Results

An Evaluation of Literacy Coaching
Final Evaluation Report

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Executive Summary

The United Way of Greenville County (UWGC) received an award in the 2014 Social Innovation Fund (SIF) grant competition to support its OnTrack Greenville initiative, a collective impact dropout-prevention program for middle grades students. Public Education Partners (PEP), a Sub-Grantee, implemented Literacy Coaching, a model that combined two evidence-based approaches to coaching teachers in secondary literacy strategies (Balanced Literacy and Disciplinary Literacy) in order to improve student course performance between 2015 and 2018. The Riley Institute at Furman University served as the third-party evaluation contractor for the SIF-funded evaluation of OnTrack Greenville, including the Literacy Coaching model. PEP offered Literacy Coaching at three Title I middle schools in the White Horse Community of Greenville County, South Carolina.

The Literacy Coaching model was a professional development program for teachers, administrators, and instructional coaches at treatment schools. PEP specialists trained and coached educators in Balanced and Disciplinary Literacy strategies, two research-supported methods of instruction. In academic year 2016-17, 30 teachers participated in Literacy Coaching. In academic year 2017-18, 64 teachers participated in Literacy Coaching. The primary intended impact of Literacy Coaching was to improve student course performance in math and ELA. The intended secondary outcomes of Literacy Coaching were to increase teacher knowledge, advocacy, and use of literacy strategies and to improve classroom culture.

Literacy Coaching targeted ELA and math teachers at OnTrack Greenville schools. The program model did not identify well the characteristics of teachers to be targeted for coaching. Researchers ultimately suggested targeting ELA and math teachers with a moderate to high degree of teaching experience who already had mastered classroom management, as these teachers would have a greater readiness to learn and implement literacy strategies. Across two years of program implementation, PEP coaches worked with 94 teachers. Of these teachers, 59% taught ELA and 41% taught math. Overall, the teachers' education level and number of years working in K-12 education reflected a high degree of experience, with 78% of teachers having a Master's degree or higher and 70% of teachers having eight or more years of experience teaching.

While there was no prior research on the implementation and impact of this unique combination of literacy coaching approaches, prior research explored the impact of the individual approaches. Using program data and publicly available standardized test data, PEP demonstrated a statistically significant advantage in ELA for students attending elementary schools that implemented coaching in Balanced Literacy. Similarly, students who attended a school implementing Disciplinary Literacy showed significant improvement in math standardized test scores when compared to the state mean scale scores.

According to the SIF evidence guidelines, the Literacy Coaching model's incoming level of evidence was preliminary and this study targeted a moderate level of evidence. As cited above, in order to substantiate a preliminary level of evidence, PEP provided local data for both approaches of coaching it planned to implement jointly: Balanced Literacy and Disciplinary Literacy. With the availability of administrative data measuring student academic impacts in course performance for students across the district and state, researchers proposed a quasi-experimental design that would provide robust results to strengthen the evidence base for the course. Due to the limited geographic scope of the initiative and

the inability to randomly assign students to treatment and control conditions, researchers were not able to design a study to target a strong level of evidence. The present study intended to advance the evidence base by assessing the combined impact of these two literacy coaching approaches. In addition, Balanced Literacy traditionally is an approach used at the elementary level; therefore, findings from this study contributed to the evidence base for the approach's effectiveness with middle grades students.

In order to achieve a moderate level of evidence, this study intended to utilize a single-site non-randomized group design with groups formed by propensity score matching. Due to challenges with model fidelity identified during the implementation study, researchers did not complete the impact analyses for confirmatory impact research questions. The implementation study examined the fidelity and variance of Literacy Coaching by conducting monthly cycles of data collection at treatment schools. Specifically, researchers collected data through semi-structured interviews, observations, and coaching log analysis in order to document the implementation of coaching events. To answer secondary exploratory outcomes in the program's logic model, researchers also conducted one-on-one interviews with teachers and administered a teacher survey. The final sample size for primary methods of data collection appear below in Table 1.

Table 1. Final Sample Size Numbers

Data Collection Activity	AY 2016-17	AY 2017-18	Total
Teacher Interviews	9	5	14
Teacher Survey	20	17	37

Researchers created the majority of instruments used in this study. The interview protocols for the teacher, coach, and principal interviews were created to align directly with the research questions of the study. The coaching observation rubric and coaching log also were constructed specifically for this study. In each academic year, four coaches and three principals participated in informal semi-structured interviews, while a total of 14 teachers participated in structured interviews over the course of the study. Teacher survey items measuring teacher awareness, advocacy, and use of literacy strategies were adapted from a previous study of Disciplinary Literacy coaching model implemented in South Carolina (Larson & Stuhlsatz, 2015). Other items on the teacher survey were created specifically for this study. Researchers administered the teacher survey two times, at the end of each academic year, and there were 37 valid responses in total.

At the conclusion of each coaching observation and interview, researchers used individual analytic memos to synthesize emerging themes. After the transcription of interviews and analytic memos, cross-case analysis resulted in emerging themes. The themes determined from interview data were triangulated with other data—namely monthly coaching cycle observations, coaching artifacts, and informal interviews with both stakeholders and administrators. In addition, researchers examined descriptive statistics of survey responses and used qualitative content analysis to code interview data. Three researchers independently coded interview transcripts before meeting to discuss and reconcile themes that emerged from the data.

The following were implementation research questions examining the Literacy Strategy Training Institute: *What were the objectives and activities at the Literacy Strategy Training Institute? How did these professional development events conceptualize the literacy frameworks of Balanced Literacy and Disciplinary Literacy? What were the experiences and reactions of participating administrators and*

instructional coaches at the Literacy Strategy Training Institute? The Literacy Strategy Training Institute did not occur in academic years 2016-17 or 2017-18.

The following were implementation research questions examining Professional Development and Training for Teachers: *What professional development events occurred for participating teachers? What were the objectives and activities of the professional development events for participating teachers? How did these professional development events conceptualize the literacy frameworks of Balanced Literacy and Disciplinary Literacy? What were the experiences of participating teachers at the professional development events?* Professional Development and Training for Teachers did not occur in academic years 2016-17 or 2017-18.

The following implementation research questions examined Ongoing Coaching in Use of Literacy Strategies: *How often, how long, and with whom did the coaching of literacy strategies occur? What events occurred during coaching cycles and sessions? What were the experiences of teachers and coaches involved in coaching sessions? What supported or impeded valuable coaching sessions?* Key findings included:

- PEP coaches completed a total of 1,253 coaching activities in academic years 2016-17 and 2017-18. Among these, 47% of activities were planning activities, 32% were in-class support, and 21% were debriefing, indicating some coaching cycles did not include all three components.
- PEP coaches reported working with 94 teachers* over a total of 289 coaching cycles across both academic years (*Note that this number includes some teachers who participated both years and were therefore counted twice. Generally, the three OnTrack Greenville middle schools have a combined total of 45 ELA and Math teachers during an academic year). On an end-of-year teacher survey, one third of teachers who participated in coaching (33%) reported meeting with a PEP coach weekly and 33% reported meeting with a PEP coach monthly, which was on par with what was expected.
- Teacher-reported frequency of in-class support from coaches varied, with 46% reporting that the PEP coach was in his or her classroom 1 – 5 days, 16% reporting 6 – 10 days, and 29% reporting 11 or more days in total. While the majority of teachers indicated they participated in most or all types of coaching activities, only 38% of teacher respondents indicated that the PEP coach provided in-class modeling of instruction.
- Teachers rated "sharing of resources" and "observation of your teaching/students" as the most valuable coaching activities that were offered. More than half of teachers (57%) reported that they were likely or very likely to recommend literacy coaching to a teaching colleague. A majority (71%) of teachers agreed that participation in literacy coaching was beneficial and enhanced their instruction.
- Several impediments to valuable coaching sessions emerged, including a lack of understanding of the coaching model and desired student outcomes, misunderstanding over the role of PEP coaches, and a lack of overall consistency in coaching sessions.

The last set of research questions were exploratory research questions related to the secondary outcomes: *After participating in literacy coaching, did ELA and math teachers demonstrate a high awareness of literacy strategies? After participating in literacy coaching, did ELA and math teachers advocate for literacy strategies? After participating in literacy coaching, did ELA and math teachers regularly use literacy strategies in classroom practice? After participating in literacy coaching, was there an improvement in student communicative interactions? After participating in literacy coaching, was there an improvement in student-teacher relationships?* Key findings included:

- As reported on an end-of-year survey, most teachers (81%) reported incorporating literacy strategies in their instruction, and 76% advocated for more teachers at their school to participate in coaching.
- Almost all teachers interviewed (86%) reported using at least one PEP literacy practice on a weekly basis. The literacy practices used most regularly in classrooms involved discussion, both among students and between student(s) and teacher.
- A majority of teachers interviewed (71%) perceived an improvement in student communicative interactions attributed to the use of literacy strategies. Teachers described using more appropriate vocabulary with students, having a stronger overall framework for communicating with students, and using a more positive tone to communicate with students.
- Similarly, 71% of teachers interviewed perceived an improvement in student-teacher relationships attributed to their use of literacy strategies. Teachers described how their use of literacy strategies allowed them to build a sense of community and increased dialogue in their classrooms.

As a result of the implementation challenges discussed in this report and a shift in the organization's strategic vision, PEP opted to conclude its Literacy Coaching model at the end of academic year 2017-18. As such, this report does not present recommendations to guide ongoing implementation of Literacy Coaching within OnTrack Greenville. However, the results provide valuable lessons for other education stakeholders and initiatives throughout the country. Based on the results of this study, researchers defined three guidelines to inform the implementation of comparable literacy coaching initiatives: (1) Ensure schools are partner-ready; (2) Leverage ongoing collaborative inquiry groups with stakeholders; and (3) Use student-centered coaching practices to empower groups of teachers.

There were few key updates to the evaluation timeline, budget, program, or research team. The major update was the change in evaluation timeline due to the lack of SIF continuation funds to complete the final two years of program implementation and evaluation. As such, researchers executed a contingency plan to end the study after Year 3 (AY 2017-18). Members of the research teams at the Riley Institute at Furman University and Clemson University remained constant, as did staff members on the PEP leadership team. Further, there was no turnover among PEP Literacy Coaches at program sites.

This final report satisfies evaluation requirements for United Way of Greenville County's SIF grant award. Due to the implementation challenges experienced, a reduction in funding sources, and a renewed strategic vision of PEP, program implementation concluded at the end of academic year 2017-18. Evaluation next steps include the continued dissemination of report findings with OnTrack Greenville stakeholders and Greenville County Schools leaders overseeing district-wide literacy coaching efforts. Researchers then will share results more broadly to inform other literacy coaching efforts throughout the state, region, and nation.

I. Introduction

This report describes the implementation and impact evaluation of PEP's Literacy Coaching, a Sub-Grantee intervention within United Way of Greenville County's SIF-funded OnTrack Greenville initiative. This is a final report submitted to the SIF to satisfy grant evaluation requirements, and it addresses implementation and secondary outcome research questions from the SEP. The intended audience of this report is the SIF, as well as Grantee and Sub-Grantee stakeholders.

Leaders from nonprofits, the school district, and the community implemented OnTrack Greenville, a collective impact approach that includes the implementation of an Early Warning and Response System (EWRS) in four target middle schools. The EWRS uses real-time data to identify and flag students at-risk of disengaging from school. An EWRS team, also known as an OnTrack Team, meets weekly and includes a team of educators and student support specialists who discuss the unique needs of identified students and match them with appropriate response interventions, tracking each student's progress over time. OnTrack Greenville's federally supported SIF portfolio funded five Sub-Grantee interventions to ensure students have access to evidence-based interventions and supports. These five interventions include (1) a summer learning program for rising sixth grade students; (2) integrated student support services; (3) a semester-long character development course; (4) school-based health centers; and (5) literacy coaching for teachers. This report examines one of these subgrantee interventions: Public Education Partners Literacy Coaching.

A. Program Background and Problem Definition

1. Description of Community and Program Need

Since United Way of Greenville County applied for this SIF grant in 2014, the local community has continued to experience significant growth and development. After the biennial census in 2010, the population of Greenville County has grown by 12.7% to more than 500,000 people.[1] With a blossoming downtown, the city of Greenville has appeared on several national lists of best cities to live in or visit (Walker, 2018). The unemployment rate in the county dropped from 5.6% in February of 2014 to 2.5% in May of 2018.[2] At the same time, the county-wide poverty rate has decreased from 15.2% in 2014 to 12.4% in 2018.[3] A broad look at community indicators suggests many county residents are experiencing improved economic conditions.

A closer look reveals that not all residents have shared in this growth, especially in the White Horse Community, the geographic area targeted by OnTrack Greenville. As community developers have worked to revitalize neighborhoods close to the city center, low-income residents have continued to relocate to the White Horse Community, which straddles the edge of the city of Greenville. A recent assessment of neighborhood needs and assets revealed that many neighborhoods located in the White Horse Community, despite their wealth of community assets, continue to face challenges with

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[1] U.S. Census Bureau 2018 Population Estimates
[2] U.S. Department of Labor 2018 Labor Force Statistics
[3] U.S. Census Bureau 2018 **Small Area Income and Poverty Estimates (SAIPE)**

unemployment, family poverty, income inequality, housing, and access to healthcare and childcare, among others (Cohen et al., 2017).

Public schools in the White Horse Community are part of Greenville County Schools. The largest district in the state of South Carolina and 45th largest district in the nation, Greenville County Schools consists of 101 schools and centers serving 76,900 students with 6,000 teachers. Approximately half of Greenville County Schools students are living in poverty (52%) and/or eligible for free or reduced price meals (52%).

OnTrack Greenville serves four middle schools located in the White Horse Community. These middle schools serve a higher proportion of low-income and minority students than other schools in the district. In academic year 2017-18, each of these OnTrack Greenville sites had at least 79% of students living in poverty and 100% of students eligible for free or reduced price meals. Three of the four treatment middle schools receive Title I funds, while the fourth site is technically a school program and ineligible for Title I funds despite a high proportion of students living in poverty. Across these three sites, the Title I funds have been used for items such as: teacher salaries, instructional technology, instructional materials, social workers, nurses, parent and family engagement coordinators, translators, tutoring, and other student services. The Title I funding can also enable schools to reduce the size of some classes and provide additional support staff.

The demographic characteristics of OnTrack Greenville treatment school student populations varied from the characteristics of the entire district[4]. In academic year 2017-18, OnTrack Greenville treatment schools were home to a high percentage of Hispanic or Latino students. The percentage of Hispanic students attending OnTrack Greenville treatment schools ranged from 27% to 55%, higher than the district average of 18%. In addition, OnTrack Greenville schools generally had a higher percentage of Black or African American students (23% to 55%) than the district average of 23%. OnTrack Greenville schools also had a higher poverty index than the overall district poverty index. The percentages of male and female students attending OnTrack Greenville treatment schools were reflective of the district average.

Table 2. School Enrollment by Gender, Race or Ethnicity, AY 2017-18, 180th Day

Site	Enrollment (2017-18)	Gender		Race/Ethnicity				Poverty Index
		F	M	Black	White	Hispanic	Other	
District	75,220	49%	51%	23%	54%	18%	8%	53
Treatment School - Maximum	746	55%	57%	55%	26%	55%	9%	88
Treatment School - Minimum	109	43%	45%	23%	16%	27%	1%	79

One key academic indicator for predicting early disengagement among middle school students is course performance (Balfanz & Fox, 2011). Overall, students attending OnTrack Greenville middle schools placed well behind their peers on the South Carolina standardized assessment in ELA and math (SC READY) in academic year 2017-18. As shown below in Table 3, the percentage of students who met or

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[4] Greenville County Schools Population Statistics 2017-18 180th Day Enrollment Summary
https://www.greenville.k12.sc.us/About/main.asp?titleid=statistics1718

exceeded state standards in ELA ranged from 6.3% to 25.7% at OnTrack Greenville schools, while the percentage of students who met or exceeded state standards in math ranged from 3.6% to 25.7%.[5] These ranges of scores were well below the district and state averages in both subject areas.

Table 3. Percentage of Students who Met or Exceeded State Standards in ELA and Math, AY 2017-18

	Number of students	SC READY ELA	SC READY Math
State of South Carolina	340,478	41.7%	44.6%
District	34,220	48.9%	52.5%
Treatment School - Maximum	654	25.7%	25.7%
Treatment School - Minimum	112	6.3%	3.6%

Source: SC School Report Cards, 2019

In order to provide students additional support toward meeting or exceeding state standards in ELA and math, PEP implemented a professional development program for teachers, administrators, and instructional coaches at three OnTrack Greenville middle schools. In its literacy coaching approach, PEP specialists trained and coached educators in Balanced and Disciplinary Literacy strategies, two research-supported methods of instruction. During Balanced Literacy instruction, teachers continually assess students' reading level and match students to appropriate reading materials with strategies such as guided reading (teacher-led instruction with a small group) and independent reading. Balanced Literacy incorporates a myriad of methods including read-alouds, shared readings, shared writings, interactive writings, student conferences, and mini-lessons. Disciplinary Literacy, on the other hand, is advanced literacy instruction embedded within specific content areas (Shanahan and Shanahan, 2008). Disciplinary Literacy instruction engages students with subject-specific content, mirroring the methods mathematicians use to gain an understanding of their discipline. An ability to read content purposefully, engage in productive dialogue, and write in meaningful ways is essential to making sense of the complexities in various academic disciplines (Beauchamp & McCallum, 2010). Lee and Spratley (2010) argued that Disciplinary Literacy requires adolescent readers to develop a background knowledge of how to read discipline-based informational texts—a skill not often taught in ELA or content area courses. A more thorough description of the program model appears in the following section.

2. Description of Program Model

PEP's program theory of change focused on improving students' academic performance by incorporating coaching supports to increase teachers' use of Balanced Literacy and Disciplinary Literacy strategies within the classroom. The long-term intended effect was to reduce dropout rates by increasing the number of students who were meeting state standards in ELA and math.

Inputs

As shown in the logic model (Appendix B), the implementation of Literacy Coaching required six different inputs: (1) PEP and South Carolina's Coalition for Mathematics and Science at Clemson University (SCCMS) program staff knowledge and experience; (2) Greenville County Schools district and school and staff knowledge, and experience; (3) The use of the existing Greenville County Schools K-12

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[5] South Carolina Department of Education 2018 South Carolina College- and Career-Ready Assessments (SC READY) Test Scores https://ed.sc.gov/data/test-scores/state-assessments/sc-ready/2018/

Literacy Framework and professional development plan; (4) Financial resources from the UWGC SIF subgrant, Greenville Partnership for Philanthropy (GPP), and other match sources; (5) Early Warning and Response System and internal data system to track students' progress, and provide ongoing feedback; and (6) OnTrack Greenville's collective impact resources and support.

(1) PEP spearheaded the introduction and integration of Balanced Literacy into Greenville County Schools' (GCS) elementary schools, an approach to literacy instruction and coaching that Greenville County Schools has currently adopted in all district elementary schools. Similarly, SCCMS has an in-depth knowledge of and record of success in Disciplinary Literacy, an approach to mathematics literacy instruction and coaching.

(2) Greenville County Schools' Title I Department, including the Executive Director of Academic Innovation and Technology and Middle School ELA and math specialists, worked in close collaboration with PEP and its literacy coaches on project implementation. In addition, PEP relied on the expertise of each school's principal and instructional coaches on best practices for building trust and relationships with middle school teachers to effectively change classroom practice and improve student performance.

(3) Greenville County Schools built upon its existing K-12 Literacy Framework, with particular attention being paid to how Balanced Literacy and Disciplinary Literacy strategies at the OnTrack Greenville schools could be scaled to other middle schools. PEP's literacy coaching intervention followed Greenville County Schools' existing professional development focus around Diane Sweeney's *Student-Centered Coaching* approach.

