

**SREB/HSTW Contract and Budget Proposal for  
Carlos F. Vigil Middle School (Española Public School District, New Mexico)  
Timeframe: July 1, 2018-June 30, 2019**

***SREB's Understanding of District:*** SREB will partner in an initial one-year plan of services to support Espanola Public Schools and specifically Carlos F. Vigil Middle School. The middle school is located in the central region of New Mexico and serves approximately 550 students in grades seven and eight.

This proposal is intended to assist administrators and teacher leaders to advance efforts to increase the rigor of assignments and to better engage students in learning. The services described in this proposal will support teacher leaders from the middle school to develop rigorous, engaging standards-based units utilizing SREB's Powerful Math and Literacy Practices. Teacher teams, and in some cases departments, will receive on-site professional development sessions that are followed by in classroom coaching to support implementation. The impact of this work will be to increase the number of students who are proficient on all state and district assessments.

***The Southern Regional Education Board:*** The Southern Regional Education Board (SREB), headquartered in Atlanta in the United States, is passionate about and committed to school reform and school leader preparation and development. The Southern region of the United States has historically had higher poverty levels and lower educational achievement than the rest of the country. In 1948, Southern governors, recognizing the link between education and economic vitality, created SREB as an organization to improve public education at every level.

SREB has partnered with the New Mexico Public Education Department to provide focused professional development to schools through the state's *High Schools That Work* Network. For over a decade, school and state leaders have used SREB's Framework of Key Practices to analyze current improvement efforts and to identify next steps to support student success. Through the *HSTW* Network, SREB has supported schools to align to the Common Core State Standards and to utilize state resources, including assessment blueprints, in the design of standards-based units. *A summary of SREB's evidence-based research on the unit design process can be found on pages 9-15.*

Starting in July of 2018, SREB staff will work with school leaders to design a focused action plan to target lesson design, lesson implementation and potential interventions to increase the school's overall report card grade. Since 2014, the school's overall grade has decreased to a "F" standing. The 2017 overall score for the middle school is a 19.54 out of 100. Reading results on the report card show that only 11 percent of all students score proficient in Reading and six percent score proficient in math. Those numbers are even lower for male and English Language Learner Subgroups.

Both High Schools That Work and Making Middle Grades Work serve as the nation's largest school improvement initiative for secondary leaders and teachers. SREB staff will utilize both state and national resources to guide this work and support teachers and leaders to have a structured plan for improvement.

A list of the HSTW Design Principles and Making Middle Grades Work (MMGW) Key Practices can be found in the *Appendix (Pages 16-19)*. While this contract focuses on specific services to

impact student achievement, the broad list of SREB services has also been provided so that district and site leaders can identify potential next steps for the middle school and other schools within the district.

### **SREB Expectations for Participation**

In order for this partnership to have the desired impact for students, the following conditions will need to be established:

1. The district and site will designate a primary SREB Liaison to monitor this work. SREB staff will communicate with both the site and district liaisons to identify next steps and to gather feedback on the quality and direction of services. These individuals will have full awareness of the tools and resources that SREB has provided in both training sessions and during on-site coaching activities.
2. The site will identify a set of Teacher Leads who will ultimately become on-site resources for the middle school. These Teacher Leads will attend all initial training sessions and will be supported in all initial on-site coaching services. The intention is to train two teachers from each content area so that departmental teams can be supported by those individuals. (\*See the guidance for selecting teacher leads below).
3. The site will identify steps needed to monitor progress (with SREB staff). This work will include the design and implementation of standards-based units. School leaders will need a timeline and structure to both review the unit plans and observe the implementation of those units in classrooms to ensure implementation.
4. The district and site leaders will need to strategically schedule both the professional development sessions and on-site coaching services with the SREB coach. It is recommended that the schedule be developed as soon as possible and shared with any expected participants. It is critical that the identified Teacher Leads fully attend and participate in all designated services.
5. The district and site leaders will actively participate in all training sessions. Whenever possible, SREB recommends that site leaders attend all SREB events with their teachers. This sends a powerful message about importance and expectations.

### **Goals for the Partnership**

1. Build capacity to sustain work at both the district and site level.
2. Deepen the culture of high expectations and increase rigor across the curriculum by improving instructional practices throughout the school.
3. Improve student achievement by using reading and writing strategies across the curriculum with the Literacy Design Collaborative Tools.
4. Improve student achievement by using numeracy strategies, including career-integrated mathematics projects across the curriculum with the Mathematics Design Collaborative Tools.
5. Provide professional development to build leadership capacity for both administrators and teacher leaders so the MMGW Framework and improvement efforts become institutionalized at the site.
6. Strengthen rigor across the curriculum to help more students meet grade-level standards while reducing course failure rates through the use of redo policies or structured intervention activities.

7. Work with the site to create a structured system of teacher teams to support school improvement planning and specific NM DASH (Data, Accountability, Sustainability and High Achievement) Goals.
8. Strengthen professional learning communities and/or teacher teams to involve the faculty in planning and implementing school improvement strategies.

We understand the district would benefit from:

1. A Literacy Focused Needs Assessment to determine current practices and to finalize training topics and support.
2. A Math Focused Needs Assessment to determine current practices and to finalize training topics and support.
3. Site and district debriefing sessions to summarize services provided and identify immediate next steps.
4. Strategically designed professional development to support the use of literacy-based assignments across all content areas.
5. Strategically design professional development to address both conceptual content development and pedagogy across all math courses.
6. On-site classroom-based coaching sessions to ensure the implementation of both the literacy and math related professional development sessions.
7. Focused student survey results to identify successful changes in classroom practices and to confirm future actions.
8. Future services to embed the unit design practices into the overall set of expectations for lesson design and delivery (*targeted services for Years 2 and 3 can be found on page 8*).

As this proposal is intended to launch efforts for structured standards-based unit design, district and school leaders will need to consider future efforts to embed these practices school-wide.

