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Supporting Students' Mastery of English Language Arts Standards Through Data Use and Curriculum Alignment

Executive Development Program Case Study #9

T his case study illustrates how one principal's National Institute for School Leadership (NISL) Executive Development Program (EDP) experience and NISL coaching helped her support students' mastery of two fundamental sixth-grade English language arts (ELA) standards: reading informational texts and writing to demonstrate understanding. After her arrival at the middle school, the principal identified a complacent school culture and recognized that teachers were frustrated with leadership and staff turnover and with frequent changes in state assessments. Against this backdrop, the principal decided to make teacher collaboration and data use the cornerstones to improving sixth-grade mastery of ELA standards. By aligning curricula; developing common strategies, procedures, and rubrics; and implementing a schoolwide "data room," the principal's actions appeared to have positively affected the culture of the school. Although the principal struggled with managing the change process, over the course of three academic years, teachers appeared to have bought in to the process and structural changes that the principal implemented.

Putting Professional Learning to Work

This case study report accompanies the report *Putting Professional Learning to Work: What Principals Do with Their Executive Development Program Learning* (available at www.rand.org/t/RR3082). The main report presents findings from part of RAND's evaluation of the National Institute for School Leadership Executive Development Program, a leadership program for sitting school principals. The evaluation included nine in-depth case studies to examine what improvement efforts principals attempted in their schools and what strategies they applied to reach their goals.

All the case study reports are available at www.rand.org/t/RR3082.

Overview

This case study features Sandra Alford,[1] a first-year principal at the start of the EDP. She drew on her 12 months of EDP experience and 1.5 years of NISL coaching to vertically align curricula across grades, implement common instructional strategies, and use data to elevate sixth-grade students' ELA achievement at Rocky Middle School (RMS).

This is one of nine case studies RAND researchers conducted as part of an overarching study of the effects of the EDP and paired coaching on principal effectiveness and, ultimately, on student outcomes.[2] We selected the nine principals from among 26 best-practice candidates nominated by NISL. To learn more about how we selected cases and our methods of analysis, please see the main report, *Putting Professional Learning to Work: What Principals Do with Their Executive Development Program Learning*, at www.rand.org/t/RR3082.

To describe the changes that occurred in RMS, we first set the stage by describing the school context in the year before Principal Alford assumed leadership. We then describe the development of her Action Learning Project (ALP), through which she applied the concepts learned in the EDP to her school. Following this, we describe the first, second, and then third year of changes she enacted, highlighting the connections between her actions and core EDP principles and concepts (shown in the text boxes).[3] After summarizing her accomplishments and plans for continuing the school improvement work, we conclude with a discussion of key factors that facilitated or hindered change.

The timeline in Figure 1 shows the key activities described in this case study. The activities above the horizontal blue arrow are Principal Alford's individual actions, and those below are school improvement activities in which the staff at RMS engaged.

Context for Principal Alford's School Improvement Effort

As shown in Figure 1, Sandra Alford became principal of RMS in summer 2015. Previously, Principal Alford taught elementary school for almost 20 years and middle school ELA for about five years, four of which were in RMS. She became the assistant principal (AP) at RMS in 2013–2014, remaining in the position for two school years before she rose to the principalship. Thus, Principal Alford started her principalship with the advantages of knowing all the staff at the school well and having credibility among the teachers.

RMS is a middle school in a rural district in Mississippi. It served about 600 students enrolled in grades six through eight as of 2017–2018. Ever since Hurricane Katrina in 2005, RMS has served a transient population, with students coming and leaving the school throughout the school year. Approximately 75 percent of the student population was white, and 20 percent was African American. Roughly two-thirds of students were eligible for free or reduced-price lunch.
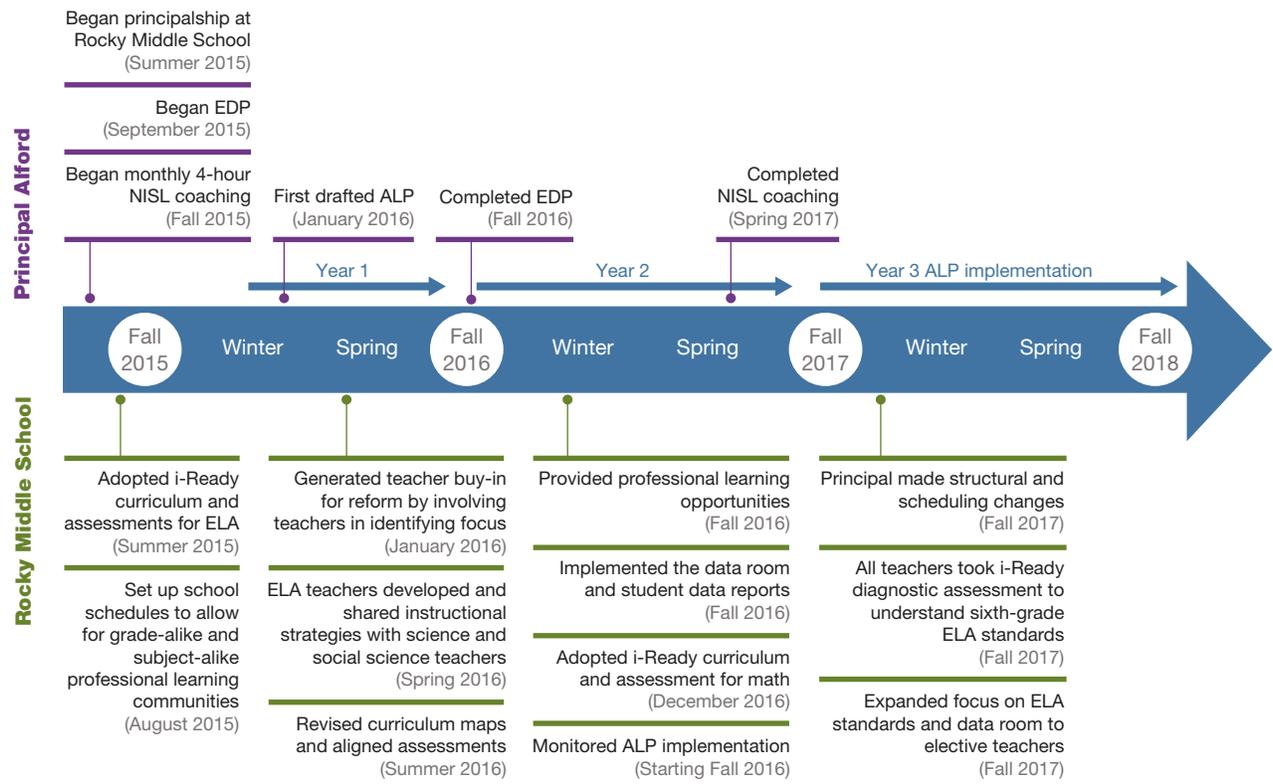
In the years leading up to Principal Alford becoming principal, the school was marked by low staff morale and a lack of cohesion, primarily stemming from recurring curricular, student assessment, and staff changes in the school and district, according to Principal Alford and some of the teachers we interviewed. Almost half of the teachers had been at