(4) Collectively, PEP received $380,958 in funding per fiscal year from all OnTrack Greenville funding sources (SIF, GPP, internal match) for implementation of Literacy Coaching.

(5) The Early Warning and Response System (EWRS) allows schools to quickly and regularly identify students who are at risk of, or who already are, sliding off track. Using a color-coded dashboard, the EWRS helps school staff members easily recognize early warning signals for their students, such as a decrease in attendance or increase in disciplinary referrals. In addition, the data provided by the EWRS can be aggregated to show trends across the school, across grade levels, and across student subgroups. By giving teachers and other school staff members access to real-time data related to attendance, behavior, and course performance, the EWRS is an essential tool for assessing individual students' strengths and needs, and then using that information to provide students with the appropriate interventions.

(6) OnTrack Greenville is a community-wide initiative to ensure middle school students stay on track toward high school graduation. The initiative works with target schools, implementation partners, nonprofits, community members, government officials, funders, and other stakeholders to achieve the common goal of keeping students on track towards high school graduation and future success. OnTrack Greenville consistently convenes school leadership, implementation partners, and funders to coordinate and implement key aspects of the initiative for the coming school year, while also building a shared vision, governance, and accountability for OnTrack Greenville. Engaging with the community, families, students, other nonprofits, and grassroots organizations contributes to the overall collective impact of the initiative.

PEP's logic model includes a series of seven key activities: (1) Literacy strategy training institute for school administrators and instructional coaches; (2) Professional development and training for teachers; (3) Ongoing coaching in the use of literacy strategies; (4) The use of literacy strategies in the classroom; (5) Classroom observations of literacy approaches; (6) Data analysis and reflection with school and district instructional teams; and (7) Ongoing assessment of the Greenville County Schools secondary literacy framework.

(1) School administrators and instructional coaches were to receive professional development focused on recognizing high quality literacy instruction in ELA and math classrooms during observations and supporting teacher use of literacy strategies. School administrators and instructional coaches were to receive training in leadership strategies that support the development of a school-wide collaborative culture.

(2) ELA and math teachers were to receive professional development each year on the use of high-quality literacy strategies in their classrooms. Professional development for ELA teachers were to focus on the use of Balanced Literacy in the middle school classroom. Professional development for math teachers were to focus on the use of Disciplinary Literacy strategies in the middle school math classroom.

(3) Coaches trained in the use of Balanced Literacy and Disciplinary Literacy worked directly with teachers on-site at each school at least two days per week. Coaches planned lessons with teachers, observed lessons in action to collect data on use of literacy strategies, and used the data to reflect with teachers on their instructional practice. Coaches also modeled literacy strategies in teachers' classrooms, and co-taught lessons with teachers. In addition to coaching individual teachers, coaches worked with teachers in grade level teams to improve collective practice and use of literacy strategies. The program unit was the coaching activity and repeated coaching activities combined to form coaching cycles.

(4) ELA and math teachers selected and used literacy strategies in their classrooms. Literacy strategies were selected intentionally to support student learning of content and engage students in learning through reading, writing, and dialogue.

(5) Coaches and school administrators observed ELA and math classrooms to collect data on use of literacy strategies to engage students in content through reading, writing, and dialogue. Coaches use data collected from classroom observations to guide teachers on reflection of the used of literacy strategies in their classrooms and set professional goals regarding integration of literacy strategies in future lessons.

(6) Literacy coaches met with school and district instructional teams to analyze EWRS student achievement data, including course grades, formative assessments, MAP data, and state achievement data to determine the effectiveness of literacy strategies in classrooms. Data are to guided professional development and coaching opportunities for teachers.

(7) Coaches met with school and district instructional teams to assess the district secondary literacy framework and make recommendations for editing the framework based on data collected through classroom observations.

While these activities all appeared in the PEP literacy logic model, researchers noted a lack of a common coaching model during the pilot year of academic year 2015-16. In response, implementation study researchers provided a suggested student-centered coaching model built upon the concept of heavy coaching as defined by Killion (2009). Acknowledging the vital role that beliefs play in coaching practices, Killion asserted "coaching light" provides support to teachers but has a primary focus on building relationships, gaining acceptance from teachers, and seeking appreciation (p. 22). Light coaching might find coaches demonstrating instructional strategies or providing resources without a central focus on student learning or engaging teachers in analyzing core beliefs about teaching, learning and students. "Coaching heavy" involves high stakes interactions between teachers and coaches in order to maintain a laser-like focus on improving learning for students. No coaching model or set of coaching practices represent either category "since the key distinguishing factor is the coaches' intention and results" (p. 23). Thus, while the light coaching efforts in the pilot year represented a common attempt to build initial relationships with teachers, the coaching model in academic years 2016-17 and 2017-18 attempted to center the coaching of teachers on specific student learning outcomes in math and ELA.

Additionally, the implementation study evaluators suggested the student-centered coaching model use a coaching cycle with three common coaching activities conducted each time the coach engaged with a teacher: (1) planning meetings to identify student-learning outcomes; (2) in-class work where coaches conduct formative assessments; and (3) debriefing meetings where teacher(s) and coach(es) analyze student formative assessment data to determine next instructional steps.

Through the activities listed above, PEP implementation was expected to produce the following outputs: (1) 100% principal-designated school administrators and instructional coaches trained in literacy strategies; (2) 100% ELA and math classroom teachers trained in literacy strategies; (3) At least four one-on-one literacy coaching sessions provided for each ELA and math classroom teacher per academic year; (4) At least four ELA and math classroom visits by a literacy coach (e.g., observation, modeling, co-teaching) per academic year; and (5) At least 90% ELA and math teachers using coach-designated literacy strategies in the classroom.

Outcomes and Impacts

The desired proximal outcomes of the PEP intervention included: (1) Increased awareness of literacy strategies by ELA and math teachers; (2) Increased advocacy of literacy strategies; (3) Regular, self-directed use of literacy strategies in classroom practice by ELA and math teachers; (4) Improvement in communicative interactions; (5) Evidence of stronger student-teacher relationships; and (6) Students are actively engaged in ELA and math content as evidenced by reading, writing, and dialogue.

(1) Increased awareness of literacy strategies among teachers is defined as teachers recognizing classroom literacy strategies when used in professional development settings and when observed in classrooms. In addition, teachers have knowledge of multiple strategies to support student learning of content through reading, writing, and dialogue.

(2) Increased teacher advocacy of literacy strategies is defined as teachers self-reporting the value of using literacy strategies to support student learning of content. Teachers encourage other educators to incorporate literacy strategies into their classroom instruction, share literacy strategies in settings with members of other content areas in order to determine effectiveness of the strategy, and adjust for different purposes.

(3) Increased use of literacy strategies is defined as strategies being intentionally selected prior to the lesson to support student learning of content. Teachers select the strategy that will best support students in meeting the goals of the lesson from multiple available strategies. Prior to initial student use of a strategy, teachers model the strategy to provide students an example in the use of the specified strategy. Multiple opportunities are provided for students to utilize reading, writing, and dialogue strategies when interacting with texts and when processing content.

(4) Greater communicative interactions occur in classrooms with a positive culture. Students communicate often with one another and with the teacher, the proportion of student talk to teacher talk is weighted toward student talk in the classroom, and teacher and student questions support thinking about content and/or text. Students and the teacher have respect for what others have to say.

(5) Stronger student-teacher relationships are evidenced by teachers encouraging and valuing student participation in classroom activities, as well as students participating in selecting strategies to use for learning. Teachers expect students to be responsible for the thinking in the classroom. The teacher is viewed as a resource person who is patient with students and actively listens to student thinking about text and content. Students exhibit a willingness to take risks with challenging material with provided teacher support.

(6) Students thinking about ELA and math content is visible through purposeful reading of text, meaningful writing to share their thinking and understanding, and productive dialogue with one another around content. Students who are engaged in learning are interacting with the content, with other students, and with the teacher at a depth of knowledge appropriate for the selected standard.

Ultimately, PEP intended for its intervention program and the resulting outcomes to lead to improved student course performance as measured by student standardized test scores in ELA and math.

B. Overview of Prior Research

Since the Coleman report (Coleman et al., 1966), discourse and policies related to the equality of education for students have shifted towards an output model with a common, widely accepted premise: improving teachers improves student learning. In response, professional development efforts for in-service teachers have moved from stand-alone workshops to coaching models that incorporate job-embedded professional learning opportunities with the hope that reflection on practice and collaboration with an expert practitioner will improve the quality of teaching and thus result in increased student learning.

Joyce and Showers (1982) originally defined coaching as "helping teachers analyze the content to be taught and the approach to be taken, and making very specific plans to help the student adapt to the new teaching approach" (p. 384). But, it also has been defined as reflective coaching (Nolan & Hillkirk, 1991), a cognitive apprenticeship (Costa, Garmston, Anderson, & Glickman, 2002), as a linguistic partnership (Caccia, 1996) and as a "way for one person to mediate and influence the thinking and

behaviors of another person" (Lindsey, Martinez, & Lindsey, 2006, p. 5). Coaching can be "a process for developing the present and future capacities" (Brown, Stroh, Fouts, & Baker, 2005, p. 5), whether that is the individual teacher, a group of teachers or the entire school's capacity to reform (Neufeld & Roper, 2009). Defining coaching is complex because it looks differently in individual school contexts and because there is a difference between "being a coach and doing coaching" (Deussen, Coskie, Robinson, & Autio, 2007, p. iii). While literacy coaching historically has been used to define the coaching that occurs in elementary school and instructional coaching has been used primarily in middle and high schools, instructional coaching certainly involves the coaching of literacy instruction and terms are often conflated or used differently in different schooling contexts. For this evaluation, literacy coaching is defined as the work between a coach and content area teacher(s) to help them implement and utilize strategies designed to improve their students' ability to read, write, and succeed in middle school math and ELA classes.

Like other reform efforts, literacy coaching in middle schools can be defined both by its accompanying potential. In the 2006 Standards for Middle and High School Literacy Coaches written by the International Reading Association in collaboration with the National Council of Teachers of English, National Council of Teachers of Mathematics, National Science Teachers Association and the National Council for the Social Studies (2006), the introduction to these standards included the following quote:

> "Current practice suggests a *promising* avenue for intervention that includes qualifying literacy experts to coach content area teachers in the upper grades who currently lack the capacity and confidence (and sometimes the drive) to teach reading strategies to students particular to their disciplines. While there are few studies—and no systematic body of research—reporting on the direct link of literacy coaching to student learning, as noted above, schools that have adopted this approach report *remarkable improvements*." (p. 2)

Within high-needs urban middle schools, where diverse students possess a wide range of literacy practices, knowledge, and learning needs, literacy coaching represents a promising model of supporting teacher learning and thereby supporting student literacy and learning within content areas.

Evaluation of Literacy Coaching

Literacy coaching often rests upon a "causal cascade" (Atteberry, Bryk, Walker, & Biancarosa, 2008) positing that collaboration with a literacy coach leads to a change in the attitude, beliefs, and practices of teachers and therefore subsequently improves student learning and achievement. In their review of the research on coaching, Cornett and Knight (2008) found coaching can impact teacher attitudes and practices, yet stated "the missing link, so to speak, in coaching research, is studies that clearly show that coaching improves the specific teaching practices that increase student achievement" (p. 210). In fact, the authors found no published, randomized-control-style studies of the effectiveness of coaching, while finding that most studies on literacy coaching occurred in elementary school contexts.

Likewise, in their status report on teacher development for the National Staff Development Council, Darling-Hammond, Wei, Andree, Richardson and Orphanos (2009) concluded the "jury remains out as to its (coaching) effectiveness" and reminded that the content of professional learning matters as much as the process (p. 11). An additional study indicated a correlation between having instructional coaches in secondary schools and increases in reading achievement in the school (Lockwood, McCombs, & Marsh, 2010). However, a correlation between having a coach and increases in test scores could be indicative of substantive change towards student-centered instructional practices and student achievement or it

could merely be coincidence. In their review of instructional coaching, Borman and Feger (Borman & Feger, 2008) reported that empirical research on the impact of middle and secondary instructional coaching remains limited by the complexity of multiple coach, teacher, and student variables, as well as the diversity of coaching models that impact coaching.

If efficacy expectations related to adolescent literacy are not met, coaching, like other middle school reforms, runs the risk of being attempted and abandoned by policy makers and schools who run out of patience, money, or both (Knight, 2007). Knight described an "Attempt-Attack-Abandon" cycle to describe typical educational reform efforts in schools (p. 200). During the "Attempt" phase, change leaders introduce a new practice into a school. However, very little support is available to help those who implement the reform. Before the reform is implemented with fidelity, various stakeholders begin to criticize the reform, typically on grounds that it has failed to achieve the desired outcomes. When the critiques mount, the reform is abandoned, often without an understanding for its demise and only to usher in another reform effort. While many school districts, school-university partnerships, and educational organizations have "adopted" coaching as reform, adapting coaching into a well-planned model of professional learning for teachers with clear goals and roles for coaches remains a central tenet of promising coaching models (Walpole & McKenna, 2008).

Among existing evaluations of literacy coaching, a growing body of evidence supports the use of literacy coaching in schools to improve both student and teacher outcomes. Matsumura, Garnier, Correnti, Junker, and Bickel (2010) found that teachers who received content-focused literacy coaching said their students frequently connected "their responses to ideas expressed by other students during discussions." This suggests that students are more likely to engage in meaningful interactions when their teachers have received literacy coaching. Additional studies have found that English Language Learners (ELLs) tend to improve their reading achievement test scores when their teacher has received literacy coaching. Other studies have shown that students experience gains across many content areas when their teachers receive professional development from literacy coaches (Sailors & Price, 2010). Van Keer and Verhaeghe (2005) compared two different coaching models and found that both models produced positive student outcomes, including gains in reading comprehension and strategy use.

Regarding PEP's intended outcomes for teachers, Cantrell and Hughes (2008) investigated the impacts of professional coaching on sixth- and ninth-grade teachers. The results of this study indicated that quality professional development in literacy can lead to an improvement in teacher efficacy, which subsequently allows teachers to implement with even higher fidelity the literacy practices they have learned. Finally, a two-year study conducted by Moje (1996) suggested that successfully practicing literacy strategies in the classroom can improve the relationships between a teacher and his or her students.

The Literacy Coaching model's incoming level of evidence was preliminary. In order to substantiate a preliminary level of evidence, PEP provided local data for both approaches of coaching it planned to implement jointly: Balanced Literacy and Disciplinary Literacy. For Balanced Literacy, PEP compared the 2014 SC Palmetto Assessment of State Standards (PASS) scores in ELA of six treatment elementary schools in the Upstate region of South Carolina to matched comparison schools throughout the state. The six treatment schools had been implementing Balanced Literacy for three academic years; thus, the third-, fourth-, and fifth-grade PASS scores all reflected three years of Balanced Literacy implementation. Of the 18 analyses completed, eight indicated a statistically significant advantage for the Balanced Literacy students. For Disciplinary Literacy, PEP analyzed individual student mean scale scores on PASS from one treatment school. The data include 5th grade scores in 2012 (pre-Disciplinary Literacy) and 6th

grade scores in 2013 (post-Disciplinary Literacy). A one-sample t-test that compared the difference in pre-/post-scores with the state difference in mean scale scores was statistically significant, indicating an advantage for the students receiving the Disciplinary Literacy treatment. While both coaching approaches had preliminary evidence at the beginning of the study, no studies had examined the combined coaching model previously.

C. Overview of Evidence Level and Impact Study

The Literacy Coaching model's incoming level of evidence was preliminary and this study targeted a moderate level of evidence. In order to achieve a moderate level of evidence, this study intended to utilize a single-site non-randomized group design with groups formed by propensity score matching. For confirmatory impact research questions, there were to be two comparison groups. Treatment students were to be matched to (1) other students in the _same school district_ attending non-treatment schools; and (2) other students attending _Title I schools across the state_ of South Carolina. The use of these multiple comparison groups improved the internal and external validity of the study, as each comparison group presented different threats to validity. Researchers planned to match students using a propensity score model that included race, gender, grade level, English proficiency, special education status, free and reduced price meal eligibility, and baseline outcome variables.

Due to the limited geographic scope of the initiative and the inability to randomly assign students to treatment and control conditions, researchers were not able to design a study to target a strong level of evidence. The present study intended to advance the evidence base by assessing the combined impact of these two literacy coaching approaches. In addition, Balanced Literacy traditionally is an approach used at the elementary level; therefore findings from this study were intended to contribute to the evidence base for the approach's effectiveness with middle grades students.

As noted, the implementation study found that implementation fidelity was too low to justify conducting the confirmatory impact analyses as planned. With a low level of model fidelity, there would have been no reasonable way to connect significant findings to program implementation. The post-only descriptive analyses used to assess exploratory secondary outcome research questions were not rigorous enough to advance the level of evidence, though they did provide valuable insights into the implementation and teacher-level outcomes of literacy coaching.

D. Research Questions

The study includes implementation research questions related to the following areas: (1) Literacy Strategy Training Institute; (2) Professional Development and Training for Teachers; (3) Ongoing Coaching in Use of Literacy Strategies; and (4) Classroom Observations of Literacy Approaches. The study also includes impact research questions related to exploratory secondary outcomes.

The following implementation research questions examine the Literacy Strategy Training Institute:

RQ1. _What were the objectives and activities at the Literacy Strategy Training Institute?_

RQ2. _How did these professional development events conceptualize the literacy frameworks of Balanced Literacy and Disciplinary Literacy?_

RQ3. *What were the experiences and reactions of participating administrators and instructional coaches at the Literacy Strategy Training Institute?*

The following implementation research questions examine the <u>Professional Development and Training for Teachers</u>:

RQ4. *What professional development events occurred for participating teachers?*

RQ5. *What were the objectives and activities of the professional development events for participating teachers?*

RQ6. *How did these professional development events conceptualize the literacy frameworks of Balanced Literacy and Disciplinary Literacy?*

RQ7. *What were the experiences of participating teachers at the professional development events?*

The following implementation research questions examine <u>Ongoing Coaching in Use of Literacy Strategies</u>

RQ8. *How often, how long, and with whom did the coaching of literacy strategies occur?*

RQ9. *What events occurred during coaching cycles and sessions?*

RQ10. *What were the experiences of teachers and coaches involved in coaching sessions?*

RQ11. *What supported or impeded valuable coaching sessions?*

The last set of questions are *exploratory research questions* related to the <u>secondary outcomes</u>:

RQ15. *After participating in literacy coaching, did ELA and math teachers demonstrate a high awareness of literacy strategies?*

RQ16. *After participating in literacy coaching, did ELA and math teachers advocate for literacy strategies?*

RQ17. *After participating in literacy coaching, did ELA and math teachers regularly use literacy strategies in classroom practice?*

RQ18. *After participating in literacy coaching, was there an improvement in student communicative interactions?*

RQ19. *After participating in literacy coaching, was there an improvement in student-teacher relationships?*

E. Contribution of the Study

1. Level of Evidence Generated by the Study

The proposed impact study design targeted a moderate level of evidence. Researchers did not conduct the statistical analyses of impacts for confirmatory research questions due to insufficient model fidelity of implementation. In the absence of these analyses, the study was not able to generate a moderate level of evidence. Nonetheless, the lessons learned from the implementation study and exploratory analyses still provide valuable learning opportunities to the field of literacy coaching and reaffirm a preliminary level of evidence.

2. Strengths and Limitations of the Study

The primary strength of the study is that the implementation study served as a mechanism for guiding and strengthening the model's theory of change and implementation at the schools. The implementation study researchers, experts in the fields of Balanced and Disciplinary Literacy, worked very closely with PEP coaches and stakeholders, in a way becoming coaches to the literacy coaches. While maintaining their role as third-party evaluators, they also recognized early on the weaknesses in program implementation and served as embedded researchers and consultants to guide implementation. This allowed stakeholders to maximize learning opportunities along the way and continue to seek joint solutions to implementation challenges.