Sustainability will be discussed throughout the initial year of work. SREB recommends that school leaders contact Minor Middle School in Jefferson County, Alabama to discuss how the unit planning process was initiated and sustained over the past three years. Taki Sarhaan, principal at Minor Middle School, has used SREB's broad services to carve out additional time for teachers to plan and to provide structured interventions during the school day. Mr. Sarhaan can provide an overview of the changes that were implemented at his campus, including success data. He can be reached by phone at (205) 379-2550 or via e-mail at [tsarhann@jefcoed.com](mailto:tsarhann@jefcoed.com).

### **Contract Proposal**

The following section provides an overview of the proposed services, listed in the order of delivery. Please note that literacy and mathematics services are listed separately below; however, those services will be scheduled concurrently in Year 1.

### **Support for Literacy-Based Assignments**

- **Middle School Literacy Focused Instructional Review:** The Instructional Review process will allow an SREB Literacy Expert to conduct classroom observations and examine resources that are used at the middle school. Interviews of administrators, teachers and students are also included in the process. The intention of the Instructional Review is to determine current school-wide and grade-level literacy needs. These visits will identify best practices that are currently being used in the building and will allow SREB Experts to work

with the district and site leaders to prioritize strategies and content provided in Literacy Professional Development Sessions. To ensure that all teachers at the middle school are observed in the process, the Instructional Review will be conducted over a day and a half. The second half day will be reserved to meet with district and site leaders to confirm the training plan and identify any additional needs or resources. The Instructional Review should be scheduled within the first month of school.

- **Literacy Professional Development Sessions** for middle school teacher leads\* in all non-math content areas: These six days will be delivered in three, two-day sessions that are based on SREB's Powerful Literacy Practices. During each session, the teacher leads will be supported to develop High Quality Literacy-based assignments. These sessions will be based on outcomes from the Instructional Reviews and will be tailored to district and school-based priorities. These sessions are intended to support the selected teacher leads to become the experts for their building and the district. The initial professional development session should be scheduled within three weeks of the completion of the Literacy Focused Instructional Review.
- **Coaching visits** for all literacy teacher leads: The SREB coach will observe teacher leads' classrooms while these teachers are presenting their Literacy-based assignments. The coaches will also provide feedback to the teacher leads. The SREB coach will provide six days of coaching support, delivered in two-day segments each, to serve as job embedded follow-up to each of the three PD sessions. Coaching sessions are typically scheduled three to four weeks after the PD session and are intended to support the teacher leads with the development and implementation of Literacy Based Assignments.

### **Support for Rigorous Math Assignments**

- **Math Focused Instructional Review:** The Instructional Review process will allow an SREB Math Expert to conduct classroom observations and resources at the middle school. Interviews of administrators, teachers and students are also included in the process. The intention of the Instructional Review is to determine current school-wide and grade-level math needs. This visit will identify best practices that are currently being used and will allow SREB Experts to work with district and site leaders to prioritize strategies and content provided in Math Professional Development Sessions. Since there are fewer math teachers, the review process will be conducted in one day. The Instructional Review should be scheduled within the first month of school.
- **Math Professional Development Sessions** for all middle school math teachers: These six days will be delivered in three, two-day sessions that are based on SREB's Powerful Math Practices. During each session, math teachers will be supported to develop High Quality math-based assignments. These sessions will be based on outcomes from the Instructional Reviews and will be tailored to district and site-based priorities. The initial professional development session should be scheduled within three weeks of the completion of the Math Focused Instructional Review.
- **Coaching visits** for all math teachers: The SREB coach will observe all math classrooms while teachers are presenting their focused standards-based math assignments. The coaches

will also provide feedback to the math teachers. The SREB coach will provide six days of coaching support, delivered in two-day segments each, to serve as job embedded follow-up to each of the three PD sessions. Coaching sessions are typically scheduled three to four weeks after the PD session and are intended to support each teacher with the development and implementation of rigorous, standards-based assignments.

### **Monitoring Campus and Classroom Practices**

- **SREB District and Site Leader Follow-Up:** At the completion of each day of service, the SREB designated coach will debrief with both the district and site leaders. The debriefing will provide a summary of completed work, will outline expectations from training and coaching activities and will designate specific artifacts that will be collected/reviewed prior to the next training event. The debrief notes will also be summarized in formal follow-up letters that will be sent to district and building leaders. SREB will provide handouts and copies of presentations that were used as attachments to these summary letters.
- **MMGW Teacher and Student Surveys:** All teachers and selected middle grades students will participate in the MMGW Teacher and Student Survey. This survey asks questions about campus and classroom practices. Survey questions have both a literacy and math focus and will provide the building leadership team with perception data to support future improvement actions.

### **\*Selecting Building Teacher Leads to Support Sustainability**

To ensure that the PD concepts are implemented in classrooms, careful consideration must be given to the selection of building teacher leads. The selection of building teacher leads is critical to initial implementation of these efforts and to expand the use of key training concepts across all classrooms. District leaders should assist principals to select two to four teacher leads for each building. Teacher leads should be selected for each core content area (English Language Arts, science, social studies) and from primary elective areas. These teacher leads will serve as resident experts for other staff members and will assist to spread the literacy practices in Years 2 and 3. Selected teacher leads should show evidence of:

- engaging students of all socioeconomic and ability levels in classroom learning activities;
- a deep understanding of their subject content;
- an ability to work with other teachers, and facilitate professional growth;
- being a self-starter and open to new ideas; and
- a willingness to make the effort necessary to implement the practices with fidelity.

To support the proposed math services, leaders will need to identify two teacher leads, preferably one per grade level. These leads will be supported by the SREB coach to serve as the experts for the campus and will be able to share resources and strategies across the department. The math teacher leads will receive additional support from the SREB coach and will be provided with an archive of resources to support implementation and sustainability.