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[1] Names of individuals and schools are aliases to protect confidentiality.

[2] To gather perceptions of how Principal Alford worked to improve her school, we conducted a series of interviews and focus groups over two school years. We visited RMS for day-long visits in April 2017 and April 2018 to (1) individually interview Principal Alford and key implementers of her school improvement effort, including two assistant principals and the district curriculum coordinator; (2) conduct five focus groups with grade-level teaching teams; and (3) observe classes. In addition, we conducted hour-long phone interviews with Principal Alford in August and November 2017. At these four points, we also interviewed Principal Alford's NISL coach. Finally, in spring 2017, we interviewed Principal Alford's direct supervisor, the district superintendent. The information we present within this case is drawn from our coding of transcribed interviews and focus groups and from school documents we collected. We note limitations in our data: (1) Our data were all qualitative in nature and mainly self-reports, and (2) because we spoke with selected individuals, their views may not necessarily represent the views of all staff at the school.

[3] Throughout the case, *Year 1* refers to the school year (or part thereof) in which the principal first started implementing the ALP. *Year 2* and *Year 3* refer to subsequent years of implementation. Each year may not be a full 12-month year.

Figure 1. Timeline of Key Activities Related to Principal Alford's School Improvement Effort

Principal Alford

- Began principalship at Rocky Middle School (Summer 2015)
- Began EDP (September 2015)
- Began monthly 4-hour NISL coaching (Fall 2015)
- First drafted ALP (January 2016)
- Completed EDP (Fall 2016)
- Completed NISL coaching (Spring 2017)

Year 1 → Year 2 → Year 3 ALP implementation →

Fall 2015 · Winter · Spring · Fall 2016 · Winter · Spring · Fall 2017 · Winter · Spring · Fall 2018

Rocky Middle School

- Adopted i-Ready curriculum and assessments for ELA (Summer 2015)
- Set up school schedules to allow for grade-alike and subject-alike professional learning communities (August 2015)
- Generated teacher buy-in for reform by involving teachers in identifying focus (January 2016)
- ELA teachers developed and shared instructional strategies with science and social science teachers (Spring 2016)
- Revised curriculum maps and aligned assessments (Summer 2016)
- Provided professional learning opportunities (Fall 2016)
- Implemented the data room and student data reports (Fall 2016)
- Adopted i-Ready curriculum and assessment for math (December 2016)
- Monitored ALP implementation (Starting Fall 2016)
- Principal made structural and scheduling changes (Fall 2017)
- All teachers took i-Ready diagnostic assessment to understand sixth-grade ELA standards (Fall 2017)
- Expanded focus on ELA standards and data room to elective teachers (Fall 2017)

the school for only two years or less. When Principal Alford assumed principalship in the 2015–2016 school year, the two APs and the school counselor were also new to the school. A new superintendent was hired in January 2016, bringing in new priorities. The state changed the standardized assessments for the third time in three years. Although RMS faced challenges, the school performed at or just above the state average on the state assessments, except for sixth-grade ELA and mathematics, which became the focus of Principal Alford's ALP.

Designing the Action Learning Project

Principal Alford began the EDP in September 2015, during her first year as principal of RMS. One NISL coach worked with Principal Alford during the 2015–2016 and 2016–2017 school years while she was taking the EDP courses; when this coach left at the end of the 2016–2017 school year, Principal Alford

received a new NISL coach in October 2017. She met with her new coach monthly for at least four hours each time and held additional meetings by phone until June 2018. Her first coach was a former principal and area assistant superintendent in her state. Her second coach was a former mathematics teacher, AP, principal, and assistant superintendent from another district within her state. The NISL coaches helped Principal Alford tie EDP themes to current school improvement efforts and reflect on the progress of her ALP.

Using Data to Inform Focus of School Improvement Effort

Given her background teaching ELA, Principal Alford chose improving student achievement in ELA as a starting point for her ALP, since it was the subject in which she could best provide instructional leadership.

After reviewing her school's annual state summative test scores, Principal Alford noticed weaknesses in sixth-grade ELA scores, particularly in skills related to reading informational texts and writing to demonstrate understanding. She brought these data back to her staff in January 2016 and had them examine their classroom assessment results to confirm that these two skills merited schoolwide attention. Principal Alford also realized that these skills connected to the district's primary focus on college and career readiness; thus, her ALP focus on these two particular sixth-grade skills could have a ripple effect that would address district priorities. She explained her reasoning for choosing this topic:

> Informational text is what gets you through high school and college and beyond. Every single job a kid is ever going to have is going to have to be reading some type of informational text and then being able to prove that they understand it and act on it. Well how do you prove you understand something? You are able to write about it.