There also were several limitations of the study. Primarily, the implementation of the model deviated from the intended design, causing researchers to shift and revise data collection instruments and timelines throughout the course of the study. While modifications to the evaluation plan ultimately were in the best interest of project stakeholders and the research teams, the changes weakened the study design. Another limitation is that the teachers invited to participate in one-on-interviews were a convenience sample based on program data provided by PEP; these teachers were more likely to have participated in moderate or heavy coaching. A random sample of teachers would have strengthened the design of the study. In addition, researchers did not audio-record the interviews. Instead, a research assistant joined the interview and transcribed the dialogue in person, possibly resulting in small inaccuracies in the data. IRB protocols for storing and protecting audio-recordings were more stringent; therefore, the live transcription of interviews was easier to facilitate despite introducing this limitation. Further, many of the instruments and measures used in the study were not validated before use.

3. Connections of this Study to Future Research

This study intended to build upon the existing body of research on the Balanced Literacy and Disciplinary Literacy coaching models, while shedding light on the PEP-specific model of intervention. This intervention was unique in that it was a combined model of both Balanced and Disciplinary Literacy strategies implemented together and previously had not been evaluated or studied in-depth. While the study failed to advance the level of evidence of the model, it did provide valuable knowledge on the conditions necessary to implement a literacy coaching model at Title I schools successfully, contributing significantly to the body of knowledge on coaching, especially within the context of school-community partnerships.

II. Study Approach and Methods

A. Implementation Study Design

An in-depth implementation study of PEP's Balanced and Disciplinary Literacy Coaching strived to achieve two goals: (1) assess the level of fidelity to the specific literacy coaching model that was proposed, and (2) provide implementation recommendations in order to strengthen model fidelity and maximize the impact of services provided to students.

The implementation evaluation design utilized a mixed-methods approach. The study design examined the fidelity and variance of PEP's implementation of a literacy coaching intervention to train teachers in Balanced Literacy and Disciplinary Literacy in three OnTrack Greenville middle schools. To assess the implementation fidelity of PEP's proposed model, researchers conducted an implementation evaluation plan which used monthly cycles of data collection to ascertain how components of the logic model were being implemented. Specifically, researchers relied upon focus groups, surveys, semi-structured interviews, and observations to document the implementation of coaching and collaborative events between coaches and teachers. These monthly cycles of data collection culminated in semester reports that provided ongoing feedback regarding strengths, limitations, and suggestions for improvement.

Ongoing coaching was measured monthly through the observation of some aspects of the coaching cycle (note: not all stages of the coaching cycle were implemented regularly) and interviews with the coaches. A complete coaching cycle ideally spans two or more school days and includes a coach-teacher(s) planning session, in-class coaching activities, and a coach-teacher(s) debriefing session. A coaching cycle could be completed in one day if the coach and participating teacher(s) are able to conduct all three events; however, a coaching cycle typically spans multiple days. Informal interviews with coaches provided data on coaching practices and tensions that informed implementation modifications. Audio-recorded conversations and field notes provided data sources. Coaches also were requested to complete coaching logs to document and reflect upon the week's coaching sessions and/or classroom visits. These sources provided information about the experiences and logistics of the coaching sessions with participating teachers.

At the conclusion of each observation and interview, the evaluators used individual analytic memos to synthesize emerging themes. After the transcription of interviews and analytic memos, cross-case analysis resulted in emerging themes. The themes determined from interview data were triangulated with other data—namely monthly coaching cycle observations, coaching artifacts, and informal interviews with both stakeholders and administrators.

In addition to the ongoing observations, interviews, and coaching logs that were collected each month, focus group meetings occurred at the onset and during the middle of year two of implementation (academic year 2016-17). In order to facilitate alignment of implementation goals for year two, initial focus group meetings with stakeholders including the PEP coaches, PEP leaders, and school administrators were conducted in the beginning of the academic year 2016-17 to share findings from year one of implementation and suggestions for year two. Additionally, a focus group was conducted with all four of the coaches in the beginning of the academic year 2016-17 to reflect on coaching from year one and to discuss supports and impediments to the enactment of the coaching model. An

additional focus group was conducted during mid-year to discuss student-centered coaching practices and impediments to this work in the focal schools.

B. Impact Study Design

The primary intended impact of Literacy Coaching was an improvement in student course performance in ELA and math, as measured by state standardized test scores. In order to achieve a moderate level of evidence, this study intended to utilize a single-site non-randomized group design with groups formed by propensity score matching. However, findings from the implementation study revealed that PEP experienced several challenges with implementation resulting in insufficient model fidelity. For this reason, researchers and project stakeholders agreed it was not methodologically sound to conduct confirmatory research analyses.

Researchers did examine the exploratory secondary outcomes in the Literacy Coaching logic model, but with a much less rigorous design. To answer research questions related to the exploratory secondary outcomes, researchers collected post-program survey and interview data with teachers who participated in Literacy Coaching at treatment schools.

C. Data Collection

Literacy Coach Interviews. Literacy Coaches participated in semi-structured interviews to gather information about the training and coaching sessions they conducted with teachers. Results from data analysis were used to report findings and assist with program improvements and transitions between academic years. These interviews were conducted two times per academic year and lasted 45 – 60 minutes. See Appendix C.

Principal Interviews. Principals participated in semi-structured interviews to gather information about perceptions of literacy coaching at each school. Results from data analysis were used to report findings and assist with program improvements and transitions between academic years. These interviews were conducted two times per academic year and lasted 45–60 minutes. See Appendix D.

Literacy Coaching Log. Literacy coaches completed a weekly literacy coaching log to track the frequency, activity, content, and emphasis of their coaching interactions. Literacy Coaches spent about 15 minutes each week completing the log. A list of data fields appearing on the coaching log is located in Appendix E.

Monthly Literacy Coach Observations. In order to determine the alignment of enacted collaborative practices with both Balanced Literacy and Disciplinary Literacy teaching frameworks, each month, researchers conducted observations of each coach as he or she (1) conducted a coaching session and (2) visited a classroom. The Coaching Observation Form appears in Appendix F.

Teacher Experience Survey. Participants who attended the annual Literacy Professional Development Workshops were to be invited to complete a survey to garner an understanding of how the participants understood the literacy frameworks. This short open-ended survey should have required 10–15 minutes to complete. The data collection activity did not occur, as PEP did not implement the Literacy Professional Development Workshops.

Professional Development Focus Groups. Researchers planned to conduct focus groups after the annual Literacy Professional Development Workshops for teachers. Teachers who participated in the workshop were to be invited to participate in the focus group to provide data concerning their reaction to the event and their learning about Balanced Literacy and Disciplinary Literacy frameworks. This proposed focus group was to last 45–60 minutes. The data collection activity did not occur, as PEP did not implement the Literacy Professional Development Workshops.

OnTrack Greenville Educator Survey. Researchers administered an electronic survey to educators at each of the OnTrack Greenville treatment schools. The purpose of this survey was to collect information related to educators' perceptions, awareness, and/or usage of each of OnTrack Greenville's subgrantee interventions. In addition, this survey included items specifically for teachers who self-identified as having participated in PEP coaching during the current academic year. In academic year 2015-16, treatment school principals emailed the survey link to all educators employed at their schools. There was an approximate response rate of 70% and the average survey completion time was 21 minutes. In academic year 2016-17, researchers emailed the survey link directly to educators at the treatment schools. The response rate was 75% and the average survey completion time was 26 minutes. In academic year 2017-18, educators at the treatment schools again accessed the survey through an online link received via email. The response rate was 65% and the average survey completion time was 21 minutes. Researchers used survey logic to provide a unique sub-set of survey items to teachers who self-identified as having worked with a PEP Literacy Coach in academic years 2016-17 and 2017-18. In academic year 2016-17, 20 teachers completed this sub-set of survey items, while 17 teachers completed these items in academic year 2017-18. The OnTrack Greenville Educator Survey is located in Appendix G.

Teacher Interviews. Researchers invited math and ELA teachers at OnTrack Greenville treatment schools to participate in individual interviews in the spring of each academic year (March/April). The purpose of the interviews was to collect information on teachers' knowledge and self-reported use of literacy practices, as well as their perceptions of classroom culture. The interviews lasted about 45 minutes and were scheduled at a time that was convenient for teachers, usually during a planning period. Two members of the Research Team attended each interview: (1) one researcher led the interview and asked questions, and (2) the second researcher transcribed the interview on a laptop or tablet. Researchers did not audio-record the interviews. As an incentive to participate in an interview, teachers received a $20.00 VISA gift card. Researchers interviewed nine teachers in academic year 2016-17 and five teachers in academic year 2017-18, for a total of fourteen teacher interviews. The Teacher Interview Protocol is located in Appendix H.

To address implementation research questions and exploratory secondary outcomes, researchers utilized qualitative data analysis techniques to reliably code the qualitative data sources, including interviews, surveys, and focus groups,. Achieving reliability in a research design is paramount for the dissemination of findings from a trustworthy source. As noted by Krippendorf (2004, p. 222), reliability in qualitative data analyses relies on the "stability, reproducibility, and accuracy…[which] turn out to be functions of the agreement achieved among observers, coders, judges, or measuring instruments." For this study, researchers sought to achieve intercoder reliability and intercoder agreement when analyzing the structured, in-depth forms of qualitative data gathered for this study. Intercoder reliability refers to different coders using a code in the same way, whereas intercoder agreement refers to two or more

coders reconciling discrepancies between their codes through conversation (Campbell, Quincy, Osserman, & Pedersen, 2013).

Researchers employed a methodological coding process which included unitizing (determining the unit of analysis used for coding), coding, discussing code discrepancies, and refining both codes and code definitions throughout the entire analysis process. Every year of implementation, two researchers coded the qualitative data using the same, agreed-upon code. This process took place over the course of two weeks, after which the coders came together to discuss any differences between their coded data results. Therefore, researchers in this study employed both intercoder reliability and intercoder agreement.

D. Measures

Socio-Demographic Variables

Race. Teacher race was measured on the OnTrack Educator Survey. There were five categories of teacher race: "African American," "Caucasian," "Hispanic," "Other," and "Prefer not to say." Teachers self-identified their race.

Gender. Teacher gender was measured on the OnTrack Educator Survey. Teacher gender consisted of three groups: "male," "female," and "prefer not to say." Teachers self-identified their gender.

Education. Teacher education was measured on the OnTrack Greenville Educator Survey. There were three categories of teacher level of education: "Bachelor's Degree," "Master's Degree," and "Master's Degree + 30 or higher" (a Master's Degree with at least 30 additional credits earned). Teachers self-identified their level of educational attainment.

Teacher Experience. There were two measures of educator experience. On the OnTrack Greenville Educator Survey, teachers self-reported the number of years of experience they had working in K12 education using the following five categories: "1 year," "2–4 years," "5–7 years," "8–10 years," and "11+ years." Teachers who participated in a one-on-one interview also self-reported the number of years they had taught. Researchers grouped responses into four categories: "less than 1 year," "1–5 years," "6–10 years," and "11+ years."

Independent Variables

Treatment. The treatment group consisted of ELA and math teachers in the treatment schools who met the following parameters: 1) the teachers agreed to participate in the study and 2) the teacher participated in literacy coaching in academic year 2016-17 and/or 2017-18. This categorical measure consisted of two groups, "teacher received treatment" and "teacher did not receive treatment."

Implementation Study Variables

Frequency of coaching activities (Educator Survey). Teachers were asked questions measuring the frequency, type, and duration of PEP literacy coaching activities they participated in during the academic year in the educator survey. Frequency of PEP coaching activities was split into four groups, "quarterly," "weekly," "monthly," and "varies."

Types of coaching activities (Educator Survey). Types of PEP coaching activities was split into seven categories: "sharing resources," "teacher/student observation," "meeting to plan instruction," "collection of student formative assessment data, "debriefing of instruction," "in-class modeling of instruction," and "other." Teachers selected all types of coaching activities they had participated in.

Amount of in-class collaborative coaching. Number of days of in-class collaborative coaching consisted of four categories: "1–5 days," "6–10 days," "11–15 days," "or 15+days." Teachers self-selected the category corresponding to the amount of in-class collaborative coaching they had received.

Frequency, duration, and types of coaching activities. Coaches maintained detailed coaching logs of the frequency and types of coaching activities they participated in with each teacher. Types of coaching activities were split into three categories: "planning," "in-class support," and "debriefing."

Most valuable coaching activities. Teachers reported on the OnTrack Greenville Educator Survey which coaching activities they perceived as most valuable. There were seven categories of coaching activities: "sharing resources," "teacher/student observation," "meeting to plan instruction," "collection of student formative assessment data," "debriefing of instruction," "in-class modeling of instruction," and "other." Teachers were able to select all of the PEP literacy coaching activities they found to be most valuable.

Teacher experiences participating in PEP literacy coaching. Several items on the Educator Survey measured teacher perceptions of the PEP literacy coaching. These included, "My students have benefitted from my participation in literacy coaching," "I feel confident incorporating teaching practices I learned through coaching into my instruction," "Literacy coaching has enhanced my instruction," and "My students are more engaged in class when I use teaching practices I learned through literacy coaching." Responses were measured on a four-point Likert-type scale ranging from "completely agree" to "completely disagree."

Exploratory Secondary Outcome Variables

Teacher awareness of literacy strategies. To demonstrate overall awareness of literacy strategies, teachers who participated in interviews were asked to identify a literacy strategy that had been most useful to them. Eight categories of strategies emerged from interviews: "curriculum planning," "student-student discussions," "student-teacher discussions," "student questioning," "classroom management," "visual aids," "assessment," and "none."

Teacher advocacy of literacy strategies. Teachers responded to two items on the OnTrack Greenville Educator Survey measuring their advocacy of literacy strategies. First, teachers responded to the prompt of, "More teachers at my school should participate in literacy coaching." Responses were measured on a four-point Likert-type scale ranging from "completely agree" to "completely disagree." Teachers also reported on their likelihood of recommending PEP literacy to their teaching colleagues, with responses falling into the following categories: "not at all likely," "somewhat likely," "likely," and "very likely."

Teacher use of literacy strategies. There were several measures of teacher literacy strategy use on the OnTrack Greenville Educatory Survey and one-on-one teacher interviews.

Overall use of literacy strategies. Teachers responded to one item on the OnTrack Greenville Educator Survey measuring their use of literacy strategies: "I regularly incorporate teaching practices I learned through coaching into my instruction." Responses were measured on a four-point Likert-type scale ranging from "completely agree" to "completely disagree." Teachers who participated in interviews also reported on their general frequency of literacy strategy use in the classroom. Three categories of literacy strategy use emerged from interviews: "daily," "weekly," and "rarely."

Type of literacy strategies most often used in the classroom. Interviewed teachers indicated the literacy practice they most regularly used in the classroom. There were six categories of literacy practices that emerged from interviews: "writing, "analyzing readings," "breaking into groups," "discussions," "reading," and "none."

Frequency of literacy strategy use in the classroom. Teachers self-reported the frequency with which they used the literacy strategy they identified in the previous question. There were six categories of literacy strategy use: "daily," "50% of days," "weekly," "monthly," "varies," and "none."

Formative assessment in the classroom. Teachers were asked to identify the methods they used to formatively assess students' progress in the classrooms. These methods were split into six groups: "analyzing students' writing," "listening to students' discussions," "asking students questions," "watching/observing students," "providing written feedback," "other," and "none."

Student-teacher communication. Interviewed teachers described how using literacy strategies had changed their communication with students. Six categories emerged from interviews: "more appropriate vocabulary," "framework for communication," "directions are more clear," "communication is more positive," "more aware of students' needs," and "none."

Student-teacher relationships. Interviewed teachers described the effects of implementing literacy practices on their relationships with students. Six categories emerged from interviews: "builds community," "increases dialogue," "appropriate expectations," "increases students' trust," "decreases stress/tension in classroom," and "no effect."

III. Study Participants

A. Characteristics of Educator Survey Respondents

In academic years 2016-17 and 2017-18, researchers administered an end-of year survey to all educators at OnTrack Greenville schools. The survey contained a sub-set of items about literacy coaching. Teachers were asked to self-identify whether they had worked with a PEP coach during the academic year. Those who said they had worked with a PEP coach were then asked a series of questions measuring the implementation and impact of PEP literacy coaching, in addition to basic demographic questions. Overall, 20 of the teachers participating in the survey indicated that they had received PEP coaching in academic year 2016-17 and 17 teachers indicated they received PEP coaching in academic year 2017-18. The demographic characteristics of teachers who reported participating in PEP literacy coaching are summarized in Table 4.

Table 4. Demographic Characteristics of Educator Survey Respondents

	AY 2016-17		AY 2017-18		Total	
School	**N**	**%**	**N**	**%**	**N**	**%**
Treatment School A	3	15%	9	53%	12	32%
Treatment School B[a]	7	35%	0	0%	7	19%
Treatment School C	10	50%	8	47%	18	49%
Subject Area[b]						
ELA	13	65%	11	65%	24	65%
Math	10	50%	7	41%	17	46%
Education Level						
Bachelor's Degree	3	15%	5	29%	8	22%
Master's Degree	9	45%	8	47%	17	46%
Master's Degree + 30	8	40%	4	24%	12	32%
Years of Experience at Current School						
1 Year	7	35%	4	24%	11	30%
2–4 Years	7	35%	8	47%	15	41%
5–7 Years	2	10%	1	6%	3	8%
8–10 Years	0	0%	2	12%	2	5%
11+ Years	4	20%	2	12%	6	16%
Years of Experience in K-12 Education						
1 Year	0	0%	1	6%	1	3%
2–4 Years	3	15%	3	19%	6	16%
5–7 Years	2	10%	1	6%	2	5%
8–10 Years	5	25%	1	6%	6	16%
11+ Years	10	50%	10	63%	20	54%

Data Source: OnTrack Greenville Educator Survey
[a] School B did not participate in the intervention in academic year 2017-18
[b] Teachers were able to select more than one subject area, as many taught multiple subjects.

In academic year 2016-17, a majority of the teachers (85%) who completed the teacher survey taught at either School B or School C, and only 15% taught at School A. In academic year 2017-18, respondents

were more evenly divided between School A and C, as School B did not participate in the intervention that academic year. Overall, 32% of survey respondents taught at School A, 10% at School B, and 49% at School C.

Across both years of the study, a large majority of respondents (78%) said they had completed at least a Master's Degree, while 22% of respondents said they had completed a Bachelor's degree. In both years of the study, slightly more ELA teachers (65%) responded to the survey than math teachers (46%).

Overall, teachers participating in the survey indicated that they had not been teaching at their current school for a long time. More than two thirds (71%) of respondents said they had been teaching at their current school for less than five years. Only 16% of respondents had been working at their current school for eleven or more years. Despite being relatively new to their perspective schools, teachers overall had been working in the field of K-12 education for a longer period of time. Nearly three quarters (70%) of respondents had been working in K-12 education for more than 8 years and only 19% of respondents has been working in K-12 education for less than five years.

B. Characteristics of Teacher Interview Participants

Researchers invited 22 teachers to participate in one-on-one interviews. PEP provided researchers a roster of teachers whose literacy coaching most closely reflected the intended model of moderate–high intensity literacy coaching. Of the 22 teachers contacted by researchers, 14 participated in one-on-one interviews. These teachers responded to a variety of questions measuring the implementation and impact of PEP literacy practices, in addition to basic demographic questions. The demographic characteristics of interview participants appear in Table 5.