**Quote for Services and Materials:**

<b>Task</b>	<b>Cost Per Item</b>	<b>Qty</b>	<b>Total</b>	<b>Notes/Consultant</b>
Literacy Focused Instructional Review	\$2,420.00	2	\$4,840.00	1.5 days on-site and .5 day follow-up with the district
Math Focused Instructional Review	\$2,420.00	1	\$2,420.00	1 day on-site
Literacy Professional Development Sessions	\$2,420.00	6	\$14,520.00	Three, two-day sessions
Math Professional Development Sessions	\$2,420.00	6	\$14,520.00	Three, two-day sessions
Literacy-Based Coaching Visits	\$2,420.00	6	\$14,520.00	Three, two-day sessions
Math-Based Coaching Visits	\$2,420.00	6	\$14,520.00	Three, two-day sessions
Administration of MMGW Teacher and Student Surveys	\$825.00	1	\$825.00	
<b>Subtotal</b>			<b>\$66,165.00</b>	
SREB Administrative Costs (10%)—have been included in the quoted daily rates.			0.00	
<b>Annual Total</b>			<b>\$66,165.00</b>	

## Contract Signature Page

The proposed plan of services outlined above meets the expressed needs of the middle school. By signing below, both SREB and Espanola Public Schools agree to initiate the services outlined above. Services will be billed quarterly based on delivered dates of services with documentation provided to the district immediately following all activities.

**The 2018 - 2019 Contract will provide 27 days of service** to work with both district and teacher leaders to implement strategies from the trainings described within this contract.

**The total contracted amount is: \$66,165.00**

*The Board of Control for Southern Regional Education, d/b/a Southern Regional Education Board (SREB), as a not-for-profit educational compact, must comply with OMB Circular A-133. Please indicate with your remittance whether any of the funds are from Federal sources, including CFDA number. In the absence of any notification with remittance, SREB will assume that the funds are not subject to OMB Circular A-133, and that there is not "recipient" nor "sub recipient" relationship created hereunder.*

\_\_\_\_\_  
James E. Bottoms  
SREB Senior Vice President

\_\_\_\_\_  
Date

\_\_\_\_\_  
Superintendent or Designee  
Espanola Public Schools

\_\_\_\_\_  
Date

## SREB Contract Appendix

### Future Sequence of Services

#### Literacy Three Year Overview (At-A-Glance)

<b>Year 1 2018-2019</b>	<b>Year 2 (Funds Permitting)</b>	<b>Year 3 (Funds Permitting)</b>
<ul style="list-style-type: none"> <li>• Train teacher leads at each building in all non-content math areas in the Powerful Literacy Practices</li> <li>• Observe all trained teachers delivering High-Quality Assignments in their classrooms</li> <li>• Develop a site/district Literacy Plan</li> <li>• Investigate the implementation of SREB's Ready for High School Literacy Course for struggling eighth graders</li> </ul>	<ul style="list-style-type: none"> <li>• Work with the trained teacher leads to train an additional group of teachers in the Powerful Literacy Practices</li> <li>• Develop common planning practices for teachers to plan together</li> <li>• Observe teachers delivering High-Quality Literacy-based assignments</li> <li>• Implement SREB's Ready for High School Literacy Course for struggling eighth graders</li> </ul>	<ul style="list-style-type: none"> <li>• Provide an additional 4 days of PD support to ensure spread of strategies</li> <li>• Refine and implement the site's/district's Literacy Plan</li> </ul>

#### Math Three Year Overview (At-A-Glance)

<b>Year 1 2018-2019</b>	<b>Year 2 (Funds Permitting)</b>	<b>Year 3 (Funds Permitting)</b>
<ul style="list-style-type: none"> <li>• Train all math teachers at the middle school in the Powerful Math Practices</li> <li>• Observe all trained teachers delivering High-Quality Assignments in their classrooms</li> <li>• Develop a math focused action plan for the building</li> <li>• Investigate the implementation of SREB's Ready for High School Math Course for struggling eighth graders</li> </ul>	<ul style="list-style-type: none"> <li>• Work with middle school teachers to develop model standards-based units on key content from both seventh and eighth grades</li> <li>• Establish a training plan for new math teachers that provides an opportunity for existing teachers to co-deliver key concepts and strategies</li> <li>• Develop common planning practices for teachers to plan together</li> <li>• Observe teachers delivering High-Quality math-based assignments</li> <li>• Implement SREB's Ready for High School Math Course for struggling eighth graders</li> </ul>	<ul style="list-style-type: none"> <li>• Provide an additional 4 days of PD support to ensure spread of strategies</li> <li>• Refine and implement the site's/district's Math Plan</li> </ul>

## SREB Evidence-Based Strategies—Current Research Findings

### Introduction

Far too many students graduate high school without the foundational literacy and mathematics skills needed to succeed in postsecondary education and careers. This trend is largely attributable to students' classroom learning experiences. Students are not exposed to the types of complex grade-level literacy and mathematics assignments that will advance their achievement and prepare them for college and careers. District and school leaders need to support teachers to put in place classroom practices to reverse this trend.

The Southern Regional Education Board (SREB) provides professional development to teachers in the instructional strategies of the Literacy Design Collaborative (LDC) and the Mathematics Design Collaborative (MDC). **This professional development provides time for teachers to receive out-of-class guided instruction in planning assignments that engage students in challenging learning experiences followed by embedded classroom coaching and feedback.**

In 2017, SREB partnered with My Student Survey to develop and administer surveys to middle grades and high school students in schools where LDC and MDC instructional practices were implemented. **The focus of the study was to compare the instructional experiences students encountered in the classrooms of teachers who experienced intensive LDC and MDC professional development from SREB (LDC and MDC trained teachers) to students who were in classrooms of teachers who had not participated in this professional development (non-LDC and non-MDC trained teachers).** The data show SREB strategies produce good results in helping teachers and students grow and achieve their best.

### The Findings

Overall, analyses of student perceptions indicate that students in classrooms where LDC and MDC were used experienced the desired literacy and mathematics instruction to a greater degree than students in non-LDC/MDC classrooms. The study found LDC-trained teachers in English language arts (ELA), social studies, science and career and technical education (CTE) incorporated literacy-based assignments in their curriculum more often than non-LDC-trained teachers. Students in classrooms where LDC had been implemented were reading and discussing grade-level texts and writing about those texts more often than students in classrooms where LDC had not been used.