Although the focus of the ALP was sixth-grade ELA, Principal Alford felt it was the responsibility of all teachers to work toward improving reading informational texts and writing to demonstrate understanding.

Developing a Vision and Strategies for Improving Sixth-Grade Performance

Principal Alford's **vision** for her ALP was to have teachers in all subject areas and administrators work together,[4] using data, to collectively tackle improving sixth-graders' knowledge and skills in reading informational texts and writing to demonstrate

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[4] Terms in bold indicate key components of the ALP that principals were to develop and articulate.

understanding. Her **strategic intent** was for teachers to develop and implement common instructional strategies to teach reading informational texts and writing to demonstrate understanding across ELA, science, and social science courses.

Principal Alford had set the stage for teacher collaboration, which would be needed to realize her vision, even before she began taking the EDP. Before the start of the school year, Principal Alford had set up the school's master schedule to maximize time for teachers to collaborate, develop strategies collectively, and share their knowledge and experiences with other teachers. For example, she created a common planning time for each subject area; for ELA teachers, it was the first period of each day and started in 2015–2016, and for other subject areas, it started in 2016–2017. In 2015–2016, Principal Alford also created time for grade-level meetings once per week and subject-alike meetings once per month. Principal Alford believed that teachers' frustration and uncertainty about changes to standards and state assessments could be a motivation for teachers to collaborate.

In addition to more teacher collaboration, Principal Alford believed that teachers' more systematic use of data could better support student learning. However, she needed to develop the school's culture and staff capacity for data use. She described her frustration with the lack of data use and accountability for student outcomes at her school when she first became principal:

> We were not data-driven at all. For the last, probably I would say, good eight years since I've been at the middle school, nobody really looked at your data or really held you accountable for much. As long as when they walked in the room to observe you, the kids were busy and the teacher was up teaching, it really didn't necessarily have to coincide with anything.

Principal Alford began to change this data-averse culture prior to starting the EDP. In an effort to motivate teachers to collect data on student progress toward mastery of standards, she adopted in summer 2015 the i-Ready ELA curriculum and assessments, which were aligned with the state standards and assessment.

Principal Alford identified three **key strategies** related to collaboration and data use for achieving her ALP vision: (1) align ELA curricula vertically and horizontally first, and do the same in other subjects next; (2) develop common strategies, procedures, and rubrics to support teachers across all subjects to address reading informational texts and writing to demonstrate understanding; and (3) create a "data room" where teachers can convene and examine data to guide instructional decisions.

To enact these strategies, Principal Alford followed a series of **action steps**, including creating a data room (described in a later section) and expanding common planning time for subject-alike and grade-alike teachers to collaborate. In addition, she offered various professional learning opportunities for her staff and conducted frequent classroom walkthroughs. These action steps were critical in making progress toward her ALP goals.

Principal Alford identified **resources and supports** she would need for successful implementation of these action steps. Her EDP coursework and first NISL coach supported the development of her ALP. Using her knowledge of the state and district, Principal Alford's original coach encouraged her to focus on aligning curricula vertically across grades in her school, which became one of Principal Alford's primary strategies. With encouragement from her second NISL coach, Principal Alford incorporated core EDP concepts into her action steps. For example, Principal Alford incorporated best practices learned in the EDP into the professional development (PD) she offered teachers to help them teach in a way that considers how students learn best.

For three academic years, Principal Alford iteratively refined and implemented her ALP. Along the way, she slowly shifted the culture of the school from being complacent and "good enough" to having teachers believe in their ability to elevate student achievement. This was a slow process, with Principal Alford carefully implementing small changes, reflecting on their impact, and making adjustments over time. The rest of the case study details her efforts.

The First Year of Implementing the Action Learning Project

Principal Alford formulated her ALP three months into the 2015–2016 school year and began to implement it in January 2016. The first year focused on generating buy-in for her ALP vision, working through the implementation of a new ELA curriculum, and encouraging (but not mandating) teachers to try new strategies. In the second year (described later), she rolled out these initial strategies further. Throughout the process, she continuously refined her thinking.

Strategy 1: Generating Teacher Buy-In

In January 2016, Principal Alford conveyed to staff her two schoolwide goals of improving instruction related to reading informational texts and student writing to demonstrate understanding. Instead of requiring teachers to make changes, she allowed a few weeks for teachers to examine their classroom-level state test and i-Ready data as well as school-level state assessment data to determine whether this focus aligned with what teachers saw as weaknesses that needed to be addressed. Teachers affirmed and supported Principal Alford's goals.

Having the teachers examine data to arrive at a conclusion helped increase buy-in for her ALP because the process felt collaborative. One ELA teacher described this approach:

> I don't think we felt like we were demanded to do [the ALP]. . . . Organizational-wise, it's not, "You're going to do this." It's "Let's investigate doing this." And you're like, "Okay, sure." And you jump right on it because it's not someone pushing along your back or telling you what you're going to do.

Principal Alford's collaborative approach to communicating her ALP topic embodied her bottom-up leadership style. She made decisions in consultation with her staff and encouraged them

to try things instead of requiring them to do so. According to teachers and administrators we interviewed, she was often "in the trenches" with teachers in classrooms, getting to know each teacher and leading the school with a positive attitude. In addition, teachers we interviewed describing buying in to the vision because Principal Alford's background in ELA provided credibility for her interpretation and knowledge of student performance data. During her first year, she even took the time to get to know each student and their academic strengths and weaknesses. Her familiarity with each student impressed the teachers and further earned their respect. One of the ELA teachers described Principal Alford's knowledge of each student:

> I went in yesterday and I called a child by name and I said, "You know, I've seen a drop all of a sudden. I'm concerned." She knew exactly what I was talking about. That's how much she studies every individual kid's scores. And then she wrote the name and said, "Let me pull him in. Let me make some calls."