Table 5. Demographic Characteristics of Teacher Interview Participants

	AY 2016-17		AY 2017-18		Total	
Years Teaching	N	%	N	%	N	%
Less than 1 Year	0	0%	0	0%	0	0%
1–5 Years	2	22%	3	60%	5	36%
6–10 Years	5	56%	1	20%	6	43%
11+ Years	2	22%	1	20%	3	21%
Years Teaching Current Subject						
Less than 1 Year	0	0%	0	0%	0	0%
1–5 Years	5	56%	4	80%	9	64%
6–10 Years	2	22%	1	20%	3	21%
11+ Years	2	22%	0	0%	2	14%
Years Teaching at Current School						
Less than 1 Year	0	0%	0	0%	0	0%
1–5 Years	6	67%	4	80%	10	71%
6–10 Years	2	22%	1	20%	3	21%
11+ Years	1	11%	0	0%	1	7%

Data Source: Teacher Interviews

Overall, the teachers participating in PEP interviews had been teaching for a moderate length of time. Three of the teachers (22%) had been teaching for 11 or more years, and another six teachers had been teaching for 6–10 years (43%). The remaining participants had only been teaching for 1–5 years (36%).

Of the teachers participating in the interviews, nine (64%) said they had been teaching their current subject for less than five years. Three participants (21%) had been teaching their current subject for 6–10 years, and two (14%) educators had been teaching their current subject for more than 11 years.

Teachers who participated in interviews were relatively new to their perspective schools. More than two thirds (71%) had been teaching at their current school for five years or less. Three (21%) teachers had been teaching at their school for 6–10 years, and only one teacher had been at his or her current school for 11+ years (7%).

IV. Implementation of PEP Literacy Coaching

A. Literacy Strategy Training Institute

RQ1. *What were the objectives and activities at the Literacy Strategy Training Institute?*

RQ2. *How did these professional development events conceptualize the literacy frameworks of Balanced Literacy and Disciplinary Literacy?*

RQ3. *What were the experiences and reactions of participating administrators and instructional coaches at the Literacy Strategy Training Institute?*

The Literacy Strategy Training Institute did not occur in academic years 2015-16, 2016-17, or 2017-18 as originally proposed in the program logic model. As such, no data collection activities occurred and researchers were not able to answer these research questions.

B. Professional Development and Training for Teachers

RQ4. *What professional development events occurred for participating teachers?*

RQ5. *What were the objectives and activities of the professional development events for participating teachers?*

RQ6. *How did these professional development events conceptualize the literacy frameworks of Balanced Literacy and Disciplinary Literacy?*

RQ7. *What were the experiences of participating teachers at the professional development events?*

The Professional Development and Training for Teachers did not occur in academic years 2016-17 or 2017-18 as originally proposed in the program logic model. Consequently, no data collection activities occurred and researchers were not able to answer these research questions.

The absence of the two annual training and professional development events (Literacy Strategy Training Institute for Administrators and Coaches; Professional Development and Training for Teachers) affected implementation efforts in all three years. Without implementation of the professional development institutes, there was inconsistent learning about the literacy coaching frameworks and the desired outcomes for teachers and students. The purpose of the Literacy Strategy Training Institute was to ensure that administrators and PEP coaches had a shared conceptualization of literacy teaching in the two select disciplines. The purpose of the Professional Development and Training of Teachers was to increase knowledge and beliefs around the core components of either the Balanced Literacy framework or the Disciplinary Literacy framework. Great variance can occur in the conceptual understanding of the components of each framework; these conceptions influence which pedagogical practices coaches and teachers identify as needing improvement in each classroom.

During the pilot year of PEP coaching implementation, the omission of the Leadership Strategy Training Institute and the Professional Development Training for Teachers meant PEP coaches and participating teachers did not begin the academic year with a shared understanding of their work together. Data from interviews with PEP coaches, interviews with participating teachers, and interviews with school administrators at the conclusion of academic year 2015-16 found a need to create a shared understanding of: (1) *what* PEP coaches and participating teachers were trying to accomplish together (teaching practices related to literacy frameworks and desired student literacy outcomes), and (2) *how* (coaching practices) they would work together to accomplish these teaching and student goals. In particular, a shared understanding of how to enact a Balanced Literacy pedagogical framework in the middle school setting remained mostly uncertain to PEP coaches and participating ELA teachers. The absence of the initial and then ongoing training and professional development activities reflected a significant breakdown in communication between stakeholders resulting in sustained, damaging impacts to the implementation of PEP coaching over all three years of the initiative.

C. Ongoing Coaching in Use of Literacy Strategies

RQ8. *How often, how long, and with whom did the coaching of literacy strategies occur?*

Teachers participating in the end-of-year survey reported the frequency and duration of their PEP coaching sessions, as well as the types of activities they engaged in with their PEP literacy coaches. A total of 37 teachers indicated they had worked with a PEP coach; generally, the three OnTrack Greenville middle schools employ a combined total of 45 ELA and math teachers each year.

Of the 37 teacher survey respondents, two thirds (66%) said they met with PEP coaches at least monthly. Another 22% of respondents reported meeting with their PEP coach on a quarterly basis. There was some variation across years of data collection, with 40% of teachers reporting meeting with their literacy coach weekly in academic year 2016-17, compared to 24% of teachers in academic year 2017-18. See Table 6.

Table 6. Teacher Reported Frequency of Coaching Activities

Frequency	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Once a semester	0	0%	2	12%	2	6%
Quarterly	4	20%	4	24%	8	22%
Monthly	7	35%	5	30%	12	33%
Weekly	8	40%	4	24%	12	33%
Varied	1	5%	2	12%	2	6%

Data Source: OnTrack Greenville Educator Survey

The duration of coaching events and cycles varied. While data collection did not provide a complete picture of the duration of coaching events and cycles, teacher survey respondents described the number of days that coaches were present in their classroom, either observing or modeling instruction. See Table 7. Overall, 29% teachers reported that coaches were present in their classroom 11 or more days. Nearly half (46%) of teachers reported that coaches were present just 1 to 5 days in their classroom. In

academic year 2016-17, teachers reported more frequent in-class collaborative coaching sessions than in academic year 2017-18.

Table 7. Teacher Reported Number of Days of In-Class Collaborative Coaching Sessions

Number of Days	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
0 days	0	0%	3	18%	3	8%
1 – 5 days	7	35%	10	59%	17	46%
6 – 10 days	6	30%	0	0%	6	16%
11 – 15 days	2	10%	0	0%	2	5%
15 or more days	5	25%	4	24%	9	24%

Data Source: OnTrack Greenville Educator Survey

In addition, PEP literacy coaches maintained logs of their coaching activities, tracking the frequency of coaching activities for each teacher who participated in coaching. Presented below in Table 8, in academic year 2016-17, coaches reported working with 30 teachers, of whom 37% were ELA teachers and 63% were math teachers. In academic year 2017-18, coaches reported working with 64 teachers, a 113% increase over the prior academic year. In contrast to the prior year, coaches worked with more ELA teachers (69%) than math teachers (32%). In total, coaches reported working with 94 teachers across the two years of data collection, though it is possible that this figure includes duplicated teachers who participated in coaching both academic years.

Table 8. Coach Reported Number of Teachers Coached

Number of Teachers Coached	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Coach 1 (ELA)	6	20%	28	44%	34	36%
Coach 2 (ELA)	5	17%	16	25%	21	22%
Coach 3 (Math)	7	23%	10	16%	17	18%
Coach 4 (Math)	12	40%	10	16%	22	23%
Total	30	--	64	--	94	--

Data Source: PEP Coaching Logs

Coaches also tracked the number of coaching cycles they completed across both academic years. A coaching cycle consisted of three core coaching activities: (1) a planning meeting where instruction was designed, (2) in-class work where the PEP coach formatively assessed student learning during classroom teaching, and (3) a debriefing meeting where the PEP coach and teacher(s) looked at student formative assessment data to determine instructional decisions for the next lesson. A coaching cycle may last multiple days depending on teacher and coach availability to meet outside of instructional time or due to coaches working with multiple teachers in multiple buildings during the course of a week. In general, though, coaching cycles occurred over the course of one to two days and occasionally over the course of two to three days. Coaches reported completing 289 coaching cycles, with the number of cycles consistent each year of data collection. Math coaches completed 214 coaching cycles and accounted for the majority (74%) of overall cycles. ELA coaches completed 75 coaching cycles, or 26% of all coaching cycles. See Table 9.

Researchers calculated the average number of coaching cycles per teacher, shown in Table 10. Overall, teachers participated in an average of 3.1 coaching cycles. The average number of coaching cycles per teacher was higher in academic year 2016-17 (4.7 cycles) than in academic year 2017-18 (2.3 cycles). In addition, the average number of coaching cycles per teacher was higher for participating Math teachers (5.5 cycles) than ELA teachers (1.4 cycles).

Table 9. Coach Reported Number of Complete Coaching Cycles

Total Coaching Cycles	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Coach 1 (ELA)	16	11%	40	27%	56	19%
Coach 2 (ELA)	6	4%	13	9%	19	7%
Coach 3 (Math)	52	37%	43	29%	95	33%
Coach 4 (Math)	67	47%	52	35%	119	41%
Total	141	--	148	--	289	--

Data Source: PEP Coaching Logs

Table 10. Average Number of Complete Coaching Cycles per Teacher

Average Coaching Cycles per Teacher	AY 2016-17	AY 2017-18	Total
Coach 1 (ELA)	2.7	1.4	1.6
Coach 2 (ELA)	1.2	0.8	0.9
Coach 3 (Math)	7.5	4.3	5.6
Coach 4 (Math)	5.6	5.2	5.4
Total	4.7	2.3	3.1

Data Source: PEP Coaching Logs

Table 11 below shows the total number of coaching activities conducted per coach, as reported in coaching logs. Coaches logged 765 coaching activities in academic year 2016-17 and 488 coaching activities in academic year 2017-18, for a combined total of 1,253 coaching activities. Similar to the number of coaching cycles described above, math coaches logged more coaching activities than ELA coaches across both years of data collection.

Table 11. Coach Reported Number of Coaching Activities

Number of Coaching Activities	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Coach 1 (ELA)	177	23%	136	27%	313	25%
Coach 2 (ELA)	62	8%	76	16%	138	11%
Coach 3 (Math)	334	44%	159	33%	493	39%
Coach 4 (Math)	192	25%	117	24%	309	25%
Total	765	--	488	--	1253	--

Data Source: PEP Coaching Logs

Presented below in Table 12, each teacher participated in an average of 13.3 coaching activities. The average number of coaching activities per teacher was considerably higher in academic year 2016-17

(25.5 activities) than in academic year 2017-18 (7.6 activities). These figures indicate that the coaching experience varied greatly for teachers across subject areas and academic years.

Table 12. Average Number of Coaching Activities per Teacher

Average Coaching Activities per Teacher	AY 2016-17	AY 2017-18	Total
Coach 1 (ELA)	29.5	4.9	9.2
Coach 2 (ELA)	12.4	4.8	6.6
Coach 3 (Math)	47.7	15.9	29.0
Coach 4 (Math)	16.0	11.7	14.0
Total	25.5	7.6	13.3

Data Source: PEP Coaching Logs

RQ9. *What events occurred during coaching cycles and sessions?*

Teacher survey respondents reported the types of coaching activities they participated in with their PEP coaches. See Table 13. Across both academic years, teachers most frequently reported that they shared resources with their PEP coach during coaching activities, with 84% of teachers indicating that they participated in this activity. Another 78% of teachers said that they met with their coach to plan instruction and 68% said their coach came into their classroom to observe their instruction and/or students. Nearly two thirds (65%) of teachers reported collecting student formative assessment data as a part of their coaching and 54% of teachers said they debriefed with their coach using student data after practicing a literacy strategy. Only 38% of teachers reported that their coach modeled instruction in-class. While reported participation in these types of coaching activities overall was consistent across both academic years, fewer teachers reported that their coach observed their teaching/students and modeled instruction in-class in academic year 2017-18 than in academic year 2016-17.

Table 13. Types and Frequencies of Coaching Activities

Type of Coaching Activity	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Sharing of resources	17	85%	14	82%	31	84%
Meeting to plan instruction	16	80%	13	77%	29	78%
Observation of your teaching/students	17	85%	8	47%	25	68%
Collection of student formative assessment data	15	75%	9	53%	24	65%
Debriefing of instruction with student data	13	65%	7	41%	20	54%
In-class modeling of instruction	9	45%	5	29%	14	38%
Other: Professional development	1	5%	0	0%	1	3%

Data Source: OnTrack Greenville Educator Survey

The coaches logged type and frequency of coaching activities generally aligned with the teacher-reported participation in coaching activities. As shown in Table 14, coaches logged 595 planning activities, 395 in-class support activities, and 268 debriefing activities across both years of data

collection. In all types of coaching activities, coaches logged more activities in academic year 2016-17 than in academic year 2017-18.

Table 14. Coach Reported Type and Frequency of Coaching Activities

Number of Coaching Activities	Planning		In-Class Support		Debriefing	
	AY 2016-17	AY 2017-18	AY 2016-17	AY 2017-18	AY 2016-17	AY 2017-18
Coach 1 (ELA)	67	42	70	49	44	45
Coach 2 (ELA)	26	53	25	11	12	12
Coach 3 (Math)	94	78	146	40	94	41
Coach 4 (Math)	148	87	34	20	10	10
Total	335	260	275	120	160	108

Data Source: PEP Coaching Logs

PEP coaching logs demonstrated an inconsistency of coaching cycle implementation. While the frequency of coaching cycle activities (planning meetings, in-class work, and debriefing meetings) increased with each coach by academic year 2017-18, these three coaching activities occurred inconsistently with participating teachers due to time constraints and coaching cycles not always being comprised of all three events. At times, PEP coaches conducted in-class work without any prior planning meeting or in-class work would not be followed by a debriefing meeting prior to the next in-class work.

For example, in academic year 2017-18, ELA Coach #1 conducted nine planning sessions and six debriefing sessions in the month of October, but only five in-class coaching events. Thus, the coach and teachers made instructional plans, but the coach was not in the class to conduct formative assessment, which should be used to determine the effectiveness of the instructional plan. In March, the same ELA Coach #1 conducted eleven in-class sessions, but only conducted three planning sessions and seven debriefing sessions. Thus, the coach spent time in-class formatively assessing students and supporting instruction, but did not consistently help the teacher evaluate the effectiveness of the instruction (debriefing session) or plan what to do during the next day's class (planning session). During interviews, the ELA Coach #1 cited several reasons for inconsistent coaching activities, including a lack of teacher time for coaching cycle events, the coach's schedule, and teachers needing to use daily planning time for meeting with a district Title I specialist.

Additionally, during academic year 2017-18, Math Coach #1 also implemented coaching cycles inconsistently due to contextual factors beyond her control. For example, in the month of November, the coach conducted twelve planning sessions and six debriefing sessions with four different teachers, yet only conducted one in-class coaching session. Thus, while time was spent planning instruction, the coach did not witness the implementation of the instruction. Since the coach was not in class during the implementation, she did not collect formative assessment data to determine the instruction students would need in future classes during a debriefing session. When asked about this inconsistency, Math Coach #1 mentioned the challenge of only being at the school a few days a week. Thus, if the coach and teacher made instructional plans on Tuesday to be implemented in class on Wednesday, the coach's schedule prevented observation of the class on Wednesday. Also, during interviews, the Math Coach #1 expressed frustration with the voluntary nature of teacher participation, limited teacher time for participation, teacher conflicts with other district professional development activities, and a limited collective understanding in the building about the purpose of PEP coaching and how building structures would support a coaching process. Inconsistencies in implementing a student-centered coaching cycle

with teachers, despite the best efforts of coaches and teachers, remained an issue in academic year 2017-18 just as it had in academic year 2016-17.

In addition to the inconsistency in coaching activities, there was a lack of consistency in the teaching practices presented during coaching activities. While PEP coaches and participating teachers expressed conceptual uncertainty about the pedagogical frameworks, researchers noted that PEP coaches and teachers had not identified which teaching practices would be the focus of their work together, how teachers already used these teaching practices, and how they would collectively improve these teaching practices during PEP coaching sessions. Analysis of PEP coaching logs and field notes from observations of coaching activities suggested a great diversity of topics covered during PEP coaching in academic year 2015-16, which did not necessarily align with the desired teacher outcomes expressed in the grant.

Prior to the 2016-2017 academic year, PEP coaches along with the district Title I math coordinator identified the ELA and mathematical practices to emphasize with teachers during coaching activities. The identified practices for math were mathematical discourse, productive struggle, and using purposeful questions. Out of 152 reported topics for coaching events as reported in the individual PEP math coaching logs, the three identified mathematical practices collectively occurred less frequently than "other," "formative assessment," and "classroom management" combined. The content of PEP coaching with ELA teachers also deviated from previously identified teaching practices. Out of the 192 reported topics as reported in the individual PEP ELA coaching logs, most time was spent on "scaffolded instruction," "other," and "formative assessment." See Table 15.

Table 15. Teaching Practices Emphasized During Coaching Activities in AY 2016-17

Math Teaching Practices	N	ELA Teaching Practices	N
Other	50	Other	50
Using Purposeful Questions	31	Scaffolded Instruction	49
Formative Assessment	25	Formative Assessment	36
Mathematical Discourse	22	Explicit Instruction	25
Productive Struggle	13	Differentiated Materials	20
Classroom Management	11	---	---

Data Source: PEP Coaching Logs

RQ10. *What were the experiences of teachers and coaches involved in coaching sessions?*

Teacher Experiences

Teachers who participated in literacy coaching overall viewed coaching activities to be valuable, felt confident in their use of literacy practices, and found their participation to be beneficial to their instruction and their students. Teachers primarily had positive experiences working with their PEP coach, though some teachers voiced frustration with coaching.

Many teachers perceived coaching activities to be beneficial. Among teachers who reported participating in each coaching activity, the percentage of teachers who rated the activity as valuable is shown below in Table 16. Nearly three quarters (71%) of teachers rated the in-class modeling of instruction as valuable. Meeting to plan instruction and the sharing of resources were rated as valuable by 69% and 68% of teachers, respectively. Only 50% of teachers rated debriefing of instruction with

student data as valuable. With the exception of in-class modeling of instruction and observation of teaching/students, more teachers rated the activities as valuable in academic year 2017-18 than in academic year 2016-17.

Table 16. Teacher Perceptions of Most Valuable Coaching Activities

Which of the following coaching activities did you find most valuable during your collaboration(s) with the PEP Coach?	AY 2016-17	AY 2017-18	Total
In-class modeling of instruction	78%	60%	71%
Meeting to plan instruction	50%	92%	69%
Sharing of resources	65%	71%	68%
Collection of student formative assessment data	59%	63%	60%
Observation of your teaching/students	60%	44%	54%
Debriefing of instruction with student data	46%	57%	50%

Data Source: OnTrack Greenville Educator Survey

As shown in Table 17, a large majority of teachers (83%) agreed that they felt confident incorporating teaching practices they learned through coaching into their instruction. There was little variation in responses between years of data collection.

Table 17. Teacher Confidence Using Literacy Strategies

I feel confident incorporating teaching practices I learned through coaching into my instruction.	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
AY 2016-17	3 (15%)	0 (0%)	7 (35%)	10 (50%)
AY 2017-18	3 (18%)	0 (0%)	5 (29%)	9 (53%)
Total	6 (15%)	0 (0%)	12 (32%)	19 (51%)

Data Source: OnTrack Greenville Educator Survey

Teachers' experiences in literacy coaching also resulted in perceived benefits for instruction and students. More than two thirds (71%) of teachers agreed that their participation in literacy coaching had enhanced their instruction. More teachers agreed that their participation in coaching was beneficial to their instruction in academic year 2016-17 (90%) than in 2017-18 (47%). A summary of teacher responses by year appears in Table 18.

