss individual student strengths and weaknesses and how to help them succeed. The collaboration among the teachers is an important piece of the process. The school leadership sees the development of the professional learning communities in Esperanza as the key to improving instruction overall as well as addressing individual learning needs of students. Math and reading teacher specialists ("instructional resource teachers") are playing a large role in individualizing instruction. They support teachers in both planning and instructional delivery, including modeling lessons, assisting with data analysis, providing intensive re-teaching to struggling students, and targeted instruction and interventions to groups of students. Teacher specialists also participate in the professional learning communities.*

## *Aligned, Individualized, and Inclusive Instructional Process Best Practices*

*Esperanza Middle School's curriculum is aligned with the Voluntary State Curriculum (VSC) and they utilize benchmark data to track how the students are progressing in content areas. For the 6th and 7th grades, they hand schedule<sup>10</sup> their students in heterogeneous groups and move them as needed to ensure that the students are receiving the instruction they need to achieve. The 8th grade follows a more traditional model but still receives differentiated instruction like the lower grades. Providing this differentiated instruction and inclusion of students receiving special education services into the regular education classroom has resulted in those students who need more assistance getting more assistance. "It is really helpful that not all struggling kids get stuck in one class. They are sort of more spread out and thus, receive more support." (Special education teacher) Esperanza is a magnet school for children with autism and most of these students are fully integrated into regular education classrooms co-taught with a special education teacher. The role of the special education teachers has changed. Instead of simply assisting/supporting within the classroom, they also teach three classes a day. According to a regular education classroom teacher, "they don't just support students with IEPs [individual education plans] anymore, but all students...who can benefit from their help."*

*The school also utilizes block periods in language arts, math and social studies; where in the second period students are grouped into homogeneous groups for targeted and individualized instruction, and interventions. The school also offers acceleration programs for advanced students.*

## *System Leadership and Environment*

*According to the teachers, discipline continues to be an obstacle to learning, although heterogeneous scheduling did help to improve the behavior. When the students are hand scheduled, the administration tries to place students from the same feeder school in different classes to break up any cliques and this has also helped with discipline issues. Esperanza also utilizes the Positive Behavioral Interventions and Supports (PBIS) program to address behavioral problems. The school staff described the district as "very supportive" and helping them work out solutions to their challenges.*

---

<sup>10</sup> *Students are selected by name and score to determine the class in which they should be place to achieve a "nice mix" in each class. Student personalities are taken into account as well.*