Strategy 2: Encouraging Common Planning Time for Informal Collaboration

Principal Alford capitalized on the meeting structures she set up prior to the start of the school year to allow time for teachers to collaborate. The common planning period for ELA teachers, grade-alike meetings, and subject-alike meetings offered opportunities for teachers to meet and collaborate throughout the school year. She strongly encouraged them to use this time to collaborate but did not require that they do so. Again, Principal Alford's approach was to lead through positive encouragement rather than by issuing mandates. Ultimately, teachers reported using their common planning time and staff meetings to develop and share common strategies for teaching

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EDP Core Concept

Participation in highly effective teams allows teachers to work together on curriculum, lesson planning, and inquiry with regard to instructional practice.

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reading of informational texts and writing to demonstrate understanding.

By the end of Year 1, teachers appeared to enjoy the extra time for grade-level collaboration, but they wanted more time for subject-alike meetings, especially the non-ELA teachers, who did not have the benefit of a common planning period. In Year 1, subject-alike teachers formally met only once per month. Principal Alford's ALP goal of curriculum alignment would eventually require more time for teachers to meet within their subject areas.

Strategy 3: Using Common Assessments and Curriculum Materials in ELA to Build a Data-Driven Culture

To improve instruction and learning, Principal Alford thought the school needed to move toward a data-driven culture, starting with ongoing data collection and tracking students' mastery of standards. She adopted the i-Ready ELA curriculum and assessments in Year 1 as a result. She required ELA teachers to use the curriculum and to administer the i-Ready formative assessments three times per year according to a master testing schedule she developed. i-Ready's supplementary curriculum is designed to automatically personalize students' learning depending on the results of their diagnostic and formative assessments. Students completed i-Ready lab lessons using these personalized lessons once per week for 45 minutes. Principal Alford gave ELA teachers discretion as to whether they wanted to use the supplemental i-Ready lesson plans in their daily lessons as well.

The i-Ready formative assessments allowed the ongoing collection of data that would ultimately feed into the data room that Principal Alford implemented the following year. Adopting i-Ready habituated teachers to administering formative assessments regularly and tracking students' progress, which were key action steps toward building the data room.

Implementing a new curriculum, however, displeased some teachers who were weary of the churn in curricular and student assessment changes. Additionally, implementing i-Ready in ELA only and not yet in other subjects disproportionately placed the burden of the schoolwide vision on ELA teachers.

Strategy 4: Developing Common ELA Instructional Strategies and Sharing Them with Science and Social Science Teachers

The one strategy that Principal Alford implemented in this first year that was directly attributable to the EDP was to have ELA teachers collectively develop a set of common instructional strategies for teaching reading informational texts and writing to demonstrate understanding that they would then share with the non-ELA teachers in grade-level meetings. This task essentially introduced ELA teachers to the focus on reading informational texts and writing to demonstrate understanding and helped set the stage for Principal Alford to more directly tackle curriculum and instructional alignment across grades in Year 2.

ELA teachers used their common planning time and subject-alike meetings to develop these strategies. One ELA teacher took the lead. She developed a template that could be used in any subject area to help students write about informational texts. Principal Alford, consistent with her approach, encouraged teachers of other subjects to try the strategies, but she did not require them to do so. As a result, the strategies were unevenly implemented.

The Second Year of Implementing the Action Learning Project

Principal Alford took a more systematic approach in Year 2, putting structures in place to move closer to achieving the goals of her ALP. She started by creating a sense of urgency over the summer for teachers to begin aligning their curriculum maps and assessments in each subject. Next, she acted on the teachers' request for professional learning opportunities to build their capacity to meet her school improvement goals; she brought on board the district curriculum coordinator to support teachers through curriculum alignment and by developing common instructional strategies. Moreover, Principal Alford officially launched the data room and accompanying student data reports in Year 2.

Year 2 saw some challenges. The mathematics curriculum was not meeting the needs of the students, according to assessment data, and Principal Alford adopted i-Ready Math in January 2018 after encouragement from the district. This decision dampened the morale of the mathematics department, and she had to deal with i-Ready Math implementation challenges for much of the second half of the year. Another challenge was engaging elective (e.g., art, physical education) teachers in supporting the schoolwide focus on informational texts and student writing. They had a difficult time understanding their role.

Strategy 1: Setting Expectations Early in the School Year

Principal Alford began the year by having subject-alike teachers meet over the summer to begin vertically aligning their curricula so there would be continuity across sixth through eighth grades. She expected the alignment to include common vocabulary across grades and assessments of similar concepts, with increasing depth at each grade level. In addition, she wanted teachers to align their curricula to standards assessed on the statewide spring assessment, and she wanted all of the unit assessments and other practice exams to align to the standards. This work continued throughout the school year, facilitated by two half-day PD sessions in the beginning and middle of the school year and two full-day sessions at the end of the school year. Principal Alford's NISL coach recommended taking a full year to complete the curriculum alignment, to avoid overwhelming staff.

In addition to the summer activities, Principal Alford heeded her teachers' request for more subject-alike meeting times by reorganizing the master schedule to provide common planning not only for ELA teachers, but also for most other core subject

teachers (mathematics, science, and social science). Because of the curriculum alignment task and the additional planning time, teachers developed a stronger sense of comradery and collegiality in Year 2, as described by an ELA teacher:

> We check in every morning [with each other]. There's not a morning that we go to class that we haven't checked in. That planning period that we have first thing in the morning makes a huge difference. We share what works, what doesn't work. . . . We know each other's students, and that, to me, is very special.