Table 18. Teacher Perceptions of the Benefit of Literacy Coaching on Instruction

Literacy coaching has enhanced my instruction.	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
AY 2016-17	2 (10%)	0 (0%)	8 (40%)	10 (50%)
AY 2017-18	3 (18%)	6 (35%)	3 (18%)	5 (29%)
Total	5 (14%)	6 (16%)	11 (30%)	15 (41%)

Data Source: OnTrack Greenville Educator Survey

Teachers also viewed their participation in literacy coaching to have positive effects on their students. As shown in Table 19, more than three quarters (76%) of teachers agreed that their participation in literacy coaching also benefited their students. Again, teacher responses were more positive in

academic year 2016-17 than in academic year 2017-18, with 85% of teachers agreeing that students benefited from their participation in coaching in the first year and 64% agreeing in the second year.

Table 19. Teacher Perceptions of the Benefit of Literacy Coaching on Students

My students have benefited from my participation in literacy coaching.	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
AY 2016-17	3 (15%)	0 (0%)	12 (60%)	5 (25%)
AY 2017-18	3 (18%)	3 (18%)	5 (29%)	6 (35%)
Total	6 (16%)	3 (8%)	17 (46%)	11 (30%)

Data Source: OnTrack Greenville Educator Survey

While teacher interviews did not assess this research question directly, several teacher interview comments provided valuable insight into teachers' experience participating in literacy coaching. Teachers generally described a very positive and beneficial experience in coaching, describing meaningful, collaborative relationships with coaches. A handful of teachers, however, expressed frustration about their experiences in coaching.

Above all, many teachers expressed respect for the knowledge and experience of the coaches and saw a great value to participating in literacy coaching. One teacher explained, "*I have to have that person [PEP coach]. She knows where to go, where to get the resources—always has alternative suggestions. We don't have another instructional coach; she got swallowed up by the special education department. I just appreciate her [the PEP coach] every single day…*" Another teacher noted how the PEP coach's areas of expertise contributed to a positive experience, describing, "*It has been good to have her experience and helping me fill in those gaps that I needed as a teacher, as well as building confidence in my classroom and engagement. It has been a very good experience for me.*" For the teachers who worked consistently with PEP coaches in moderate-high intensity coaching cycles, their perceptions of coaches and coaching were positive, demonstrating that coaching was integral to these teachers' growth and success in the classroom that academic year.

In-class coaching activities were one component of a complete coaching cycle. Several teachers stated that they would have appreciated more in-class opportunities to have the coaches lead the instruction, giving the teachers the opportunity to observe a new strategy in action. "*We would meet and talk about new things, and she'd watch some students and give me ideas, but time was best used when she came in to co-teach,*" stated one of the participating teachers who most valued the in-class support. Another teacher agreed, stating, "*The coaches are wonderful, they've come in and done some of co-teaching and so more of that would be great.*" The in-class modeling and co-teaching allowed teachers a valuable opportunity to actually see how to implement a given literacy strategy, making the learning more concrete. As described by a math teacher, "*I feel like the most benefit I have gotten from it is when she (PEP coach) is actually in the classroom with me, either when I do station activities and she has taken a station. I also would love a co-teaching type where she models the lesson, how can you incorporate it and watch how it is done… I would love to see a video or something to see how it is done really well.*"

However, not all teachers described their overall experience as positive, instead expressing frustration about the coaching process. One teacher saw the value of having coaches lead strategies in the classroom, but argued against the need for "another coach" taking up planning time for the teachers, stating, "*I need this time to be grading papers, giving them [the students] feedback- I don't need another coach. All instructional coaches, literacy coaches [should] go teach in the classroom. Drop the coach. We need to collaborate. That is not collaboration—you putting me in a room and telling me to do this, try*

this." Further, several of the math teachers who participated in literacy coaching spoke to the challenges of employing the suggested coaching strategies in content areas outside of ELA, and specifically for math. Teachers felt as though strategies were either not applicable to math or that the demands of covering all math standards in a timely manner did not allow them the freedom to experiment with activities that were not directly applicable. As one math teacher described, "*It would be very beneficial to have math-specific ideas, suggestions, and workshops. A lot just didn't apply to me*."

Coach Experiences

A common theme that emerged from interviews with coaches was a sense of frustration. The PEP coaching position was a new position with no clear guidelines in place at the onset of the project. As such, tensions existed between PEP coaches and the Title I specialists and between PEP coaches and principals regarding PEP roles and responsibilities. From the onset of implementation, the PEP coaches struggled to clarify and distinguish their role from the district level Title I specialists.

Overall, PEP coaches felt ostracized and isolated and, at one school, the coaches stated that they were excluded from the larger OnTrack Greenville conversation altogether, as if their perspectives, knowledge, and participation were not relevant, informative, or valued. PEP coaches reported experiencing limitations and boundaries on their work. Though one principal noted that the PEP coaches were a vital part of the fabric of the overall culture of literacy at the school level, one coach said she "*felt the most ineffective at this job*" due to a limited sense of authority and ownership in her role.

Without the implementation of the initial training institutes, the PEP coaches had limited opportunities to negotiate a shared vision with their school(s) and their roles were defined without their input. The PEP coaches lacked a clear sense of identity and waited for their roles to evolve, which led to inconsistent coaching models with more passive practices. In this way, the PEP coaches acted as a resource or "consultant," which included providing input rather than facilitating "true honest and reflective thinking." In some cases, the PEP coaches performed tasks such as making copies and gathering resources for teachers. In another school, they were asked to organize professional development workshops without consideration for how this workshop would support sustained in-class teacher implementation of instructional strategies. As one coach reflected, "*I had to meander through it myself. There was no introduction to 'this is your role'. Year One I just introduced myself to teachers and told them I was available to help them and help them find resources and help them plan. We didn't have a model of what coaching looks like with cycles until Year Two*."

RQ11. *What supported or impeded valuable coaching sessions?*

Several issues emerged as impediments to valuable coaching sessions. Primarily, PEP coaches, district literacy partners, and school level partners (i.e. principals, instructional support staff, and teachers) lacked a shared understanding of the Balanced Literacy and Disciplinary Literacy initiatives and desired student outcomes. During academic year 2015-16, a pilot year of implementation, PEP coaches expressed that stakeholders, school leaders, and district leaders needed to provide increased support and leadership toward understanding and implementing the literacy coaching model's theory of change. Initial professional development sessions with administration would have helped establish a shared understanding and expectations. For instance, there was a lack of clarity around the actual coaching model and activities and which teachers the coaching model targeted. In one school, the principal wanted the coaches to work with the teachers who needed the most support and it was difficult to

obtain teacher buy-in. "*It sent the message that coaches work with struggling teachers.*" At another school, the coaches were asked specifically not to coach the teachers and were questioned by the administrator about the coaching model. The administration at another school was unaware of who the PEP coach worked with, the content of the coaching, and how this PEP coaching related to student learning outcomes in the two disciplines. During the pilot year especially, PEP coaches desired ongoing and regular communication with school administration to ensure teacher and administrator buy-in and to determine how the coaching would be implemented with grade-level math and ELA teachers who were initially unaware of how PEP coaching would involve them, their classrooms, and their students.

Increased communication between stakeholders, school administrators, and PEP coaches occurred during academic years 2016-17 and 2017-18 with the goal of clarifying implementation activities and goals. For example, a meeting with stakeholders occurred prior to the start of academic year 2016-17 and involved a presentation of academic year 2015-16 implementation data. The intended outcome of this meeting was to devise a plan for integrating the PEP coaching model with the district's Title I support and to develop collective clarity of desired project outcomes. Despite efforts to engage district leaders, school leaders, and teachers, both the PEP student-centered coaching model and the district's coaching model were still both implemented in the schools without sufficient coordination which would have allowed the work of PEP and of the district to mutually support each other. For example, the district coaching model used by the district Title I specialist focused more on curriculum planning with groups of teachers while the PEP student-centered coaching model focused on data-driven instruction and was typically conducted with one teacher at a time on a voluntary basis.

Throughout implementation, this lack of clarity around the roles of PEP coaches and Title I specialists impeded coaching sessions. While some teachers regarded coaches as assistants, other teachers perceived them as evaluators (as opposed to the role of supporter or facilitator). Despite the best efforts of PEP coaches and district level Title I specialists to differentiate the coaching, ELA and mathematics teachers often experienced coaching collaborations with overlapping goals and collaborative processes on subsequent days. Some teachers frequently were assigned to meet with both a PEP coach and a district level Title I specialist on the same or subsequent days. With Title I specialists' positions established prior to implementation, PEP coaches frequently defaulted to the Title I specialists to determine which teachers to support through coaching. At times, as PEP coaches and Title I specialists struggled to find collaborative solutions, work naturally became frustrating and acrimonious. Over time, tensions between PEP coaches and district level Title I specialists resulted in decreased collaboration and communication between the stakeholders. As a result of the ongoing power dynamics between the Title I specialists and PEP coaches, PEP coaches experienced limited opportunities to effectively develop coaching partnerships with teachers. Indeed, multiple teachers stated they did not understand the purpose of working with PEP coaches since district level Title I specialists already were offering support.

Collective clarity of the pedagogical frameworks and coaching roles remained tenuous by the end of academic year 2017-18, with different middle schools focusing on different aspects of the literacy frameworks. Researchers are uncertain as to why specific middle schools or grade level groups of teachers focused on specific components of each framework. A focus on one common component of a literacy teaching framework did not constitute an intentional emphasis on the literacy teaching framework nor collective decision-making as to which component(s) teachers needed to address through PEP coaching.

For example, the goals of the project focused on balanced literacy coaching in ELA classrooms, but there was not an "established framework for literacy" in the middle schools for how all ELA teachers should

engage students. There was no consistent mention or focus of the school district literacy framework until spring of 2017 when the newly appointed Executive Director for Academic Innovation and Technology increased support for implementation of the school district literacy framework. Following, one middle school introduced some of the components of Balanced Literacy, including vocabulary, shared reading, and shared writing, while another middle school focused on shared reading (in sixth grade) and independent reading (in all grades)—two typical components of the district's Balanced Literacy Framework. There was little to no emphasis on writing instruction or conferring with students on their writing (another component of the district's Balanced Literacy Framework) by academic year 2017-18 of the project, even though it had been established as a goal for the middle schools by the school district for that year.

Despite the best efforts of PEP coaches to build a shared focus with participating teachers and despite the best efforts of stakeholders to garner collective clarity of the desired teacher level and student level outcomes *during* implementation, researchers found limited evidence of collective understanding of what PEP coaches and participating teachers were attempting to change together. This limited collective clarity impeded the implementation of PEP literacy coaching and reduced the teacher-level and student-level impact of the model.

V. Impact of PEP Literacy Coaching

This section of the report describes results for the research questions examining exploratory secondary outcomes. Researchers answered research questions using data from the end-of-year OnTrack Greenville Educator Survey and one-on-one interviews with teachers who participated in literacy coaching.

RQ15. *After participating in literacy coaching, did ELA and math teachers demonstrate a high awareness of literacy strategies?*

PEP coaches provided teachers instruction on a wide array of literacy practices. By describing the literacy strategies learned through coaching that were most beneficial to their teaching, teachers demonstrated a high level of awareness of literacy strategies. A large majority of interview respondents (86%) identified one or more literacy strategies that were beneficial to their teaching practice. Only two of fourteen teachers across both academic years could not name a literacy strategy that was beneficial to their teaching. The categories of beneficial teaching strategies appear in Table 20.

Table 20. Types and Frequencies of Beneficial Literacy Strategies

Strategy	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Curriculum Planning	1	11%	2	40%	3	21%
Student-student discussions	3	33%	1	20%	4	29%
Student-teacher discussion	2	22%	0	0%	2	14%
Student questioning	2	22%	0	0%	2	14%
Classroom management	1	11%	1	20%	2	14%
Visual aids	1	11%	1	20%	2	14%
Assessment	0	0%	1	20%	1	7%
None	1	11%	1	20%	2	14%

Data Source: Teacher Interviews
*Note: Some of the strategies that teachers cited in response to this question fit into more than one of the above categories. Therefore, there is overlap in the above data.

Among beneficial literacy strategies cited, nearly one-third (29%) of teachers discussed methods their coaches had shared with them for fostering productive discussions between students. Other teachers cited methods for improving student-teacher conversations as well. In addition, participants discussed questioning techniques they had learned from their PEP coaches, curriculum planning strategies, classroom management strategies, and methods for creating effective visual aids.

Teachers most frequently mentioned strategies that promoted discussion of concepts between students as the most beneficial. One teacher described an example of a specific strategy in this category, saying, "*Talk to each other and talk to me…[has been the most beneficial]. Most of the [students] are reading below grade level. It's beneficial to have someone read [a section] aloud…I have students who made really good gains, and I think it's from reading with a partner who could read it to them*." Another teacher gave a specific example of a strategy, "*Accountable talk… that was the first time I had heard that*

buzz word (accountable talk), but we talked about what that actually looked like – how it is more intentional than just 'turn towards your partner and talk.'" Another teacher elaborated, "*Giving them time to share [has been the most beneficial]. It's easier to learn concepts from a peer rather than a teacher.*" Based on these interview responses, it is clear that many literacy strategies allowed teachers to benefit greatly from more strategic student peer-to-peer discussions in their classrooms.

Teachers also cited the use of specific literacy strategies in curriculum and lesson planning as beneficial. One math teacher described a literacy strategy that allowed him or her to revisit lessons and adjust the pacing depending on student feedback, which is also a form of formative assessment. "*The BOUNCE method seems to be the one I gravitate to most often…I can go back and address the prior day's lesson if needed. It engages more than one student at a time. It can help students justify their own way of thinking or other students' way of thinking.*" Another teacher described a literacy strategy called "chunking" as beneficial, stating, "*She [PEP coach] gave us a strategy about chunking information. That helped my students: to feed them a chunk of info at a time and let them work with the smaller amounts. [This strategy] makes it more manageable, doesn't overwhelm [the students].*"

RQ16. *After participating in literacy coaching, did ELA and math teachers advocate for literacy strategies?*

Teacher advocacy for literacy coaching was moderately positive, as reported on an end-of-year educator survey. As described below, two measures of teacher advocacy appeared on the survey.

Teachers responded to a survey question measuring their likelihood of recommending literacy coaching to a teaching colleague, shown in Table 21. Over two years of data collection, just over half (57%) of respondents reported that it was likely or very likely that they would recommend literacy coaching to a colleague. Responses were slightly more positive in academic year 2016-17, with 60% of respondents recommending literacy coaching compared to 53% in academic year 2017-18.

Table 21. Teacher Recommendations of Literacy Coaching

How likely are you to recommend literacy coaching to a teaching colleague?	Not at all Likely	Somewhat Likely	Likely	Very Likely
AY 2016-17	1 (5%)	7 (35%)	6 (30%)	6 (30%)
AY 2017-18	2 (12%)	6 (35%)	5 (29%)	4 (24%)
Total	3 (8%)	13 (35%)	11 (30%)	10 (27%)

Data Source: OnTrack Greenville Educator Survey

Across two years of the evaluation, teachers overwhelming agreed that more teachers at their school should participate in literacy coaching. See Table 22. In academic year 2016-17, 85% of teachers agreed that more teachers should participate in coaching and 65% of teachers agreed in academic year 2017-18. While there was a small decrease in the number of teachers advocating for greater participation in coaching over academic years, feedback overall remained positive.

Table 22. Teacher Advocacy for Literacy Coaching

More teachers at my school should participate in literacy coaching.	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
AY 2016-17	2 (10%)	1 (5%)	12 (60%)	5 (25%)
AY 2017-18	3 (18%)	3 (18%)	3 (18%)	8 (47%)
Total	5 (14%)	4 (11%)	15 (41%)	13 (35%)

Data Source: OnTrack Greenville Educator Survey

RQ17. *After participating in literacy coaching, did ELA and math teachers regularly use literacy strategies in classroom practice?*

On an end-of-year survey, teachers reported regularly incorporating literacy practices learned through coaching into their instruction. In total, 81% of teachers agreed that they regularly incorporated literacy practices into their instruction. As shown in Table 23, responses varied some by academic year, with more teachers agreeing in academic year 2016-17 (90%) than in academic year 2017-18 (70%).

Table 23. Teacher Perceived Use of Literacy Strategies in Instruction

I regularly incorporate teaching practices I learned through coaching into my instruction.	**Completely Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Completely Agree**
AY 2016-17	2 (10%)	0 (0%)	12 (60%)	6 (30%)
AY 2017-18	3 (18%)	2 (12%)	6 (35%)	6 (35%)
Total	5 (14%)	2 (5%)	18 (49%)	12 (32%)

Data Source: OnTrack Greenville Educator Survey

Teachers who participated in the PEP interviews also indicated, on average, the frequency with which they utilized PEP literacy practices. See Table 24. A majority of respondents (79%) reported using literacy practices at least once per week, while one teacher (7%) reported using literacy strategies daily. Only two teachers (14%) reported using strategies rarely.

Table 24. Teacher Self-Reported Average Frequency of Literacy Practice Use

Type	**AY 2016-17**		**AY 2017-18**		**Total**	
	N	%	N	%	N	%
Weekly	8	89%	3	60%	11	79%
Daily	0	0%	1	20%	1	7%
Rarely	1	11%	1	20%	2	14%

Data Source: Teacher Interviews

Types of Literacy Strategies Used Regularly

Teachers described an example of a PEP literacy practice they regularly used in their classroom. Shown in Table 25, of the fourteen teachers interviewed, five (36%) cited a PEP literacy practice that required students to discuss a topic with each other and/or with the teacher. In addition, teachers listed practices that involved writing, such as journaling, and strategies that required students to analyze readings. Two teachers (14%) stated that they did not incorporate PEP literacy practices into their instruction.

Table 25. Types of Literacy Practices Teachers Used Regularly

Type	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Writing	2	22%	0	0%	2	14%
Analyze readings	2	22%	2	40%	4	29%
Break into groups	1	11%	1	20%	2	14%
Discussions	3	33%	2	40%	5	36%
Reading	0	0%	3	60%	3	21%
None	1	11%	1	20%	2	14%

Data Source: Teacher Interviews

Teachers then indicated the frequency with which they employed the specific strategy that they described as using regularly in their classroom. See Table 26. Nearly half (43%) of the teachers indicated that they used the specific strategy on a weekly basis. Four teachers (29%) said they used the specific strategy daily, one teacher (7%) said he or she used the strategy about half of the time.

Table 26. Frequency of Teacher Use of Specific Literacy Strategies

Frequency	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Daily	2	22%	2	40%	4	29%
Weekly	5	56%	1	20%	6	43%
Half of the time	1	11%	0	0%	1	7%
Monthly	0	0%	1	20%	1	7%
Varies	1	11%	0	0%	1	7%
None	0	0%	1	20%	1	7%

Data Source: Teacher Interviews

Use of Literacy Strategies for Formative Assessment

An important strategy teachers learned through their participation in literacy coaching was how to formatively assess students. Formative assessment is a method through which a teacher continuously assesses students' mastery of content in order to tailor their instruction to students' needs. Teachers participating in interviews described the ways they formatively assessed their students. Nearly all (93%) teachers described a method of formative assessment they used with students. Only one teacher did not report a strategy of formative assessment.

Overall, a majority (56%) of participants described exercises where they gave students a topic to discuss and then listened to their discussions to assess knowledge. Additionally, 33% of participants said they gave students writing assignments and analyzed the resulting product(s). Other teachers said they questioned students on the material they had learned and provided students with periodic written feedback. All methods of formative assessment teachers described using appear below in Table 27.

Table 27. Types and Frequency of Formative Assessment Strategies

Method	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Analyze students' writing	3	33%	1	20%	4	29%
Listen to students' discussions	5	56%	1	20%	6	43%
Ask students questions	2	22%	2	40%	4	29%
Watch/observe students	1	11%	1	20%	2	14%
Written feedback	1	11%	0	0%	1	7%
Other	1	11%	1	20%	2	14%
None	0	0%	1	7%	1	7%

Data Source: Teacher Interviews

Teacher Perceptions of In-Class Impediments to Literacy Strategy Use

Teachers who participated in one-on-one interviews also mentioned some impediments to the successful use of literacy strategies in the classroom. The two central, in-class impediments cited by teacher related to student readiness and student motivation.