Based on student perceptions, results show that LDC- and MDC-trained teachers engaged students in more challenging assignments and used more questioning and feedback strategies to address students' deeper understanding of literacy-based assignments and mathematical concepts, and to motivate students to assume greater ownership of their learning. Both LDC and MDC students reported their teachers encouraged peer discussion, and students experienced classroom environments that promoted collaboration and active learning to a greater extent than students in comparison classrooms.

### The Frameworks

**LDC is a planning framework** for incorporating rigorous literacy standards into middle grades and high school content area assignments. LDC provides a system for creating assignments using

reading, writing and thinking skills and strategies to advance students' academic achievement and their abilities to read, comprehend and analyze grade-level texts and express their understanding orally and in writing.

**MDC is a planning framework** for using formative assessment lessons (FALs) to engage students in assignments that advance their understanding of mathematics concepts and fluency with mathematics procedures. FALs allow teachers to gauge what students understand and do not understand and to correct misconceptions. This framework helps mathematics teachers shift from “GPSing” students, (e.g. telling students step-by-step how to arrive at the answer) to allowing students to think, reason through and productively struggle to solve complex, multistep, abstract and real-world problems.

For the past three academic years, SREB has partnered with school districts across the South to help teachers implement these planning frameworks in a manner that engages students in deeper, higher-level assignments to positively impact student learning.

## **Scope of Work**

The surveys were administered in schools where LDC and MDC have been implemented and professional development and other support have been provided by SREB. For comparison purposes, the surveys were administered to students in classrooms where teachers had received LDC or MDC training, classroom coaching and feedback, and to students in classrooms where LDC and MDC strategies were not used (non-LDC and non-MDC classrooms). The LDC survey was administered to 25,820 students, and the MDC survey was administered to 11,300 students.

Each survey consisted of approximately 40 items, and each item had a five-point response scale (1 = Never, 2 = Sometimes, 3 = Often, 4 = Almost Always and 5 = Always). Each survey was designed to measure the broad instructional practices expected if teachers were implementing the frameworks with fidelity. The survey items aligned to each instructional practice and were divided into five categories. These categories reflect the desired instructional practices directly associated with the LDC and MDC frameworks.

## **Literacy Design Collaborative Student Survey Results**

The analyses used detected significant differences between students reporting classroom learning experiences under LDC-trained teachers and those under non-LDC-trained teachers across all five broad categories of desired instructional practice. Appendix C details the analyses used to detect group differences and effect sizes.

Results showed that students in LDC classrooms received more concentrated support from their teachers. They spent more time comparing, contrasting and synthesizing grade-level texts, and they were writing about those texts more often.

Also, LDC-trained teachers provided their students with more effective feedback on their writing and other assignments. Moreover, LDC students indicated that they spent more time discussing texts with their classmates, including sharing ideas and formulating questions. Results are shown in Table 1.

**Table 1. Mean Category Scores for LDC Classrooms and non-LDC Classrooms**

Categories	LDC Classrooms	Non-LDC Classrooms
<b>Objectives and Learning Targets</b>	3.90**	3.76
<b>Reading Strategies</b>	3.64**	3.46
<b>Student Ownership of Learning</b>	3.73**	3.58
<b>Writing Strategies</b>	3.57**	3.36
<b>Assessments</b>	3.78**	3.62

Source: My Student Survey

Note. \*\* = Mean difference is significant at the .01 level.

LDC classrooms = Teachers received training in literacy-based strategies from SREB.

Non-LDC classrooms = Teachers did not receive SREB literacy-based training.

Additionally, across every subject area tested (ELA, science, social studies and CTE courses), students in classrooms where LDC had been implemented rated their teachers significantly higher in their use of literacy-based assignments than students in classrooms where LDC had not been used. This finding shows that regardless of discipline, LDC can be used to help teachers incorporate literacy-based assignments in their curricula.

Moreover, LDC was effective for teachers at all experience levels (0-2, 3-10 and 11 or more years of teaching experience). According to students surveyed, LDC-trained teachers at every level, those **with one, two and three years of training, were using effective literacy practices more frequently than non-LDC teachers.**

Finally, teachers who received three years of LDC training were rated significantly higher than teachers with one or two years of experience, **which implies that over time, teachers with additional support continue to improve in their abilities to plan and implement assignments using the LDC framework with fidelity.** Results are shown in Table 2.

**Table 2. Mean Category Scores for LDC Classrooms and non-LDC Classrooms by Years of Teacher Training**

Categories	No LDC Training	One Year of LDC Training	Two Years of LDC Training	Three Years of LDC Training
<b>Objectives and Learning Targets</b>	3.78	3.88**	3.88**	3.94**
<b>Reading Strategies</b>	3.47	3.63**	3.60**	3.81**
<b>Student Ownership of Learning</b>	3.60	3.71**	3.70**	3.89**
<b>Writing Strategies</b>	3.37	3.56**	3.54**	3.79**
<b>Assessments</b>	3.63	3.78**	3.74**	3.92**

Source: My Student Survey

Note. \*\* = Mean difference is significant at the .01 level.

## Mathematics Design Collaborative Student Survey Results

For MDC, all five categories of the survey showed significant differences in student perceptions between MDC-trained and non-MDC trained teachers. This finding indicates that MDC-trained teachers were more effective at helping their students develop conceptual knowledge and procedural fluency and apply mathematics skills to real-world problems. Furthermore, MDC-trained teachers were more effective at adjusting their instruction to meet student needs, and at creating classroom environments that promote active learning. Results are shown in Table 3. See Appendix C for more information on the analyses used to detect group differences and effect sizes.