Not all teachers, however, bought into the focus on sixth-grade reading and writing during Year 2. The sixth-grade core subject teachers became the focus in Year 2, so ELA, mathematics, science, and social studies received the bulk of the attention. The professional learning opportunities, for example, primarily targeted ELA teachers. Although elective teachers were expected to incorporate informational texts and writing into their courses as well, they did not receive as much attention and, thus, did not buy into the process as consistently as Principal Alford had hoped. By the end of the year, Principal Alford had to meet with the elective teachers individually for some difficult conversations about how they could be more engaged in the process and how to incorporate instructional strategies for teaching reading and writing into their classes.

Strategy 2: Providing Professional Learning Opportunities for Teachers

During Year 2, Principal Alford solicited the help of the district's middle school ELA curriculum coordinator to provide training for all teachers, but she concentrated particularly on ELA teachers. Beginning in the summer, the curriculum coordinator conducted three PD sessions for teachers throughout Year 2 that focused on curriculum alignment, instructional practices in ELA, and writing assessments. She was responsive to teachers' needs. For example, ELA teachers requested and received ideas for instructional practices and strategies on how to dissect a writing prompt, how to read informational text with a pen in hand while looking for key details, and how to teach students to annotate text. The curriculum coordinator also supported teachers further developing strategies to share with the non-ELA teachers during their grade-alike meetings. This year, ELA teachers were more successful in disseminating these common strategies to non-ELA teachers, and Principal Alford more closely monitored the non-ELA teachers to make sure they were incorporating these shared strategies.

Principal Alford provided professional learning throughout the year as well, especially in the area of writing. She presented instructional strategies during schoolwide faculty meetings, such as concept mapping in service of writing. In addition, she had teachers share examples of student writing during these meetings so they could gather feedback on how to help students develop their writing. Teachers would then try the strategies they learned from each other in their classrooms and debrief with the group at their next faculty meeting. By examining student work from her teachers during these faculty meetings, Principal Alford kept a pulse on the quality and standards of student assignments. Overall, teachers found their professional learning opportunities to be effective and valuable, and the additional supports helped teachers buy in to the school improvement process.

Principal Alford also made a more concerted effort to debrief with teachers after classroom observations. This is something that the NISL coach helped her improve. On occasion, they jointly

observed classrooms, then debriefed with each other
about what they saw and rated teachers using NISL's
Performance Analysis Framework tool. They dis-
cussed what high-quality instruction looked like
and to what extent teachers were demonstrating
high-quality instruction according to their observa-
tions. The NISL coach advised Principal Alford to
reflect on the root causes of any issues uncovered and
to effectively debrief with teachers.

Strategy 3: Implementing the Data Room and Student Data Reports

Principal Alford reasoned that, to develop students'
reading of informational texts and writing to demon-
strate understanding, teachers needed to be aware
of students' strengths and weaknesses in all subject
areas. Thus, toward the end of the school year in
Year 1, Principal Alford turned a conference room in
the school into a data room, where teachers brought
in their student-level data on a regular basis from all
the formative assessments they had administered.

Teachers documented recent student data on
index cards created for each student that tracked
their progress in each subject with their various
test scores (e.g., i-Ready formative assessments, unit
exams) listed chronologically, beginning with their
final exam scores from the previous year. Figure 2
shows a snapshot of one of the data walls in the room.
Teachers were responsible for keeping the students'
cards updated on the data room wall. After each
diagnostic and formative assessment, ELA teachers
would move the cards vertically up or down the data
wall to reflect the achievement level of students in
mastering the reading of informational texts and
writing to demonstrate understanding and to bench-
mark their progress against the cutoff score for profi-
ciency. All teachers had to accept the responsibility of
helping students achieve these goals. Principal Alford

Figure 2. Snapshot of the Data Wall

NOTE: There is one index card for each student in the school, and the
five color bands on the wall represent the five proficiency levels on the
state test.

and her administrators met with staff departments in
the data room to plan. Principal Alford said,

> We . . . explain to all of our teachers we are all
> accountable for what we are doing in the class-
> room with these students. We have to make
> them all grow. It's our responsibility. It's not
> the language arts teachers' responsibility. It's
> not the math teachers' responsibility. It's not
> just eighth-grade science, but we all have to be
> rowing this boat in the same direction.

Principal Alford explicitly conveyed her expecta-
tion for teachers to use the data room in the begin-
ning of Year 2. She described the data room's purpose
as a "ground zero" for teachers to get on the same
page about the strengths and weaknesses of their
students and as a place for teachers to work collab-
oratively to address students' weaknesses across all
grade levels and subject areas.

Principal Alford also required teachers to share
a version of the student-level, subject-specific data
cards with each student a few times throughout the

year after formative assessments. The student version, which differed slightly from those posted in the data room, listed students' longitudinal assessment data, as well as goals for the next assessment and end-of-year goals. Teachers conveyed to students that their goal was to "get in the green," indicating scores that are on or above grade level. Given the additional number of assessments and data collected in ELA, students received two data cards for ELA. One index card contained their target scores for informational texts, writing, and literature on the state summative exams and prior year scores on the state test; the other index card had diagnostic scores from the three i-Ready formative assessments, with additional goals for that assessment.

The data room and data cards yielded positive results for teachers and students. Growth in student test scores gave teachers reason to celebrate, further increasing buy-in for the process and motivating them to continue to find ways to help students improve. Students also responded positively to the data cards. Having stated goals helped the students focus, according to the instructors we interviewed, and many students received targeted, aligned supports across subject areas to help them meet their goals.