Teachers described students, especially at the beginning of the academic year, as not possessing the minimum math or writing skills needed to participate in certain literacy strategies. Though teachers did express that student readiness improved throughout the year, it remained frustrating to attempt to use many of the literacy strategies. One teacher explained when saying, "*The reason why [literacy strategies are unsuccessful] is that they cater to students who already have the basics, not those that are so, so behind. Students who know how to move around the room without causing problems. At the beginning of the year, doing a carousel isn't any good. By the end of the year, we get there, but not at the beginning of the year*." Another teacher described how a literacy strategy was unsuccessful due to his or her students' lack of readiness, saying, "*I tried to do some journaling at the beginning of the year…mainly because their [students'] writing skills were so poor. That was one problem I had in general. I couldn't get more than a sentence out of them. That was a little frustrating that I devoted class time to that*."

Another barrier to student readiness that emerged from interviews was the large student population of English Language Learners. Teachers found it challenging to implement literacy strategies successfully with so many students who were still working to master basic English vocabulary. For example, one teacher said, "*It [lack of success] happens a lot. When I try to give the pictures or the definitions to go with the vocabulary it doesn't always work because they don't have any background knowledge for the words, or they may not even understand the basic words that I'm using in the definitions for vocabulary. They just don't have the English*."

Several other teachers cited student behavior and lack of motivation as barriers to successful implementation of literacy strategies. One teacher explained, "*When we first started using it [analyzing the text], the unmotivated students said nothing surprised them, so you have to rephrase it. More along the lines of student motivation. It wasn't as effective as it could have been*." Without student motivation and engagement, the literacy strategy fell flat. Another teacher described how student behavior made it challenging to use a whole-group literacy strategy, saying, "*The first time, [my coach] came in and led the strategy, so I could actually see it. Because it's such a large Title I population, in the beginning when*

we first did it, it was chaos. When it was just the two of us leading the whole group, the kids were just talking to each other about anything, not focused.”

RQ18. *After participating in literacy coaching, was there an improvement in student communicative interactions?*

One of the goals of literacy strategies is to improve the lines of communication between teachers and their students. Teachers participating in interviews were asked to identify how their communication with students did or did not improve with implementation of PEP literacy strategies. Overall, ten of fourteen teachers interviewed (71%) cited an improvement in their communication with students, while four teachers (29%) reported no improvement in their communication with students related to their use of PEP literacy strategies.

The teachers who said PEP literacy practices had improved their communication cited a variety of reasons why. Across two academic years of interviews, three teachers said PEP literacy practices had helped them use a more appropriate vocabulary when teaching students. Other teachers said that PEP strategies helped provide a framework for their communication with students, helped them provide clearer directions, helped them communicate in a more positive manner, and made them more aware of students' needs. A breakdown of themes by academic year appears in Table 28.

Table 28. Influence of Literacy Practice Use on Student-Teacher Communication

Effect	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
More appropriate vocabulary	2	22%	1	20%	3	21%
Framework for communication	1	11%	2	40%	3	21%
Directions are more clear	1	11%	0	0%	1	7%
Communication is more positive	1	11%	0	0%	1	7%
More aware of students' needs	1	11%	3	60%	4	29%
None	3	33%	1	20%	4	29%

Data Source: Teacher Interviews

The most frequently cited influence of literacy strategy use on student-teacher communication was a greater awareness of students' needs. One teacher described how coaching and the use of literacy strategies helped him or her recognize better when students were not mastering a lesson or skill, allowing the teacher to communicate and teach differently with students. The teacher explained:

> *This year has been difficult for me and for a lot of us. [Coaching has helped me with] feeling more comfortable in presenting them with material. I'm up here and they're down there [used hand motions indicating the level at which she is teaching and the level at which they are comprehending]. The coach is helping me to build it up/bring them up. She's the one who helps me to see "they're not there yet." I made assumptions before [about what they know] and she helped me not to do that.*

Another teacher, who overall didn't have a positive experience with coaching, appreciated that the coaching process had helped her focus on students and their various needs. “*If anything, it has helped me be more aware of [students'] needs. In our everyday interactions, I forget with all that we have to do.*

Even though I get aggravated with our [coaching] meetings because the strategies don't apply to math, it brings me back and reminds me of how much help [students] need."

Another common theme that emerged was that the literacy strategies gave teachers a framework for addressing communication and communicating with students. One teacher's description was, "*It gives a framework for addressing information and teaching. You know what it should look like beforehand so it makes it easier to go from student to student. It makes it easier to dish out.*" For other teachers, the literacy strategies made a notable difference in the way they asked students questions, especially when formatively assessing students. One teacher explained, "*[PEP literacy practices] help me to ask better questions of my students; they help me iron out what I need them [students] to know. The graphic organizer and paired strategies help me to get the kids from point A to point B.*" While the literacy strategies proved useful in creating a framework for teachers to ask students questions, they also helped teachers create a framework for responding to students' questions. A teacher described it by saying, "*I think it makes me more intentional, so I can lean on a strategy rather than feeling like I have to problem-solve every situation… it helps me be more intentional about the way I handle questions that students may have.*" The incorporation of literacy strategies provided teachers several frameworks and opportunities for communicating with students differently to assist with formative assessment and general instruction.

Still, some teachers could not identify any ways in which their use of literacy strategies improved their communication with students. For one teacher, his or her improved communication was attributable to a different school-level approach aimed at strengthening relationships and communication, explaining, "*No, because I attribute that to Capturing Kids Hearts. I connect with them, instead of seeing them as a brain I have to put information in. PEP didn't have anything to do with that.*" Another teacher, while able to describe other benefits of participating in coaching, did not link coaching or the use of literacy strategies with improved communication with students. "*No change in communication. The biggest deal was the content and collaboration with the coach on a weekly basis in the first semester. I was very structured about the back and forth with her. Very detailed sheet to complete on google. Communication with students is not different.*"

RQ19. *After participating in literacy coaching, was there an improvement in student-teacher relationships?*

In one-on-one interviews, teachers who participated in PEP literacy coaching described how using PEP literacy practices had influenced their relationships with students. The themes that emerged from their responses appear below in Table 29. Overall, a majority of respondents (10/14) said PEP literacy practices had helped them improve their relationships with students, while only four said there was no effect or they were unsure of the effect on their relationships with students.

Teachers who said PEP literacy strategies helped improve relationships with students cited a number of reasons for this change. Across two years of interviews, teachers most frequently cited that PEP strategies helped them build a sense of community in the classroom and increased dialogue in the classroom. Others said PEP practices helped them set appropriate expectations for their students, or that PEP strategies increased student trust in teachers.

Table 29. Influence of Literacy Practice Use on Student-Teacher Relationships

Effect	AY 2016-17		AY 2017-18		Total	
	N	%	N	%	N	%
Builds community	2	22%	0	20%	3	21%
Increases dialogue	2	22%	2	40%	4	29%
Appropriate expectations	1	11%	1	20%	2	14%
Increases students' trust	2	22%	0	0%	2	14%
Decreases stress / tension in classroom	0	0%	2	40%	2	14%
None / Unsure	2	22%	2	40%	4	29%

Data Source: Teacher Interviews

One frequently cited way the literacy strategies helped improve student-teacher relationships was by promoting dialogue in the classroom, which allowed teachers and students to learn more about each other. One teacher described the role of the strategies in promoting dialogue, saying, "*It encourages dialogue anytime you are working with [students], like even when you are discussing the text, you still get their input and their personality, you get their experiences in life and how it applies to the situation*." Especially in diverse learning environments, such as those at OnTrack Greenville schools, teachers found the dialogue generated by the use of literacy strategies to help open doors to understanding students and their experiences. One teacher working with English Language Learners explained, "*It makes the relationship stronger. They [students] are better readers and understand English. She [the PEP coach] has given me a lot of strategies to improve their English; they have a better, stronger bond with me because I've helped them speak better English*."

Additionally, some teachers said using PEP literacy strategies helped them build trust with students and reduce stress and tension in the classroom. Through the use of literacy strategies, teachers interacted with students differently and more openly. One teacher explained, "*It does [affect my relationships with my students] because they realize I'm willing to help them. They are more likely to ask questions because they know I'm willing to try to answer them*." Other literacy strategies helped teachers with overall classroom management, creating a more positive and trusting environment, as a teacher described, "*I think [PEP literacy practices] keep both of us [the students and the teacher] from getting frustrated. Now I have a better strategy. The stress level has been relieved now*." Yet another teacher connected the use of literacy strategies to his or her professional confidence in the classroom, stress levels, and relationships with students, explaining:

> *I definitely think the presence of [my PEP coach] and the strategies I've learned from her have made me more confident of an educator and less stressed of an educator, and when you are less stressed, you are able to have better relationships with kids. [You can] build a foundation and talk with them about their lives because you aren't stressed. [PEP practices have] increased my confidence and decreased my stress, therefore positively impacting my relationships with [students].*

As shown here, the PEP literacy strategies used stronger teacher-student relationships as a mechanism for engaging students more in class content, an important step toward achieving student growth in ELA and math.

While perceptions of the impact of literacy strategies on student-teacher relationships overall were positive, some teachers were hesitant to make a connection between the strategies and their relationships with students. Some teachers, for example, already strived to have strong relationships

with their students, with one teacher explaining, "*I don't know if they [literacy strategies] do only because I am very purposeful about creating relationships with my kids. I don't know that the strategies necessarily do. I can see they are designed to help build relationships with your kids, but I'm not sure it would make a difference with my kids.*" Another teacher expressed uncertainty, saying "*I don't know that I can say that it is has influenced my relationships. I don't think any strategies have built or undone a relationship.*" Though some teachers viewed literacy strategies as important tools in their instruction toolbox, the utility of the strategies did not reach into other areas of their teaching, including connecting with students on a personal level.

VI. Findings, Lessons Learned, and Next Steps

A. Summary of Implementation Study Findings

The findings from the implementation study did not find evidence to support fidelity to the prescribed literacy coaching model in academic years 2016-17 or 2017-18. Analysis of PEP coaching logs, interviews, and observations suggested an inconsistency in: (1) which teachers participated in coaching in academic years 2016-17 and 2017-18; (2) how often a PEP coach collaborated with participating teachers; (3) the activities occurring in coaching cycles; and (4) the duration of a collaboration with a teacher. Key implementation study findings included:

- The Literacy Strategy Training Institute and Professional Development and Training for Teachers did not occur in academic years 2015-16, 2016-17, or 2017-18.

- PEP coaches completed a total of 1,253 coaching activities in academic years 2016-17 and 2017-18. Among these, 47% of activities were planning activities, 32% were in-class support, and 21% were debriefing activities, indicating some coaching cycles did not include all three components.

- PEP coaches reported working with 94 teachers* over a total of 289 coaching cycles across both academic years (*Note that this number includes some teachers who participated both years and were therefore counted twice. Generally, the three OnTrack Greenville middle schools have a combined total of 45 ELA and math teachers during an academic year). On an end-of-year teacher survey, one third of teachers who participated in coaching (33%) reported meeting with a PEP coach weekly and 33% reported meeting with a PEP coach monthly, which was on par with what was expected.

- Teacher-reported frequency of in-class support from coaches varied, with 46% reporting that the PEP coach was in his or her classroom 1 to 5 days, 16% reporting 6 to 10 days, and 29% reporting 11 or more days in total. While the majority of teachers indicated they participated in most or all types of coaching activities, only 38% of teacher respondents indicated that the PEP coach provided in-class modeling of instruction.

- Teachers rated "sharing of resources" and "observation of your teaching/students" as the most valuable of the coaching activities offered. More than half of teachers (57%) reported that they were likely or very likely to recommend literacy coaching to a teaching colleague. A majority (71%) of teachers agreed that participation in literacy coaching was beneficial and enhanced their instruction.

- Several impediments to valuable coaching sessions emerged, including a lack of understanding of the coaching model and desired student outcomes, misunderstanding over the role of PEP coaches, and a lack of overall consistency in coaching sessions.

While many school districts, school-university partnerships and educational organizations have "adopted" coaching as reform, fewer have "adapted" coaching into a well-planned model of professional learning with clear goals and roles for coaches (Blamey, Meyer, & Walpole, 2008). Although leading organizations in the field of literacy education have established guidelines for the roles and responsibilities of coaches, 74% of middle school and secondary coaches surveyed indicated their role

remained undefined (Blamey, Meyer & Walpole, 2008). Findings from this implementation evaluation aligned with those survey results. Data analysis revealed a lack of clarity of the roles of coaches shared among stakeholders including PEP, district level Title I specialists, and principals. Defining clear roles and responsibilities for coaches on paper and in practice remained a challenge throughout implementation.

Although stakeholders established a more concrete coaching framework with better-defined coaching roles during academic year 2016-17, it was difficult for the coaches to transition into a role where they facilitated ongoing and in-depth student-centered coaching cycles. Variations in the implementation of coaching cycles (how) as well as variations in PEP coach and teacher collective clarity of the teaching practices they would hone together to impact desired student outcomes (what) remained a challenge throughout the life cycle of the grant. Additionally, the content (what) of the collaborations (both teaching practices and student learning outcomes) and the process (how) remained inconsistent within and across each PEP coach's collaborations and across the work of all four PEP coaches.

Findings revealed limited time for teachers to engage in regular coaching cycle events. As a result, coaching cycles were implemented inconsistently. A coaching cycle was defined as a sustained period of collaborative work between a coach and teacher that spanned a period of multiple consecutive weeks at a time. A coaching cycle included repeated cycling through three key coaching events: (1) planning, the discussion and/or creation of curriculum and instruction; (2) in-class support, the implementation of the instruction plan through observation, co-teaching, and/or formative assessment of student learning; and (3) debriefing, the use of actionable student formative assessment data to analyze the influence of enacted instruction on student learning and to determine subsequent instructional responses. Among the coaching activities logged, 47% of activities were planning activities, 32% were in-class support, and 21% were debriefing activities. The differences in these percentages indicated that some types of coaching activities occurred less frequently than other activities.

Through the triangulation of data sources, researchers gained a deeper understanding of the overall inconsistencies of coaching events within coaching cycles. For example, many of the coaching events occurred in isolation without engagement in full coaching cycles. Analysis indicated in-class support was not consistently preceded by planning sessions or followed-up with debriefing sessions. As a result, long-term goal-setting with ongoing analysis of formative assessment data and reflection on instructional methods and student progress did not occur consistently. Limited debriefing after in-class support indicated a need for increased follow-up with teachers to reflect on instructional practice, the use of literacy strategies, analysis of formative assessment data to examine student progress, and planning for future instruction. There was a need for greater intentionality with frequent, routine, and predictable coaching cycles.

Without a consistent use of all three coaching cycle activities, PEP coaches and participating teacher(s) likely did not identify the learning to be formatively assessed during in-class work or did not take the time to analyze formative assessment data gathered during in-class work prior to teaching the next day's lesson, for example. Thus, while coaches and teachers often met during teacher planning time, before school, during lunch, and after school, the limited and inconsistent time or days set aside for teachers and coaches to plan or debrief in-class work impacted the PEP coaches' and participating teachers' ability to implement literacy teaching practices that directly responded to the immediate learning needs of students.

While it was important for all three coaching activities to occur as part of a coaching cycle, it also was important for these coaching activities to occur consecutively over several weeks. Responses to an end-

of-year teacher survey revealed that 33% of teachers who participated in coaching reported meeting with their PEP coach weekly, while 33% reported meeting with their PEP coach monthly, indicating that many coaching activities were not occurring as intended. Even if a coach were to conduct a planning session, in-class event, and a debriefing with a teacher in sequence, the mere occurrence of all three events did not comprise a coaching cycle, as all three could occur in a single day. According to coaching logs, the majority of the reported coaching cycles lasted between one day and one week, with less than 10% of the reported coaching cycles characterized as long-term collaborations lasting more than four consecutive weeks. Thus, teachers sometimes worked with a PEP coach for a few days and then did not reconvene again with the PEP coach for another a week or two.

Though the evaluators did not determine how long collaborations between PEP coaches and teachers should last, data suggested there rarely was a consistent collaboration length or intentional decision-making regarding which teacher collaborations would last longer and why. Coordination of collaboration durations also did not occur across all four PEP coaches. Additional interview data with teachers suggested teacher learning through PEP coaching often lacked consistent follow-up—follow-up needed to ensure a sustained change in teacher implementation of literacy teaching practices related to the Balanced Literacy and Disciplinary Literacy frameworks.

In summation, with insufficient communication amongst stakeholders, especially during the pilot year of implementation, and the absence of two key training institutes, PEP coaches were left to garner clarity of desired outcomes with teachers. While PEP coaches and stakeholders attempted to achieve collective clarity in academic years 2016-17 and 2017-18, the roles of coaches had been previously defined in year one of the grant. Coaching roles, even if defined on paper or explained by a school administrator, occurred daily in practice depending on how coaches participated with teachers in buildings. It is a sizeable task to implement a clearly defined, student-centered coaching model with distinct coaching activities all within a coaching cycle and with teachers who voluntarily participate—even when all stakeholders, including coaches and teachers, have clarity of the process (how)—that they will use together to try to achieve the desired goals (what). Fidelity of implementation of a clearly-defined coaching model requires collective clarity of the desired goals, the coaching process to be used, and how the system can support the ongoing work of teachers and coaches within classrooms. Practically speaking, this work requires decision-making regarding which teachers will participate in coaching, how coaching should be enacted each day, the focus of the coaching, the length of teacher collaborations, how coaching will build instructional capacity and be sustained within the school, and how coaching effectiveness will be determined. PEP coaches, already placed at schools, largely had to figure out the answers to these questions after project implementation had started. Despite their best efforts, the lack of clarity and consistency at a stakeholder level deeply hindered implementation of the literacy coaching model, resulting in insufficient model fidelity.

Implementation study researchers made a handful of changes to the data collection protocol outlined in the SEP. First, researchers did not conduct several data collection activities related to the Literacy Strategy Training Institute and Professional Development Training for Teachers, as the program did not implement these components of the logic model. In addition, researchers proposed conducting monthly focus groups with coaches and teachers to garner data on coaching practices and tensions that could inform implementation modifications. Given teacher and coach scheduling demands, it was not feasible to conduct these focus groups. As such, researchers removed these focus groups from the data collection protocol.

B. Summary of Impact Study Findings

This study assessed exploratory research questions related to secondary outcomes through an end-of-year teacher survey and one-on-one teacher interviews. PEP's literacy coaching model intended to increase teacher awareness of, advocacy for, and use of literacy strategies in instruction. Through the use of these literacy strategies, the program aimed to see improved student communicative interactions and student-teacher relationships in the classroom. Key findings across both academic years of the project included:

- As reported on an end-of-year survey, most teachers (81%) reported incorporating literacy strategies in their instruction, and 76% advocated for more teachers at their school to participate in coaching.

- Almost all teachers interviewed (86%) reported using at least one PEP literacy practice on a weekly basis. The literacy practices used most regularly in classrooms involved discussion, both among students and between student(s) and teacher.

- A majority of teachers interviewed (71%) perceived an improvement in student communicative interactions attributed to the use of literacy strategies. Teachers described using more appropriate vocabulary with students, having a stronger overall framework for communicating with students, and using a more positive tone to communicate with students.

- Similarly, 71% of teachers interviewed perceived an improvement in student-teacher relationships attributed to their use of literacy strategies. Teachers described how their use of literacy strategies allowed them to build a sense of community and increased dialogue in their classrooms.