**Table 3. Mean Category Scores for MDC Classrooms and non-MDC Classrooms**

Categories	MDC Classrooms	Non-MDC Classrooms
<b>Balanced Approach to Mathematics Instruction</b>	3.65**	3.57
<b>Assignments That Matter</b>	3.61**	3.52
<b>Utilizing Questioning and Feedback for Deeper Understanding</b>	3.80**	3.71
<b>Adapting Teaching and Learning</b>	3.28*	3.22
<b>Student Ownership of Learning</b>	3.84**	3.76

Source: My Student Survey

Note. \*\* = Mean difference is significant at the .01 level; \* = Mean difference is significant at the .05 level.

MDC classrooms = Teachers received training in math strategies from SREB.

Non-MDC classrooms = Teachers did not receive SREB math training.

Like LDC, analyses showed MDC to be effective for teachers at all experience levels (0-2, 3-10 and 11 or more years), and to be more effective for teachers with three years of training experience as more effective. Of importance, on four of five categories (Balanced Approach to Mathematics Instruction, Assignments That Matter, Utilizing Questioning and Feedback for Deeper Understanding and Student Ownership of Learning), students experiencing desired mathematics practices rated teachers at all levels of MDC training significantly higher than non-MDC-trained teachers.

On one scale, Adapting Teaching and Learning, a significant difference between MDC-trained teachers and non-MDC-trained teachers was not detected until MDC-trained teachers had received two years of MDC training. This could be due to SREB's failure to address skills and strategies associated with this category (e.g., adjusting lessons, re-engaging students in previously covered material, etc.) until the second year of professional development. Professional development on these skills was greatly accelerated in Years 2 and 3 as a result of data collected from earlier surveys. Results are shown in Table 4.

**Table 4. Mean Category Scores for MDC Classrooms and non-MDC Classrooms by Years of Teacher Training**

Categories	No MDC Training	One Year of MDC Training	Two Years of MDC Training	Three Years of MDC Training

<b>Balanced Approach to Mathematics Instruction</b>	3.57	3.63**	3.67**	3.79**
<b>Assignments That Matter</b>	3.51	3.58**	3.65**	3.82**
<b>Utilizing Questioning and Feedback for Deeper Understanding</b>	3.70	3.77**	3.81**	4.00**
<b>Adapting Teaching and Learning</b>	3.23	3.25	3.29**	3.51**
<b>Student Ownership of Learning</b>	3.76	3.81**	3.87**	4.09**

Source: My Student Survey

Note. \*\* = Mean difference is significant at the .01 level.

## Advancing Student Achievement

A preliminary review of schools with available data that have used LDC for one to two full academic years revealed reason for optimism. The districts below have seen significant gains in student achievement in classrooms where literacy-based assignments were implemented with fidelity. Not all states had released their 2016-17 achievement data at the time of this report.

### The Impact of the Literacy Design Collaborative on Student Achievement

**In Alabama**, ACT Aspire ELA data were collected from 36 middle grades schools (grades six through eight) across nine districts. Of those 36 schools, 27 made significant gains from the 2015 to 2016 academic years. Eight of those schools made gains greater than the state.

**In Louisiana**, state end-of-course ELA III data were collected from the Ouachita Parish school district. All five of the district's high schools showed significant increases from the 2016 to 2017 academic years that were greater than gains made by the state.

**In North Carolina**, state end-of-grade (EOG) ELA and state end-of-course (EOC) ELA II data were collected from 236 schools across 26 districts. One hundred and sixteen middle grades schools (grades six through eight) provided EOG ELA data, while seven middle grades schools provided both EOG ELA and EOC ELA II data. Additionally, EOC ELA II data were gathered from 113 high schools. Of the 236 total schools, 122, or 52 percent, made achievement gains in ELA. Fifty percent of middle grades schools made gains greater than the state on the EOG ELA assessment, and 43 percent of middle grades schools made gains greater than the state on the EOC ELA II assessment. Forty-eight percent of high schools made gains greater than the state on the EOC ELA II assessment.

**In West Virginia**, state end-of-grade ELA data were collected from three districts, Kanawha, Mercer and Wetzel counties. Two of three districts, Kanawha and Mercer, showed districtwide increases in the percentage of middle grades and high school students (grades six through 11) meeting

college- and career-readiness standards over the last three academic years, with both districts outpacing the state's gains. Wetzel County made a significant gain from the 2015 to 2016 academic years but declined in 2017.

### **The Impact of the Mathematics Design Collaborative on Student Achievement**

**In Alabama**, ACT Aspire mathematics data were collected from 23 middle grades schools (grades six through eight) across five districts. Of those 23 schools, 17 made significant gains from the 2015 to 16 academic years, and all 17 showed gains that were larger than the state's gain.

**In Louisiana**, state end-of-course Algebra I data were collected from the Ouachita Parish School District. Of the 14 middle grades schools in the district, four made improvements in the percentage of students meeting college- and career-readiness standards from the 2016 to 2017 academic years; five maintained their status; and only two schools experienced declines. Two schools made gains that were greater than the gain made by the state.

**In North Carolina**, state end-of-grade mathematics and state end-of-course mathematics I data were collected from 230 schools across 26 districts. EOG mathematics and EOC mathematics I data were collected from 111 middle grades schools (grades six through eight). An additional seven middle grades schools had only EOG mathematics data. EOC mathematics I data were collected from 112 high schools. Of the 230 total schools, 180, or 78 percent, made gains. Thirty-six percent of middle grades schools made gains greater than the state on the EOG mathematics assessment across grades six through eight, and 50 percent of middle grades schools made gains greater than the state on the EOC mathematics I assessment. Forty-six percent of high schools made gains greater than the state on the EOC mathematics I assessment.

**In West Virginia**, state end-of-grade mathematics data were collected from three districts, Kanawha, Mercer and Wetzel counties. All three districts showed districtwide increases in the percentage of middle grades and high school students (grades six through 11) meeting college- and career-readiness standards over the last three academic years, with Mercer County outpacing the state's gains and Kanawha County matching the state's gains.