Strategy 4: Expanding the i-Ready Curriculum to Mathematics

Principal Alford did not initially adopt i-Ready beyond ELA, but after disappointing test scores in mathematics in Year 1 and even poorer diagnostic scores in Year 2, she abandoned the mathematics curriculum midyear (in December 2016) and adopted i-Ready with the encouragement of her superintendent.

This top-down decision frustrated mathematics teachers, and their relationship with Principal Alford was temporarily strained. Principal Alford tried to

mitigate their concerns by providing i-Ready training, but technology issues with the implementation of the i-Ready mathematics curriculum further fueled their frustrations. The NISL coach helped find resources for Principal Alford, including by connecting her with a larger school district in the state that had implemented i-Ready Math.

Eventually, mathematics teachers began seeing growth in students' mathematics scores using the new curriculum and ultimately accepted i-Ready by the end of the year. i-Ready also provided mathematics teachers with the same reports and types of data that the ELA teachers received, so there was more common language between the two subjects. Thus, this strategy helped Principal Alford with her larger strategy of aligning curricula in the school.

Strategy 5: Monitoring the Implementation of ALP Strategies and Their Impact on Students

Principal Alford and her leadership team began monitoring progress on the ALP strategies in Year 2. Her leadership team, which included her two APs and the curriculum coordinator, made regular classroom visits to observe how teachers, including non-ELA teachers, were incorporating strategies from their grade- and subject-alike meetings to support the standards related to reading informational texts and writing to demonstrate understanding. By rotating observations, each leadership team member was able to observe all teachers every three to four months. Leadership team members also used a common checklist, which was a tool adapted from an EDP resource, for the observations. Having a common observation checklist and observing all teachers allowed the leadership team to calibrate teachers' strengths and weaknesses so it could provide appropriate supports. To monitor the weekly and monthly grade- and subject-alike meetings, the leadership team collected agendas and meeting notes and reviewed them to ensure that these meetings had an instructional focus.

Principal Alford monitored student progress, as well. She had access to all students' formative and summative test scores for ELA and mathematics

through the i-Ready portal for administrators. She generated various types of reports every Friday to monitor the progress students were making. She also examined reports by classroom to identify which teachers' students were struggling or thriving. Moreover, Principal Alford encouraged teachers to bring in student work during staffwide meetings and to share with others instructional strategies that worked or not. The leadership team used these meetings as a forum to assess the kinds of assignments that students were completing and whether those assignments met the standards.

The Third Year of Implementing the Action Learning Project

In Year 3, Principal Alford encouraged more teacher-driven strategies to align teachers' instruction and boost student performance on reading informational texts and writing to demonstrate understanding. She also adopted the supplementary lesson plans that i-Ready automatically created for teachers based on their students' strengths and weaknesses. Finally, Principal Alford made a concerted effort to introduce the data room to the elective teachers and encouraged them to use it.

Strategy 1: Making Additional Structural and Scheduling Changes to Support Innovative Approaches to Instructional Improvement

In Year 3, Principal Alford gave teachers some leeway in developing instructional strategies to try to elevate students' ELA skills, particularly with informational texts and writing to demonstrate understanding. ELA teachers, for example, had the idea of each teacher specializing in certain skills and then rotating classes with each other across grades so that they could each teach the skills and lessons that they were strongest in. For example, one teacher had expertise in teaching how to read informational texts, so she would teach related skills across all the ELA courses. The ELA teachers brought this idea to Principal Alford a month before school started, and she was initially wary of how they would be able to

make it work logistically. The teachers provided her with a plan showing how their schedules would allow for cross-teaching, as well as a plan to explain the rotation of teachers to parents. Ultimately, Principal Alford approved the idea.

In addition, based on the curriculum coordinator's recommendation, Principal Alford decided to require mathematics and ELA teachers to implement lesson plans designed by i-Ready and that were personalized to each classroom using students' test scores and common areas of weaknesses. These supplementary lesson plans from the i-Ready "teacher toolbox" also contained tutorials and activities for helping small groups of students who were struggling with a given standard. Teachers received a data binder of targeted goals and mastery scores for each student, which allowed them to monitor and track students' progress throughout the year against the i-Ready targets. Although most of the teachers we interviewed were supportive, citing increased test scores, not all teachers welcomed the additional focus on the i-Ready curriculum. One mathematics teacher expressed her dismay: "I miss teaching because too many days of the week are now devoted to i-Ready Math. i-Ready curriculum isn't real math."

Furthermore, Principal Alford expanded the mathematics and ELA intervention classes in Year 3 to include more low-performing students than in previous years. Because of the slower progress that the mathematics department made with the new curriculum in the previous year, the number of students in the mathematics intervention class greatly increased in Year 3. The intervention class met for 52 minutes daily and targeted the lowest 25 percent of students. Students received targeted one-on-one or small-group support in the mathematics or ELA standards they struggled with. Some of the teachers in these intervention classes found the increased class sizes a challenge, because many of the students needed one-on-one attention.

> **EDP Core Concept**
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> Principals must recognize the identified forms of resistance and be able to effectively implement the appropriate strategy.

Strategy 2: Building Understanding of the Curriculum by Having Teachers Complete the i-Ready Assessments

As part of her strategy to build schoolwide teacher capacity for supporting sixth-grade students' ELA development, Principal Alford required all teachers, including non-ELA teachers, to complete the i-Ready diagnostic assessment for sixth- grade ELA so they would understand what the students were expected to do on the exam. Teachers, particularly non-ELA teachers, reported that seeing multiple examples of assessment questions helped them understand the expectations for incorporating ELA elements, such as informational texts. One non-ELA teacher described this "aha" moment:

> [A]s you know, the state gives us like one practice test with 50 questions on it. So, you may get a glimpse of how one standard is tested. One practice question is probably about all you are going to get, so [taking the i-Ready diagnostic provided] more exposure to what the questions are going to look like, so that we can be more comfortable knowing that we are teaching like it's going to be tested.