These results, in combination with implementation study findings, suggest that literacy coaching was a valuable experience for a core set of teachers. These teachers established deep, collaborative relationships with their coaches over an extended period of time. The discipline-specific literacy strategies and general classroom management strategies learned through coaching were sometimes transformational for individual teachers, especially those new to their subject-area or to teaching in a Title I setting. For these teachers, literacy coaching made a lasting impact on their instruction and relationships with students.

On the other hand, a smaller yet consistent group of teachers had negative perceptions of literacy coaching and did not view their participation in coaching as valuable for them or their students. This likely related to the ongoing lack of clarity around the role of coaches in relation to the role of Title I specialists. Some teachers reported rarely using the literacy strategies and/or perceiving their use of strategies as not related to changes to classroom culture.

This study contributes to the broader body of literature on the implementation of literacy coaching models, but it failed to achieve a moderate level of evidence due to a lack of implementation fidelity. The teacher-level exploratory outcome findings were generally positive, but the study design for assessing exploratory secondary outcomes was not rigorous enough to confirm a primary level of evidence if model fidelity had been stronger. The guidance for program implementation outlined next in the lessons learned section will allow similar programs to establish a strong foundation for implementing with fidelity and creating conditions for program success with project stakeholders.

As discussed, researchers deviated from the approved SEP by not completing the impact analyses as proposed. However, the low level of model fidelity and ongoing challenges with program implementation would have posed significant threats to the validity of confirmatory impact analyses. In addition, researchers originally proposed measuring exploratory secondary outcomes through classroom observations. Researchers proposed randomly selecting two ELA and two math teachers for classroom observations at treatment schools each semester. As researchers learned more about the implementation of the coaching model and the wide array of literacy strategies included in the model, it became clear that random classroom observations would not provide a clear snapshot of teacher use of strategies, student communicative interactions, and student-teacher relationships. Instead, researchers conducted one-on-one interviews with teachers to measure their use of strategies and perceived changes to classroom culture related to strategy use.

C. Lessons Learned

Implementation of literacy coaching through OnTrack Greenville concluded at the end of 2017-18; therefore, there are no next steps for the program. PEP remains a committed OnTrack Greenville implementation partner, transitioning to a role of thought-leader and influencer. As partners continue to meet to strengthen the initiative and the network of supports available for students and families, lessons learned from this evaluation will be useful to stakeholders working to understand how the partnership values and programs have evolved over time.

Given the findings of this study, researchers present below three major guidelines for future design and implementation of literacy coaching initiatives. Based on the need for greater transparency and communication between all stakeholders of the project, researchers suggest ensuring schools are partner-ready. Based on a need for greater collective clarity of desired student and teacher outcomes, researchers also suggest conducting ongoing collaborative inquiry groups with stakeholders to establish common understanding of a clear theory of change which includes desired student outcomes and teaching practices (what), and the coaching model (how). Lastly, based on a need for clarity of roles for coaches, researchers suggest using a student-centered coaching model to empower groups of teachers.

Guideline One: Ensuring District, Schools, and Programs are Partner-Ready

Before agreeing to participate in this type of grant project, schools and programs must be "partner-ready." In this way, the schools and programs should demonstrate willingness to communicate, collaborate, engage in innovating thinking, and be open to change and growth. Particularly for a program like PEP's, it would be valuable to engage in intentional discussion around how to engage stakeholders in academic-related interventions. To ensure schools are partner-ready for participation in implementation of this type of initiative, clear articulation of goals and expectations of the grant is necessary prior to agreement to participate. Collaborative discussion and shared consensus of how the initiative will be launched and sustained is essential. Initial professional development institutes preceded by conversations with administration are fundamental to establishing a shared understanding and vision for the future coaching work. School leadership should engage relevant teachers (in this case, all math and ELA teachers) and participating staff (i.e. co-teachers, coaches, etc.) in identifying the challenge related to student literacy and/or learning in the disciplines. Time should be taken to analyze multiple data sources, to discuss instructional practices and pedagogical frameworks currently used to address the student learning needs, and to explore possible reasons for student learning difficulty.

Greater clarity around the value of and need for the Literacy Training Institute also may have increased the likelihood of its occurrence.

This discussion--preferably led by teachers--should focus on understanding the problem and discussing the successes and limitations of current solutions, whether they be pedagogical or curricular. In this way, all stakeholders can then fully understand their roles in the collaborative partnership prior to grant implementation. These institutes would be an essential first phase to deepen stakeholders' understanding about the roles of the PEP coaches. According to one coach, "*We needed an institute first with the administrators so they first understood that this wasn't just a money grant but it came with parameters and if you accept these people in and you get all of this support these are the non-negotiables. We never established what the non-negotiables were. I don't think that understanding of what the grant says we have to do was clear*." Greater transparency and ongoing and regular communication between building administrators, teachers, and coaches throughout the academic year is imperative to the success of any literacy coaching initiative.

Guideline Two: Leverage Ongoing Collaborative Inquiry Groups with Stakeholders

Greater support is needed at the onset and during implementation of a reform effort to avoid the "Attempt-Attack-Abandon" cycle (Knight, 2007). Literacy coaching must be integrated into a well-planned model of professional learning for teachers with shared goals and clear roles for coaches in order to be an effective initiative. Development of common understanding and alignment of the grant's goals, a shared vision for implementation, and clarity of coaching roles among all stakeholders should occur through initial stakeholder meetings, followed by institutes with all staff. Additionally, it is important to conduct ongoing collaborative inquiry groups with stakeholders to establish common understanding of desired teaching practices, student outcomes, and coaching model. Researchers advise these groups to focus on understanding what is working (or not) and proposed solutions or modifications to the implementation of the coaching model instead of focusing on accountability or blame.

To avoid the ongoing tensions that existed as a result of the lacking alignment between district and PEP coaching protocols, researchers recommend greater coordination among efforts. Principal interviews suggested year one implementation would have benefited initially from a more egalitarian and intentional engagement of Title I specialists in discussing the roles and responsibilities of the PEP coaches and how both initiatives could be mutually supportive. Researchers also suggest that it may have been beneficial for staff and the district to have spent a full academic year engaging in exploration and planning so that all roles were clear and mutually agreed upon.

Focused roles and responsibilities in light of the Title I specialists' efforts have a greater chance of avoiding confusion, acrimony, and frustration between stakeholders as well as pooling expertise, knowledge, and efforts towards a common goal. All stakeholders should meet before the onset of implementation to establish agreed-upon clear roles, attainable goals, and guidelines for the literacy coaches. Both the coaches and principal agreed that the coaches needed initial training, ongoing guidance, and a clear and consistent coaching model. Researchers recommend the use of the International Literacy Association Standards for Specialized Literacy Professionals (2017) as a framework for designing the roles of the literacy coach.

There is a need for a collective vision and clarity in the model of coaching to be implemented from the onset. "*It needed to be solidified before we ever stepped foot in a school with principals and even with teachers so they knew when the PEP coaches arrived this is what it would look like. Here are the goals, how we are going to do it. This is your part. This is our part*." One principal and PEP coach believed the role of the coaches should be more clearly defined by the principal rather than the organization. There were tensions with the academic department as PEP coaches felt they were stepping on toes as roles seemed to overlap. With district coaches working primarily on planning and curriculum maps, PEP's focus could remain on coaching but perhaps could use the district's coaching model to elicit a smoother transition and avoid "stepping on toes". Although the PEP coaches felt that this should be determined by school-level and district-level leaders, researchers also believe that the coaches themselves should have a voice in this process.

Guideline Three: Use Student-Centered Coaching Practices to Empower Groups of Teachers

Literacy coaching is defined as the collaborative work between a coach and content area teacher(s) to implement and utilize strategies designed to improve their students' ability to read, write, and *succeed* in middle school math and ELA classes. For successful implementation of the literacy coaching initiative, researchers believe that both teachers and coaches must be engaged and empowered in their work. This occurs when the coach plays the role as a supportive equal rather than an evaluator. When coaches and teachers work in tandem using a student-centered coaching model, the focus remains on how to improve student success. Coaches and teachers can engage in job-embedded professional learning opportunities through regular and ongoing coaching cycles. In a coaching cycle, a PEP coach and participating teacher(s) engage in a cycle of three core coaching activities: (1) planning meetings to identify student learning outcomes and design instruction, (2) in-class work where coaches conduct formative assessments, and (3) debriefing meetings where teacher(s) and coach analyze student formative assessment data to determine instructional decisions and next steps. Consistent use of all three coaching cycle activities are necessary to facilitate a cycle of planning, data collection and analysis, and reflection and goal setting for the next lesson.

Researchers suggest coaching with groups of teachers can become empowering for teachers by the incorporation of three key coaching practices. First, incorporating this coaching cycle into a student-centered collaborative inquiry process can position groups of teachers as learners with greater autonomy. Understanding the nature of teacher resistance must also be paired with efforts to protect teacher autonomy, since ignoring teacher autonomy often ensures teachers won't implement new teaching practices (Knight, 2007, p. 511). Collaborative inquiry provides a means for teachers to "deliberate problems of practice" and to "work together to uncover, articulate, and question their own assumptions about teaching, learning, and schooling" (Cochran-Smith & Lytle, 2009), p. 141). Kalmbach-Phillips and Carr (Kalmbach Phillips & Carr, 2010) propose teachers follow an inquiry cycle of planning, implementing, and reflecting prompting them to use student data to improve pedagogical decision-making and inform next steps (p. 42). Wilder (2017) has proposed reframing coaching as collaborative inquiry using a five phase process (See Figure 1).

When planning instruction in the "Ask" phase, a coach and teacher(s) can use student data to determine what students need to understand, know, and be able to do by the end of the learning experience. During the "Investigate" phase, the coach and teacher(s) can explore resources which expand their understanding of the student's learning needs. For example, this could be a digital resource summarizing how to best utilize collaborative groups with students in class. Then, during the "Create" phase, the

coach and teacher(s) can design the learning experiences for students while identifying two to three students for the coach to formatively assess during the lesson. In the "Do" phase, the coach and teacher put the instruction in place with one or both of them teaching while the other collects formative assessment data on student learning and confusion during class. Finally, in the "Reflection" phase, literacy coach and teacher(s) can look at the student's formative assessment data together, identifying the level of student understanding, the appropriate next instructional steps, and reflecting on their own learning as teacher(s) and coach.
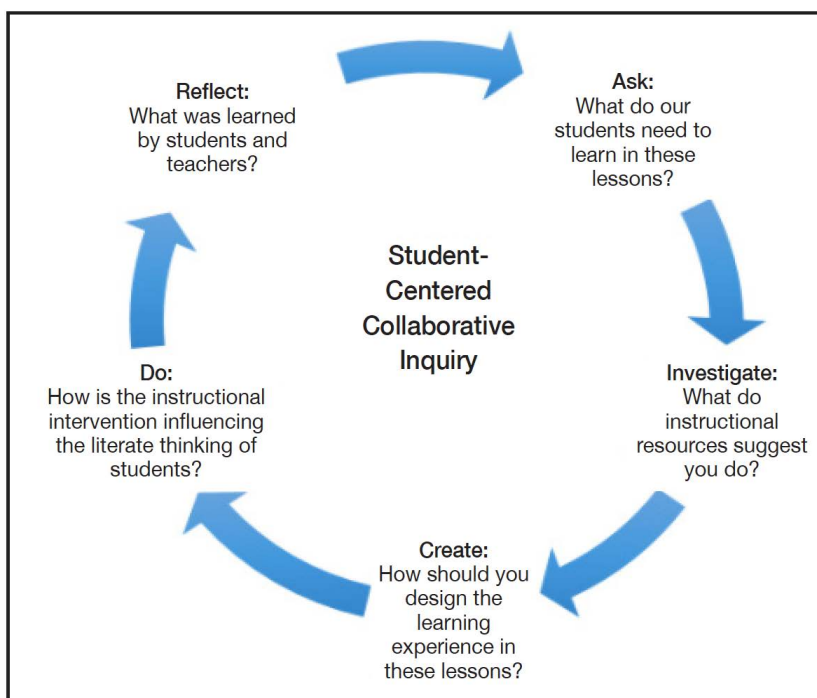
Figure 1: Student-Centered Collaborative Inquiry Process

Source: Wilder, P. (2017).

The "Ask," "Investigate," and "Create" phases of inquiry can occur during a planning meeting, the "Do" phase occurs during in-class work, and the "Reflect" phase occurs during the debriefing meeting. And, when this process includes an entire grade level of teachers, the coaching ensures increased sustainability and instructional capacity will exist after the coaching has ceased. Thus, researchers recommend a coach engage a group of teachers in this inquiry process while asking the group to decide which teacher's class makes sense for the coach to visit during the "Do" phase. The goal is to support how a group of teachers come together to inquiry into their teaching practice. In order for increased implementation of the grant program and a greater likelihood of impact from the logic model for teachers and students, researchers recommend coaches prioritize the *in-class* work with teachers. While coaches might offer "light coaching" to any teacher as they share resources and offer pedagogical suggestions, researchers recommend the majority of their time be spent conducting cycles of coaching in classrooms with teachers.

Secondly, grounding all collaborative work in the immediate formative assessment data of students represents the third coaching practice which can empower groups of teachers. Student formative assessment data (i.e. observations, writing, homework, classwork, etc.) provides a window into what students understand and where they are stuck in their learning. Thus, student formative assessment

data must be present at each phase of the student-centered collaborative inquiry process. During a planning meeting, coach and teachers analyze recent student work to determine student-learning outcomes (Ask), consider student work when using resources (Investigate), and while designing the instruction for students (Create), but it is also collected real-time during the in-class work (Do) and analyzed to determine student growth in the debriefing session (Reflect). By grounding the coaching conversations in the work of students, the coach and teacher(s) become shared partners who attempt to make instruction more responsive to the immediate learning needs of students in class. Effective teaching, then, is not based on how a coach or teacher feel about instruction, but is determined by how the instruction influences real-time student learning. In an era of increased teacher evaluation, grounding coaching in student-centered inquiry which uses student formative assessment data to inform instructional decisions is critical to empowering teachers.

Finally, the third coaching practice which can empower teachers is for coaches (and administrators) to adopt a transparent stance towards teacher participation in coaching. By choosing transparency of intentions, even during tense discussions, literacy coaches can convey their understanding of the challenges of teaching and their belief in teachers. Transparency of intentions can mean telling teachers why the literacy coach has offered to work with them, what participation would entail, how the collaborative inquiry cycle has been enacted with other teachers, why a particular instructional practice may be prioritized, or even which instructional routines a coach is comfortable or uncomfortable modeling. While transparency of intentions can reassure teachers the collaborative risks are worth the effort, it can also provide teachers with the means to safeguard their practices. Researchers suggest a transparent approach that distributes expertise. This kind of approach acknowledges that the coach and participating teachers have expertise as it relates to pedagogy and knowledge of specific students in their classroom. Through a transparent stance, both teacher(s) and coach learn with and from each other as they use a student-centered collaborative inquiry process to improve their instructional efforts.

All professional learning is an effort to close the gap between the collective knowledge of teachers and what students need teachers to learn. If middle schools are to improve how they respond to the learning needs of students, teachers need empowering, job-embedded professional learning which leverages the collective expertise of all teachers and engages them in ongoing inquiry into how to best support all students. Coaching can be a critical lever if it first ensures schools are partner-ready, leverages ongoing collaborative inquiry groups with stakeholders to establish a common understanding of a clear theory of change, and uses a student-centered coaching model to empower groups of teachers.

Appendix A. Study Logistics Updates

A. Institutional Review Board

There were no issues securing Institutional Review Board approval for this study. Furman University's Institutional Review Board approved and oversaw all research activities affiliated with the impact study. Furman University's IRB reviewed this research under its Expedited review process. The original application was submitted to Furman's IRB in July 2016 and approved in August 2016. Modification requests were submitted for IRB reviewed on an ongoing basis and continuation requests were submitted annually. The school district and school personnel informed parents and guardians of the interventions and services available to their students and secured permission to provide services when necessary. Evaluators followed all parental consent and child assent protocol, as dictated by Furman University IRB guidelines and Greenville County Schools' district research protocol. These protocols detailed precisely how researchers must protect data electronically and in hard copy, and detailed informed consent procedures for both parents (parental consent) and students (child assent).

In addition, the implementation evaluation was governed by Furman University and Clemson University's IRBs. The implementation study researchers followed all IRB informed consent processes and procedures when conducting interviews, focus groups, and classroom observations.

B. Project Timeline

There were very few modifications to the evaluation timeline for data collection, analysis, and reporting. The most notable change is that data from the South Carolina Department of Education for academic year 2017-18 were not made available in November as originally planned. At present time, researchers still have not received these data; therefore. Since researchers did not conduct impact analyses for this study, however, this change in timeline did not affect the evaluation.
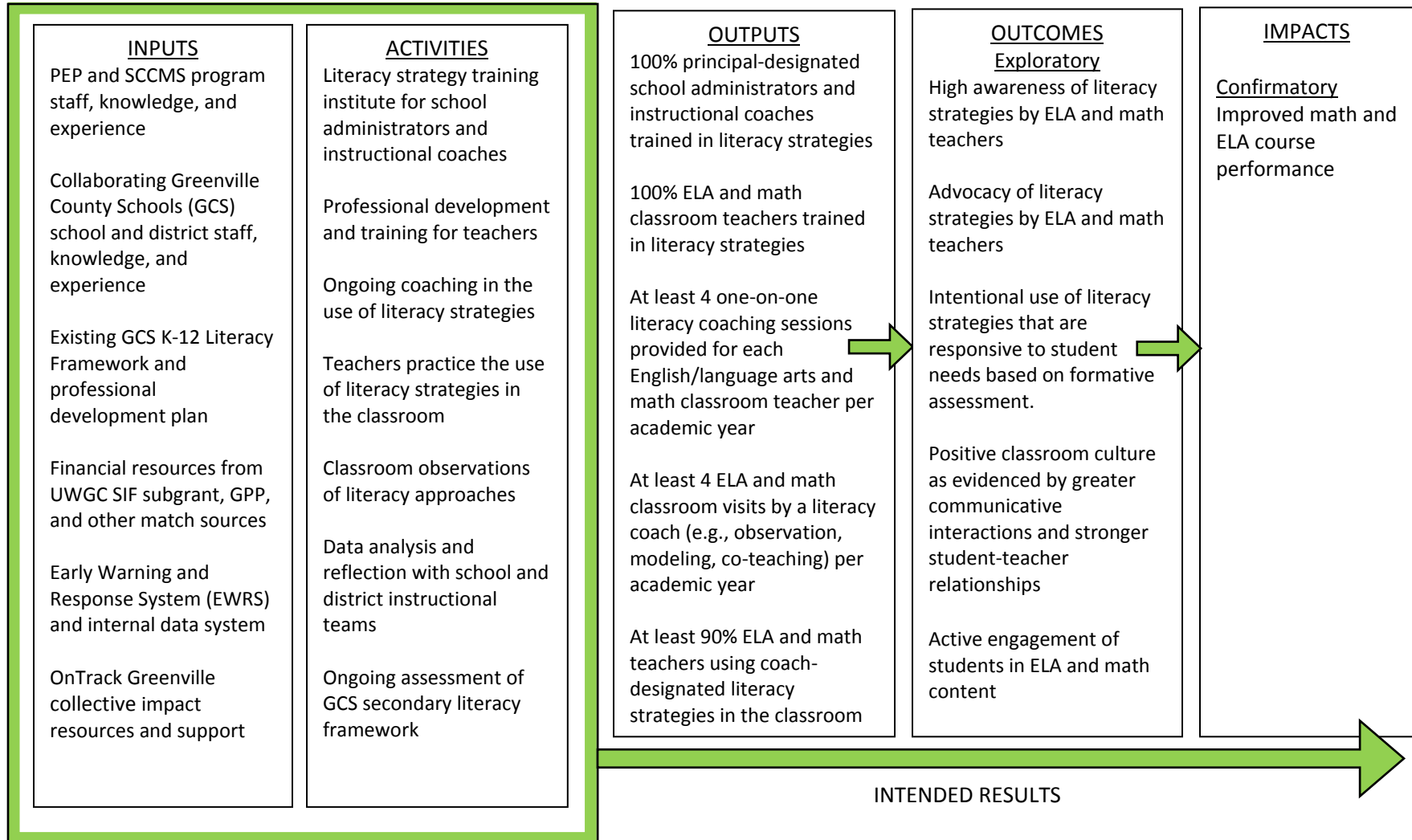
C. Project Personnel

There were no major changes to the evaluation or PEP project team. The Principal Investigators and lead project staff remained constant for all years of the study.