### **Lessons Learned: Six Takeaways**

Results from the student surveys reveal that LDC and MDC professional development are having positive impacts on teachers' practices. There are several takeaways from this study.

1. Students enrolled in college-preparatory, honors and basic courses who were exposed to either the LDC or MDC strategies were engaged in more meaningful and challenging learning environments than other students.
2. Teachers of basic courses who received LDC or MDC training made greater shifts, as perceived by their students, in their use of complex grade-level literacy and mathematics assignments than did teachers of basic courses who had not received LDC or MDC training. This is important because students in basic courses are often subjected to lower-level cognitive assignments that lack the necessary skills for college and career readiness.
3. The use of literacy-based assignments in ELA, science, social studies and CTE classrooms has great potential for advancing students' literacy levels and content achievement.
4. An analysis of individual survey items shows that students in some MDC classrooms reported having experiences that were no different from the experiences of students in non-MDC classrooms. See Appendix B. This offers clues for revising the next round of mathematics

professional development to enhance teachers' abilities to engage students in complex grade-level mathematics assignments.

5. The achievement data collected by SREB shows student assignments designed from the LDC and MDC frameworks offer promise for advancing student achievement across disciplines. Data show these frameworks can facilitate powerful instructional shifts in teachers of all disciplines and backgrounds to engage students more deeply in assignments aligned to college- and career-readiness standards. The key to successful implementation of LDC and MDC is continuous professional development spread over at least three years with job-embedded coaching and feedback and with involved, supportive school leaders and locally developed certified trainers.
6. SREB professional development providers have seen firsthand the impact principals have on the professional development process. Principals who attended trainings, observed their teachers in the classroom and met with their teachers during planning sessions were significantly more likely to have teachers who made the desired instructional shifts.

**The full research brief and corresponding school summary vignettes are available upon request.**

## Key Elements of the Improvement Design

### **Design Principle 1: All Students College and/or Career Ready**

All students need **assignments** and high-quality **instruction** aligned to grade-level college- and career-readiness standards in academic and career and technical education (CTE) courses. The Literacy Design Collaborative (LDC), Mathematics Design Collaborative (MDC), and project-based assignments are keys to improving the quality of assignments in academic and CTE courses. This is best accomplished when college-ready academic courses and career pathway courses are coherently aligned in a career pathway program of study. It is important that students are provided counseling for careers to develop a program of study that aligns with one's career aspirations beginning no later than eighth grade.

### **Design Principle 2: Redefining How Time Is Used to Connect Academic, Career Pathways and Workplace Learning**

Finding time for academic and career and technical teachers to plan connected learning experiences for cohorts of students is essential. Students learn best when academic and applied learning opportunities in school and in the workplace are connected. Project-based learning is key to making seamless connections between academic and CTE courses in career pathway programs of study and LDC and MDC are key to creating strong project-based assignments.

### **Design Principle 3: Time and Support for Students to Achieve College and/or Career-Readiness Standards**

All students need opportunities for **accelerated learning experiences** in the middle grades and high school to master college- and career-readiness standards to eventually earn a credible credential or degree. To achieve these goals, students need extended time and often multiple tiers of instruction and support to acquire the foundational literacy, math, technical and behavioral skills and understandings needed to achieve employability and postsecondary success.

### **Design Principle 4: Use Career Pathways to Remove the Lines Between Secondary, Postsecondary and Workplace Learning, Business and Industry Partners**

Students need to meet readiness indicators of literacy and math to access advanced-level sequences of career pathway courses and work-site experiences leading to early college and early advanced credentials in high-demand, high-wage fields. Students need opportunity to make serious progress towards earning a credible credential while in high school that advances college and career readiness. This can be achieved through providing students accessibility to dual credit, embedded credits, early college, apprenticeships and other work-based learning experiences. Business and industry should be lead partners in the development of rigorous career pathways programs of study. Pathways should be designed to align with regional or state economic data and forecasts.

### **Design Principle 5: Students Have School- and Community-Based Experiences to Help Set Future Career and Educational Goals**

Through counseling for careers, students are provided with a progressive set of **school-based and community-based experiences** in the middle and early high school grades to explore career and educational options that reflect their interests and aptitudes. Students, with parental involvement,

need a chance to learn what a good fit is for them and to act on it. Students need opportunities to have experiences in broad career fields to learn first-hand what future possibilities align with their interests, aptitudes and abilities.

## **Design Principle 6: Make School and Instruction Work for Students**

To serve students well, schools must rethink ways middle grades and high school teachers can work together in content areas and in interdisciplinary groups to plan grade-level assignments that engage and motivate students. This involves high schools finding ways to: a) organize around students' interests with varying ability levels and to create assignments that engage and motivate them to succeed in meeting college- and career-readiness standards; b) make greater use of technology and other strategies to engage students in personalized assignments; and c) provide support to teachers using professional development to help them become facilitators of student learning.

### **Key Practices for Improvement:**

#### **High Schools That Work (HSTW) Key Practices**

Graduates from HSTW sites are prepared for postsecondary studies and careers. They have acquired a credible industry-recognized credential, and/or they are ready for a range of postsecondary education and/or training options. The students are prepared to make informed decisions regarding postsecondary opportunities and careers. To graduate with the literacy, math and technical skills necessary to succeed in postsecondary studies and careers, students from HSTW sites will:

1. Complete an intellectually demanding career pathway program of study that includes:
  - a. four or more CTE courses aligned to labor market opportunities, college-ready academic standards and to postsecondary education training opportunities;
  - b. college-ready academic core (English/language arts, mathematics, science, social studies);
  - c. four years of math with Algebra I and geometry and two additional rigorous mathematics courses such as statistics and other mathematics courses related to their career pathway;
  - d. students pursuing advanced career pathway programs of study leading to advanced credentials and postsecondary degrees in STEM fields should take Algebra II and higher math courses;
  - e. students experiencing assignments and high-quality instruction aligned to grade-level, college- and career-readiness standards in all courses within the career pathway program of study;
  - f. in lieu of four CTE courses, a pathway may include a focus on Advanced Career (AC) courses, Advanced Placement (AP), International Baccalaureate (IB) courses as College Level Examination Program (CLEP) exams that result in college credit toward a certification or degree; and
  - g. a weighted grade-point average for selecting CTE courses.
2. Develop strong literacy (reading, verbal and written communication), numeracy and math skills that are necessary to succeed in postsecondary education and training settings and in the workforce.