Strategy 3: Expanding Expectations to Teachers of Elective Subjects

At the end of Year 2, Principal Alford met with the elective teachers (art, physical education, and music) to talk about their role in working toward the ALP goals for improving student's skills in reading informational texts and writing to demonstrate understanding. A few teachers disagreed with her recommendations, so the NISL coach helped Principal Alford through the process of "coaching teachers out" at the end of Year 2, explaining to her that such a move was necessary sometimes to preserve a positive school culture. Although Principal Alford was conflict-avoidant, the EDP unit on coaching helped her navigate the difficult conversations with dissenting teachers. As a result of Principal Alford's coaching and encouragement that they resign, two of the teachers left the school before the start of Year 3. Principal Alford discussed her approach to staffing:

> I was very strategic. My first year [was] about building the culture and climate where we all work together, and it is . . . not me telling you, but we are in this together. . . . I knew that if I could get everybody paddling in the right direction, that we could make it happen. So, I had to be very strategic in building the climate and culture where it was everybody respects each other, everybody is professional, and we are all going in the same direction and have the same dream. Once I accomplished that, then I knew that I could push on and focus on the instructional piece.

Capitalizing on the staffing changes and the new teachers' excitement, Principal Alford introduced elective teachers to the data room and trained them on how they could examine their students' scores in any of the tested subjects. Per Principal Alford's expectations, the elective teachers began using the data room to examine which standards their students needed improvement on and worked to incorporate lessons into their classes that addressed the weaknesses. Simultaneously, ELA teachers finally expanded the sharing of common instructional strategies to the elective teachers. Principal Alford commended the elective teachers' progress in Year 3:

> My art teacher is teaching art and doing informational texts about artists and getting the kids excited about learning about art. [In physical education,] they are teaching . . . the systems of the body and how the body works and what physical fitness is. . . . It's taken me two years to kind of get through [to elective teachers]. The art teacher and the [physical education] teacher actually are working with the language arts teachers, and they are saying, "What can we do?" because they are . . . eager to get on board.

Evidence of Progress

The "positive encouragement, but optional" approach to ALP implementation in Year 1 did not produce the results that Principal Alford or the teachers expected. Teachers met mostly informally, which meant that not all teachers participated in collaboration activities during grade- and subject-alike meeting times,

not all ELA teachers capitalized on their common planning period, and non-ELA teachers did not widely implement the common strategies that the ELA teachers developed. Because of the many changes, ELA teachers in particular began feeling fatigued and disengaged by the end of the year. Principal Alford did not offer many official professional learning opportunities in Year 1, so teachers were left to figure things out on their own, with the only help coming from Principal Alford herself.

Over the longer term, however, Principal Alford saw meaningful change in the school culture near the end of three academic years of ALP implementation. When Principal Alford first became principal, she noticed an unacceptable level of complacency with teachers' expectations for students. She wanted to move teachers away from "good enough" to having them truly believe in their students' abilities. She reiterated her high expectations via daily intercom announcements that reminded students and staff of the school's goal to become a high-performing "A" school, where all students achieved academically. To help facilitate this goal, Principal Alford constantly conveyed her expectations for teachers to teach bell-to-bell, which was something she looked for when conducting classroom observations.

Teachers' attitudes toward collaboration also changed. Teachers were previously siloed into their departments and rarely worked with teachers of other subject areas. The common planning period for ELA teachers and grade- and subject-alike meetings that Principal Alford implemented in Year 1, coupled with the shift to increased subject-alike meetings in the data room in Year 2, appeared to have increased collegiality among teachers. Principal Alford noted this change at the end of Year 2:

> We have gotten to the point where we have the climate and culture where they want to do better, they want to do what's best for kids, they want to help each other and support each other. It's not shocking anymore to walk past a teacher's room who may be a math teacher [and see] a science teacher or social studies teacher in the room, and they're talking about their kids and . . . what they're doing in their classrooms. . . . Now . . . [teachers] are all working together, and that's been something

we really had to work on. It didn't just happen overnight. It had to be intentional.

Her second NISL coach concurred:

> The culture and climate of working together really changed in the building to where it's a very open climate now of teachers forming to work together. . . . In the beginning, when [Principal Alford] took over, that was not the case. It was pretty much teaching in isolation, not working with each other. . . . I think she [now has] got a team approach to seeing what best practices in teaching were and . . . how that would affect student achievement if [teachers] got together and worked on their lesson plans together.

Principal Alford observed effects on student achievement as well, although these cannot be directly attributed to her improvement efforts. During her first year as a principal, RMS was a "C" school but was only seven points away from becoming a "D" school in the state accountability ratings. By Year 2, it had become a "B" school, suggesting a large improvement in student achievement test scores in just one year. Principal Alford noticed a change in student writing skills in particular. She commented on the progress she noted when examining student work:

> We would have samples of students who had the writing at the beginning of the year versus what they were doing [toward the end of the year]. . . . It was just amazing to see. Progress. The only way they can write like that is if they actually understood what they were reading, so that has been huge.

RMS continued to be rated a "B" school in Year 3, but received a higher "B" than the year before. Principal Alford attributed much of the continued growth in test scores to the i-Ready curriculum and the assessments that allowed teachers to track student progress by standard. In Year 3, for the first time in the school's history, no students scored at the lowest level on the mathematics state assessment, and only ten students did so on the ELA state assessment.