3. Experience the extended learning time and support services needed to graduate with the foundational literacy, mathematic, technical and work-place knowledge and skills needed to achieve postsecondary and workplace success.
4. Have access to high school literacy and math courses at either grade eight or grade nine when deemed not ready for high school studies, and senior ready literacy and math courses in grade 12 when not meeting math and literacy standards of readiness for postsecondary and advanced training.
5. Participate in authentic work-related project-based learning experiences in their career pathway courses that require: a) the application of grade-level college-readiness standards in literacy, mathematics, and science knowledge and skills; b) the utilization of technologies (coding and learning new software); and c) students to work both independently and as part of a team to use technical, academic and technology knowledge and skills to solve real-world projects/problems.
6. Participate in a progressive sequence of work-based experiences related to students' career pathway – tours, shadowing, internships (paid and unpaid) – and as a capstone experience, participate in structured work-based learning that includes application of academic and technical knowledge and skills in real-world employment settings. Work based learning is linked to students' career pathway coursework and is governed by an explicit learning plan developed with the employer.
7. Make informed choices based on deeper understanding of their interests, aptitudes, academic strength, career opportunities and the education required for different career and educational options. Students participate in career pathways programs of study that are aligned with post-secondary education and career opportunity options. Students have access to high quality academic and career counseling with the full participation of teachers and parent(s) or individuals with parental responsibilities. Counselors support teachers' efforts to assist students to choose a pathway program of study that prepares students for a double purpose – postsecondary studies and a career.
8. Have a senior year that allows students who have the foundational literacy and math skills needed for college and careers to pursue an early advanced credential program, an early college program or both.
9. Support school and teacher leaders to champion a culture of continuous improvement by tracking progress on a number of indicators toward the goal of having 80 percent of students leaving high school college- and career-ready with 25 percent earning an advanced certificate or degree by age 25.

### **Making Middle Grades Work (MMGW) Key Practices**

SREB is prepared to work with middle grades schools to design and implement a school improvement plan based on a framework of proven practices. This framework may be modified as SREB works with district, school and teacher-leaders. The proven Key Practices include:

1. Teach all students to grade-level standards.
2. All teachers use literacy strategies to advance students' literacy and subject area achievement.
3. Place a balanced emphasis on teaching procedural skills, conceptual understanding, reasoning skills and application of math to real-world problems.
4. Require and support lab-based science.
5. Engage students in STEM-based projects – assignments that blend science, technology, engineering, math and literacy.

6. Get at-risk students on the graduation track through a more engaging and accelerated curriculum coupled with extended learning time.
  - a. Identify students who are not on a graduation path.
  - b. Keep at-risk students enrolled in a rich and challenging curriculum.
  - c. Create advocacy teachers and classes.
  - d. Extend time to meet grade-level standards.
7. Provide experiences for students to explore their interests, aptitudes, careers and educational goals through in-school learning activities and experiences outside the school.
8. The principal should engage the faculty in continuous school improvement; have in-depth knowledge of curricula, instructional strategies, effective teaching; and use resources, time and money to support teachers to become great teachers.

### **Key SREB Supports for Schools/Districts**

**High Schools That Work/Making Middle Grades Work (HSTW/MMGW) Job-embedded Coaching:** The objective of this job-embedded support is to assist school leaders in effectively implementing key aspects of the HSTW/MMGW framework in schools.

HSTW/MMGW Coaches will work with leadership to develop a plan for coaching with clear objectives. Initial coaching visits may include conducting an informal needs assessment to determine potential actions for support. Each HSTW/MMGW Coaching day is planned in advance by the coach working in collaboration with school leadership and includes a follow-up report that is written to the principal and copied to SREB and district leadership. Coaching visits may include adapting SREB's Learning Centered Leadership Program modules for use in a job-embedded format and will include working with leaders to implement the continuous improvement framework of teacher focus teams.

An integral part of HSTW/MMGW Coaching is for SREB to help a school/district develop a master plan for career pathways in the district. The HSTW/MMGW Coach will use the results of the needs assessment process to (1) develop a number of exemplary career academies and career pathway programs of study that blur the lines between high school and postsecondary education and (2) make related recommendations that help the school/district offer high-quality instruction and educational experiences in those pathways.

**Ongoing Content Specific Professional Development:** SREB provides content specialists to deliver ongoing professional development in specific areas. Professional development may be provided to a specific group of teachers or to entire faculty. SREB asks that a school leader participate fully in any professional development. Content Areas of Support Include, but are not limited to:

- Literacy Design Collaborative
- Mathematics Design Collaborative
- Authentic Project-based Learning
- Counseling for Careers
- Developing a STEM Initiative in Middle Grades
- Aligning Assignments and Assessments to Standards
- Redesigning the Senior Year
- Redesigning the Use of Time

- Achieving Success for Every Student

**Job-embedded Content Coaching:** SREB provides job-embedded follow-up content coaching in conjunction with ongoing content specific professional development. Conducted between professional development sessions, the SREB trainer works with teachers in their classrooms to ensure implementation of new lessons learned. Coaching may include modeling of lessons, co-teaching, peer observations or working with teachers during planning times.

**Needs Assessment:** SREB uses multiple tools, based upon the school situation, to conduct a needs assessment. Each tool includes a follow-up report of findings that include recommendations for continued improvement. A Desktop Audit is an electronic review of school data, including an analysis of graduate success and review of local and regional workforce needs. A Site Review may include the Desktop Audit and includes conducting a series of classroom observations, analyzing assignments and assessments and conducting interviews with students, teachers, leaders and community members. A Curriculum and Instruction Review is a two-day site review conducted by an external team of SREB coaches and possible state partners. The visits strive to identify the degree to which school and classroom practices prepare graduates for college and/or career success. A Career Pathways Review is a two-day site review by SREB Career Pathway Specialists to analyze the alignment of the school/districts pathways to workplace needs and to assess the success of each pathway in preparing students for postsecondary success.

**Site Development Workshop (SDW)** – This workshop engages school leaders and teachers in analyzing their current school and classroom practices, achievement data and other data to take ownership of the problems at the school and develop a set of actions to take to address the problems. The workshop orients participants to the Design Principles and key school and classroom practices while also organizing the faculty for improvement.

**Surveys of Students and Teachers:** Annually, SREB conducts surveys of eighth grade, ninth grade and senior students. The surveys are to determine what school and classroom practices they experienced while in middle school and/or high school. The surveys are given to a scientific random sample or all students in the appropriate grade level. In addition, faculty at the school participate in a faculty survey that also looks at school and classroom practice and includes a section on leadership practices. All surveys result in a report that is provided to the school to be used in improvement planning and to document changes in practice.

**Curriculum Products:** Contracted sites will have access to all SREB curriculum products and the training for implementation. Products include:

**Ready for High School Literacy** uses the LDC approach for assignments and offers fully-developed modules and teacher and student materials. The course utilizes a disciplinary literacy approach that teaches students strategies for reading and understanding complex texts in different subject areas. Students learn to develop and defend ideas and write about them at a

high school level in several disciplines (e.g., English, science, social studies, and technical studies).

**Ready for High School Math** is a special math course developed using the MDC approach to target the FALS that are most necessary for success in high school math. The course emphasizes understanding math concepts rather than memorizing procedures. Students learn the “whys” of math, including how to use certain formulas or methods to solve real problems. Students also learn how to apply critical thinking skills to complete assignments and a capstone project.

**Literacy Ready** and **Math Ready** teach skills that can close readiness gaps in reading, writing and math, including how to learn and think independently, read for information and solve problems — skills young adults need to succeed, whether they go on to postsecondary studies or the workplace. If taught as designed, evidence suggests that these courses reduce the percentage of students who need developmental or remedial classes in college. The courses have also been designed around the LDC and MDC framework to address fundamental literacy and math skills students most need to succeed in high school and in advanced education and training.

- **Advanced Career (AC) Curricula** – Advanced Career is an initiative of SREB and a consortium of states to create career pathway programs of study curricula that prepare high school students for college and careers. The AC pathways curricula consist of four intellectually demanding career courses organized around authentic, hands-on projects that require application of the college- and career-readiness standards, technical standards and 21st-century skills. Each curricula joins with a college-ready academic core and are designed to bridge high school and postsecondary studies in ways that can lead to a recognized industry certificate, a community/technical college certificate, or an associate’s or bachelor’s degree.

AC pathway curricula are available in the following areas (partner states are in parenthesis).

- Aerospace Engineering (Alabama)
  - Clean Energy Technology (South Carolina)
  - Energy and Power (West Virginia)
  - Global Logistics & Supply Chain Management (New Jersey)
  - Health Informatics (Ohio)
  - Informatics (Kentucky)
  - Innovations in Science and Technology (Arkansas)
  - Integrated Production Technologies (Kentucky)
- ***Skills for a Lifetime: Teaching Students the Habits of Success*** – SREB has found that too many students do not take charge of their own learning. This happens because they have not been taught the habits of success for challenging courses and their personal lives. This guide provides structures for schools to intentionally teach these skills to students in multiple formats.

SREB will work with schools to create a course using this guide as an integral aspect of the curriculum.

**National Workshops:** All schools/districts may participate in various national workshops offered by SREB. Each contract will specify if registration, air travel or hotel costs for a specific number of attendees are included in the contract. Schools may pay for participation under separate invoice, as well.

- **Content Specific National Workshops:** SREB annually hosts a series of national workshops, each based on a specific topic or area of need for schools in the region. Most will be two-day workshops located near a transportation hub for a specific region of the country.
- **SREB’s Annual Staff Development Conference** is a nationally recognized exemplar for professional development with nearly 5,000 teachers and leaders participating each summer. This conference allows participants to reflect on current plans for improvement and connect with other schools that are addressing similar needs. With over 600 concurrent sessions, participants learn best practices to address the needs of their school. The College- and Career-Readiness Standards Networking Conference, offered in conjunction with the staff development conference, draws over 1000 participants to share lessons learned and best practices used involving LDC/MDC tools and strategies.
- **College and Career Readiness Standards Networking Conference:** Beginning in 2013, SREB began hosting a national convening of teachers and leaders who were taking actions to move college and career readiness standards into classrooms using the Literacy Design Collaborative and Mathematics Design Collaborative tools.

**The National Research Center for Career Technical Education (NRCCTE) at SREB Professional Development Tools** – Recently the NRCCTE relocated from the University of Louisville to become a part of SREB. In addition to its nationally recognized research, NRCCTE offers professional development tools to support teachers and leaders including:

- **Math in CTE/Science in CTE/Literacy in CTE** – These three professional development series provide CT teachers with tools and strategies to embed academics in CT projects. Each area of professional development is delivered in a multiple day series over the course of several weeks. Schools may also have job-embedded content coaching to support teachers.
- **Preparing CTE Teachers for Today’s Students Induction Model for New CT Teachers/Teach to Lead (T2L)** – This program is designed to accelerate the transition of those with highly valued business and industry experience into the teaching profession without going through the traditional teacher preparation and certification route. The research-based induction model of professional development assists new CT teachers to make a successful transition for preparing students for further learning and a career. The induction model can be used by states, school districts and schools for new and existing teachers who need to calibrate their skills to the 21st-century learner. T2L uses the same modules to support struggling CT teachers to better prepare students for college and careers. The training is built around four modules: Instructional Planning, Instructional Strategies, Classroom Assignments and Assessments and Classroom Management.