Overall, respondents indicated that, by the end of Year 3, teachers and students completely trusted Principal Alford's leadership and her approach

to implementing and monitoring aspects of her ALP. The NISL coach remarked on the progress he witnessed:

> I think the data really spoke to me of seeing the gains that students have made since the beginning of the year. . . . Also, . . . how much that has changed to be a much more collaborative effort by the teachers [compared with] where she was at the beginning.

Plan for Upcoming Years

Principal Alford arranged for the district ELA curriculum coordinator to take a position at her school on a full-time basis for the 2018–2019 school year as part of her leadership team and with instructional coaching responsibilities. The curriculum coordinator had been instrumental in helping Principal Alford make progress on her ALP goals, so having her on staff should help sustain Principal Alford's school improvement effort.

As for the next phase of her ALP, Principal Alford envisioned having her staff and students take more ownership of their learning. She aimed to have teachers self-identify where they may need additional professional learning opportunities and begin teaching each other. She also wanted students to take ownership of their test scores and goals. Beginning with the 2018–2019 school year, students developed their own targets and goals. Principal Alford and her teachers felt that if students created their own goals, they may be more motivated to achieve them.

Factors That Facilitated and Hindered Change

Facilitators of Change

Our analysis indicates that the following factors helped Principal Alford implement her ALP:

- **Principal Alford's prior history at RMS, along with her positive outlook and bottom-up leadership style.** Principal Alford was previously a middle school ELA teacher at RMS, which helped her garner respect from teachers and establish credibility when she took over as principal. In addition, she led the school with a positive attitude and outlook, whether she was celebrating becoming a "B" school with a schoolwide event or even when coaching teachers out of the school. She was often "on the ground" in classrooms with teachers and never hesitated to offer support. In an effort to get to know her students better, she reviewed individual student test scores weekly using the i-Ready reports. Thus, she was able to talk to her teachers about specific students, which helped her gain teachers' trust in her leadership. She also led the school using a collaborative, bottom-up approach by soliciting teachers' input and making decisions collectively with her staff. This approach allowed her to garner buy-in for her ALP goals and helped motivate teachers to engage in strategies and action steps to meet those goals.

- **Principal Alford's content knowledge and instructional leadership in ELA.** Principal Alford selected an ALP goal within her content area of expertise. This decision facilitated her ability to plan the appropriate strategies and action steps needed to achieve her goal. It also allowed her to be directly involved in working toward those goals, so the process was less directive and more collaborative.

- **Support from the district curriculum coordinator.** The district curriculum coordinator was a tremendous help with implementing Principal Alford's ALP. Not only did she provide critical professional learning opportunities for teachers, she became part of Principal Alford's leadership team. The curriculum coordinator had a wealth of knowledge about state curriculum and assessments; she used to help write test items for the state. She helped Principal Alford implement several strategies for her ALP and brainstormed potential solutions to any challenges that arose.

- **District and state contexts, which created a school environment ripe for collaboration.** Consecutive years of multiple changes at the state, district, and school levels helped RMS teachers rally around each other for support,

creating a collaborative atmosphere amid constant change.

Challenges Hindering Change

Aspects of the broader context presented challenges as Principal Alford worked to implement her ALP:

- **Implementing multiple changes simultaneously.** Principal Alford developed and implemented her ALP in the middle of a school year. She had already made some structural and curriculum decisions prior to the EDP and continued to implement additional strategies after adopting her ALP. Because her ALP topic focused on ELA, most of the strategies and action steps required engagement from ELA teachers in particular. Consequently, ELA teachers felt overwhelmed by the number of changes, and their engagement declined by the end of the school year. Principal Alford did not mandate the implementation of strategies to support her ALP in Year 1, to lessen the pressure on teachers to make changes, but that decision led to the uneven implementation and adoption of strategies among teachers.
- **District leadership turnover.** Turnover in district leadership posed a significant challenge for Principal Alford. A new superintendent started during Principal's Alford first year at RMS, after she had already developed her ALP. The new superintendent supported Principal Alford's ALP but had his own priorities, as well. Specifically, he supported the i-Ready curriculum and was a factor in why Principal Alford forced her mathematics department to switch to the i-Ready mathematics curriculum in the middle of Year 2, which led to teacher dissatisfaction. Principal Alford had to balance the strategies she implemented for her ALP with district priorities.
- **Reticent teachers.** Teachers who were slow to buy in frustrated the implementation of Principal Alford's ALP. Because ELA was the focus, ELA teachers bought in from the beginning, but it was difficult to get other teachers to implement her strategies. After some intentional structural changes in Year 2, Principal Alford was able to engage other core subject teachers (science, social science, and mathematics), but some elective teachers remained disengaged. She learned how to have difficult conversations with the reticent teachers and encouraged them to resign to fulfill her vision of a school culture that revolves around data and collaboration.

Conclusion

Principal Alford's approach to her school improvement effort in some ways mirrored that of other principals in our case studies. She leveraged her prior experience as a teacher and AP at RMS, a positive attitude, and a collaborative leadership style to create a culture of teacher collaboration and data-driven instruction. Early on, she put structures in place to allow for teachers to collaborate formally and informally on curriculum alignment and developing common instructional strategies. Later, she drew on her ELA content expertise, solicited the district ELA curriculum lead to offer professional learning opportunities to teachers, and built teachers' capacity to implement her ALP strategies. With collaborative structures in place, she then implemented a data room that used formative student data to track students' progress, enhance teachers' collaboration, and guide their instruction. Along the way, Principal Alford strategically adjusted her strategies and staffing plans. In all, she instilled a culture of collaboration and respect in her school while providing the resources and support for her teachers to enhance their instruction. Although some challenges remained, early evidence suggested that her school transformed from being siloed and complacent to becoming a school where formal and informal collaboration was the norm and the process of collecting, analyzing, and using data was routine.

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