D. Project Budget

Apart from the unavailability of SIF continuation grant monies for Year 4 and Year 5 of the project, there were no issues with or changes to the budget for this evaluation.

Appendix B. Program Logic Model

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES Exploratory	IMPACTS
PEP and SCCMS program staff, knowledge, and experience Collaborating Greenville County Schools (GCS) school and district staff, knowledge, and experience Existing GCS K-12 Literacy Framework and professional development plan Financial resources from UWGC SIF subgrant, GPP, and other match sources Early Warning and Response System (EWRS) and internal data system OnTrack Greenville collective impact resources and support	Literacy strategy training institute for school administrators and instructional coaches Professional development and training for teachers Ongoing coaching in the use of literacy strategies Teachers practice the use of literacy strategies in the classroom Classroom observations of literacy approaches Data analysis and reflection with school and district instructional teams Ongoing assessment of GCS secondary literacy framework	100% principal-designated school administrators and instructional coaches trained in literacy strategies 100% ELA and math classroom teachers trained in literacy strategies At least 4 one-on-one literacy coaching sessions provided for each English/language arts and math classroom teacher per academic year At least 4 ELA and math classroom visits by a literacy coach (e.g., observation, modeling, co-teaching) per academic year At least 90% ELA and math teachers using coach-designated literacy strategies in the classroom	High awareness of literacy strategies by ELA and math teachers Advocacy of literacy strategies by ELA and math teachers Intentional use of literacy strategies that are responsive to student needs based on formative assessment. Positive classroom culture as evidenced by greater communicative interactions and stronger student-teacher relationships Active engagement of students in ELA and math content	Confirmatory Improved math and ELA course performance

INTENDED RESULTS

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Appendix C: Literacy Coach Interview Protocol

1. Describe your background as a teacher and coach.

2. Which of the four schools do you work with and what is your schedule like at each school?

3. Describe your role(s) at each school and the relationships you've established to facilitate those roles.

4. In what ways have you attempted to work with teachers in their classroom during the first year?

5. What challenges have you faced as a coach in your first year?

6. Recently you met with the principal of the school(s) where you are coaching. Can you tell us about those meetings?

7. What have you learned as a coach this year?

8. How are you thinking of altering or modifying your coaching during year two?

Appendix D: Principal Interview Protocol

1. Describe the role(s) of the literacy coach(es) at your school.

2. Describe the relationship the coach(es) have with you and your staff.

3. In what ways have the coach(es) worked with teachers in their classrooms during their first year?

4. What challenges have emerged in the first year of implementation?

5. What plans have been established to facilitate coaching at your school during year two

Appendix E. Sample Coaching Log

PEP Coaches used a Coaching Log to track coaching activities performed at treatment schools. The Coaching Log was a Google Sheet that coaches updated weekly. The following fields appeared on the Coaching Log.

- Date
- School
- Teacher name/discipline
- # teachers
- # coaches
- # administrators
- # other
- Grade level
- Activity
- Content
- Emphasis
- Cycles
- Comments

Appendix F. Coaching Cycle Observation Protocol

Date:	Location:
Names of Teacher(s):	Grade Level/Discipline:

Ask

What question(s) are being pursued in this collaboration? What goals have been established? To what extent are goals student-centered?

Initiated by Teacher _____ Initiated by Coach_____ Instructional Focus _____
Student Concept Focus_____ Student Skill Focus _____
Shared by Other Teachers in Building: _____

Investigate

What resources are used? What planning events are part of the collaboration?

Resources: District Curriculum _____ Practitioner Article_____ Digital _____
Planning: During Prep Time _____ Before/After School_____ Daily _____
Semi-Weekly_____ Inconsistent _____

Create

What are the products of this collaboration? What are the design elements or components of lessons or curricular units resulting from this collaborative work?

Lesson Plan_____ Mini-Lesson_____ Other _____

Do

> What is implemented in the classroom? What coaching roles are used?
>
>
>
>
>
>
>
> Coach as Observer _____ Coach as Model Teacher _____ Coach as Teacher _____
> Coach as Student Assessor _____ Coach as Tutor of Students _____ Other:_____

Reflect

> When is debriefing occurring? What is the nature of debriefing?
>
>
>
>
>
>
>
> After Class _____ Before/After School _____
> Looking Together at Student Work _____ Cognitive Coaching _____

Tensions

> What naturally occurring tensions do participants face? What coaching practices are used to
> ameliorate these tensions?
>
>
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>

Appendix G. OnTrack Educator Survey

Welcome, and thank you for participating in the Educator Survey administered as a part of the evaluation of OnTrack Greenville.

Please know that results of this survey are confidential, and no findings will be reported that identify you or your school. The informed consent form on the next screen provides additional information on confidentiality and reporting of results.

Your survey link is unique to you; no one else will be able to use your link. If you need to stop while completing the survey: finish the page you are on, click the Next button, and then close your browser window. You can resume the survey at any point by clicking the link in your email invitation. Your answers will be saved.

To thank you for completing this survey, you will receive five free movie rentals from Redbox. At the end of this survey, you will be redirected to a separate page where you will enter your name and email address. A member of the research team will send the movie rental codes to the email address you provide. Your personal information will not be connected to your survey responses in any way, maintaining your confidentiality at all times.

If you have questions at any point during the survey, contact Tracy Waters at tracy.waters@furman.edu or (864) 294-3803.

Click the Next button to view the informed consent and begin the survey.

Please select your choice from the options below. To view and/or print the informed consent form, click **here**.

By choosing "Agree" you acknowledge that you understand the general purposes of your involvement in the study described, have decided that you will participate, and understand that you can withdraw at any time.

If you select "Disagree" the survey will end.

    a.   Agree
    b.   Disagree → END OF SURVEY

Q1. What is the name of your school? [If you work at multiple schools, check all that apply.]
    a. Berea Middle School
    b. Greenville Early College
    c. Lakeview Middle School
    d. Tanglewood Middle School
    e. Other School: _____

Q2. What is your current role in the school(s)? [Check all that apply]
    a.   Teacher
    b.   Administrator
    c.   Title I Staff
    d.   Guidance, Social Work, Mental Health, or other Case Management Staff
    e.   Other Professional Staff: _____

Q3. What is your highest level of education?
- a. High School diploma or equivalency
- b. Associate's degree
- c. Bachelor's degree
- d. Master's degree
- e. Master's degree + 30
- f. Doctoral degree

Q4. IF Q2=Teacher, Which of the following grades do you teach? [Check all that apply.]
- a. 6th grade
- b. 7th grade
- c. 8th grade

Q5. IF Q2=Teacher, Which of the following courses do you teach? [Check all that apply]
- a. Math
- b. ELA
- c. Social Studies
- d. Science
- e. Special Education
- f. Related arts courses
- g. Other: _____

Q6. How many years have you been employed at your school, including this school year?
- a. This is my first year
- b. 2 – 4 years
- c. 5 – 7 years
- d. 8 – 10 years
- e. 11 or more years

Q7. How many years have you worked in the field of K-12 education, in total, including this year?
- a. This is my first year
- b. 2 – 4 years
- c. 5 – 7 years
- d. 8 – 10 years
- e. 11 or more years

Q8. Overall, how much do you agree or disagree with the following statements?

Responses: (1) Completely Agree, (2) Somewhat Agree, (3) Somewhat Disagree, and (4) Completely Disagree.

a. Educators in this school are able to get through to the most difficult students.
b. Educators here are confident that they will be able to motivate their students.
c. If it seems like a child doesn't want to learn, educators here give up.
d. Educators here have the skills needed to produce meaningful student learning.

Q9. Overall, how much do you agree or disagree with the following statements?

Responses: (1) Completely Agree, (2) Somewhat Agree, (3) Somewhat Disagree, and (4) Completely Disagree.

a. Educators in this school believe that every student can learn.
b. Students in this school come to school ready to learn.
c. Students in this school just aren't motivated to learn.

Q10. Overall, how much do you agree or disagree with the following statements?

Responses: (1) Completely Agree, (2) Somewhat Agree, (3) Somewhat Disagree, and (4) Completely Disagree.

a. Educators in this school do not have the skills to deal with student disciplinary problems.
b. The opportunities in this community help ensure that students will learn.
c. Learning is more difficult at this school because students are worried about their safety.
d. Drug and alcohol abuse in this community make it difficult for students here.

Q11. Overall, how much do you agree or disagree with the following statements?

Responses: (1) Completely Agree, (2) Somewhat Agree, (3) Somewhat Disagree, and (4) Completely Disagree.

a. Educators at this school routinely analyze information together (such as student work and data) to inform practices.
b. Educators at this school routinely develop strategies for improvement based on data they have analyzed.
c. Educators at this school have effective practices for working together.
d. My school's schedule allows adequate time for educator collaboration.

Q12. Do you participate in an OnTrack Team (a.k.a. EWRS Team) at your school?
   a.   Yes
   b.   No

Q13. How familiar are you with OnTrack Greenville and the following OnTrack interventions available at your school?

Responses: (1) Very familiar, (2) Familiar, (3) Somewhat familiar, and (4) Not at all familiar

a. OnTrack Greenville
b. Public Education Partners (PEP) Literacy Coaches
c. School-Based Health Center (GHS)
d. Communities In Schools (CIS)
e. BELL Summer Program
f. Teen Leadership course

ONTRACK TEAMS (Questions 14 – 21) [DISPLAY THIS SECTION IF Q12 = Yes]

Q14. How often did you participate in OnTrack Team (EWRS Team) meetings at your school this year?

a. Every week
b. About two times per month
c. About once per month
d. About every other month
e. Only once or twice this year

Q15. The following statements describe how OnTrack Teams hope to make decisions when matching students to appropriate interventions. How much do you agree or disagree with the following statements?

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, and 5) Completely Agree.

When matching students to appropriate interventions…
a) …discussions of students focus on strengths and solutions.
b) …decisions are made collaboratively with OnTrack Team members.
c) …decisions are made collaboratively with students.
d) …decisions are made collaboratively with families.

Q16. The statements below reflect how OnTrack Greenville hopes team members interact with each other. Overall, how much do you agree or disagree that team members are achieving these behaviors?

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, and 5) Completely Agree.

OnTrack Team members at my school are…
a. …sharing information and communicating effectively.
b. …following through on assigned tasks.
c. …reporting back to the team on progress and/or barriers.
d. …working together to discover different approaches to the EWRS process.
e. …adapting solutions to improve student success.

Q17. How much do you agree or disagree with the following statements?

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, and 5) Completely Agree.

a. The right types of interventions exist at my school to meet student needs.
b. The right types of interventions exist in my community to meet student needs.
c. Most students who have needs are matched to an intervention(s).
d. When identified as in need of assistance, students generally are matched with the right intervention(s).
e. When identified students are matched with an intervention(s), the intervention(s) seems to meet the students' needs.

Q18. [IF Q17a=1, 2, or 3]: What additional types of interventions are needed to help meet student needs? [open-ended essay-size test box]

Q19. [IF Q17b=1, 2, or 3]: What are the reasons that some students who have needs are not matched to an intervention(s)? [Check all that apply.]
   a. The intervention(s) cannot serve enough students.
   b. The right type of intervention(s) is not available at my school or in my community.
   c. Caregivers do not provide consent for students to participate in the intervention(s).
   d. Other, please specify: _____ [ESSAY-SIZE TEXT BOX].

Q20. The following partners serve students identified as needing assistance by the OnTrack Teams. How often does your OnTrack Team match identified students to these OnTrack interventions?

Responses: 1) Rarely, 2) Once in a while, 3) Sometimes, 4) Often, and 5) All the time.

a. Communities In Schools (CIS)
b. School-Based Health Center (GHS)

Q21. What feedback or suggestions, if any, do you have about how the OnTrack Team in your school can be improved? [Essay-sized text-box.]

COMMUNITIES IN SCHOOLS (Questions 22 – 26) [DISPLAY SECTION IF Q13c=1, 2, or 3]

Q22. Have you referred students to services provided by Communities In Schools (CIS)?
   a.   Yes
   b.   No

Q23. Thinking about your school, indicate how much do you agree or disagree with the following statements.

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

CIS has helped participating students…
a. …improve their attendance.
b. …improve their behavior
c. …improve course performance in Math.
d. …improve course performance in English/language arts.

Q24. Thinking about your school, indicate how much do you agree or disagree with the following statements.

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

CIS has helped participating students…
a. …improve their attitude toward learning and school.
b. …become more engaged in learning.
c. …build relationships with caring adults.
d. …improve their educational self-perception.

Q25. Please indicate the extent to which you agree or disagree with the following statements.

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. CIS is well-integrated with other interventions and services for students at my school.
b. CIS Student Support Specialists in my school have developed good relationships with the students they serve.
c. This year, CIS Student Support Specialists have contributed to an improvement in our school climate.

Q26. What feedback or suggestions, if any, do you have about how the CIS program in your school can be improved? [Essay-sized text box].

<u>SCHOOL-BASED HEALTH CENTERS: IMPACT QUESTIONS (Questions 27 – 29) [DISPLAY IF Q13b=1, 2 or 3.]</u>

Q27. Have you referred students to the School-Based Health Center staff?
   a.   Yes
   b.   No

Q28. Please indicate the extent to which you agree or disagree with the following statements:

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. The School-Based Health Center in this school is well-integrated with other interventions and services for students.
b. The School-Based Health Center staff in this school have developed good relationships with the students they serve.
c. This year, School-Based Health Center staff have contributed to an improvement in our school climate.

Q29. What feedback or suggestions, if any, do you have about how the School-Based Health Center in your school can be improved? [Essay-sized text box]

<u>TEEN LEADERSHIP COURSE (Questions 30 – 31). [DISPLAY SECTION IF Q13e= 1, 2, or 3]</u>

Q30. Please indicate the extent to which you agree or disagree with the following statements:

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. The Teen Leadership course in my school is well-integrated with other interventions and services for students.
b. The Teen Leadership teachers in my school have developed good relationships with the students they serve.
c. This year, Teen Leadership teachers have contributed to an improvement in our school climate.

Q31. What feedback or suggestions, if any, do you have about how the Teen Leadership course in your school can be improved? [Essay-sized text box]

PUBLIC EDUCATION PARTNERS (PEP) LITERACY COACHES (Questions 32 – 33) DISPLAY SECTION IF Q13a=1, 2, or 3

Q32. Please indicate the extent to which you agree or disagree with the following statements:

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. PEP Literacy Coaching in this school is well-integrated with other professional development/coaching opportunities.
b. The PEP Literacy Coaches in this school have developed good relationships with the teachers they coach.
c. This year, PEP Literacy Coaches have contributed to an improvement in our school climate.

Q33. What feedback or suggestions, if any, do you have about how PEP Literacy Coaching in your school can be improved? [Essay-sized text box]

BELL SUMMER PROGRAM (Questions 34 – 35) [DISPLAY SECTION IF Q13d=1, 2, or 3]

Q34. Please indicate the extent to which you agree or disagree with the following statements:

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, 5) Completely Agree, and 6) I don't know enough to speak to this.

a. The BELL Summer Program in this school is well-integrated with other interventions and services for students.
b. The BELL Summer Program staff in this school have developed good relationships with the students they serve.
c. This year, the BELL Summer Program staff have contributed to an improvement in our school climate.

Q35. What feedback or suggestions, if any, do you have about how the BELL Summer Program at your school can be improved? [Essay-sized text box]

PUBLIC EDUCATION PARTNERS DISPLAY SECTION IF [Q1=A, C, **OR** D] **AND** [Q2=TEACHER] **AND [**Q5=MATH **OR** ELA]

Q36. Did you work with a PEP Literacy Coach or PEP Mathematics Coach during this academic school year?
    a. Yes
    b. No

[Display Questions 37 – 45 IF Q36=Yes]

Q37. How often did you work with a PEP Coach this year?
    a. Once a semester
    b. Once a quarter
    c. Monthly
    d. Weekly
    e. Other: _____

Q38. How many total days was the PEP Coach in your classroom during the year?

    a. 15 or more days

    b. 11 – 15 days

    c. 6 – 10 days

    d. 1 – 5 days

    e. 0 days

Q39. Who typically initiated the collaboration between you and a PEP Coach?

    a. PEP Coach

    b. You

    c. Teaching Colleague

    d. Administrator

    e. Other: _____

Q40. What student learning outcomes did you and the coach attempt to improve upon? [Essay-sized text box]

Q41. What teaching practices/strategies were focused on during your collaboration? [Essay-sized text box]

Q42. Which of the following coaching activities occurred during your collaboration(s) with the PEP Coach? [Check all that apply]

    a. Sharing of resources

    b. Meeting to plan curriculum and/or instruction

    c. In-class modeling of instruction

    d. Observation of your teaching/students

    e. Collection of student formative assessment data

    f. Debriefing of instruction with student data

    g. Other: _____

Q43. Which of the following coaching activities did you find most valuable during your collaboration(s) with the PEP Coach? [Check all that apply]

    a. Sharing of resources

    b. Meeting to plan curriculum and/or instruction

    c. In-class modeling of instruction

    d. Observation of your teaching/students

    e. Collection of student formative assessment data

    f. Debriefing of instruction with student data

    g. Other: _____

Q44. How likely are you to recommend literacy coaching to a teaching colleague?

    a. Very likely

    b. Likely

    c. Somewhat likely

    d. Not at all likely

Q45. Please indicate the extent to which you agree or disagree with the following statements.

Responses: 1) Completely Disagree, 2) Somewhat Disagree, 3) Neither Agree nor Disagree, 4) Somewhat Agree, and 5) Completely Agree.

a. More teachers at my school should participate in literacy coaching.
b. I regularly incorporate teaching practices I learned through coaching into my instruction.
c. My students have benefited from my participation in literacy coaching.
d. I feel confident incorporating teaching practices I learned through coaching into my instruction.
e. Literacy coaching has enhanced my instruction.
f. My students are more engaged in class when I use teaching practices I learned through literacy coaching.

SCHOOL-BASED HEALTH CENTERS: IMPLEMENTATION QUESTIONS (Questions 46 – 58)

The following questions are to get a sense of your level of awareness about the School-Based Health Center services and processes. Please answer each question to the best of your ability.

Q46. On what days are the School-Based Health Center staff available at your school (Check all that apply)?
    a. Monday
    b. Tuesday
    c. Wednesday
    d. Thursday
    e. Friday
    f. It varies by week or month
    g. School-Based Health Center staff are not available at my school, only Telemedicine
    h. I don't know

Q47. On a weekly basis, what is the best way to let school personnel know when School-Based Health Center staff are on site? [Essay-sized text box]

Q48. On a weekly basis, what is the best way to let students and parents know when School-Based Health Center staff are on site? [Essay-sized text box]

Q49. The following is a list of ways students could be referred to the School-Based Health Center health care provider. Of these, which referral processes are available at your school?

Responses: 1) Yes, available at my school, 2) No, not available at my school, and 3) Unsure if available at my school

a. A parent may make a request for their child to be seen by my school's School-Based Health Center health care provider.
b. The school nurse can refer someone to the School-Based Health Center health care provider.
c. A teacher, staff member, or administrator may refer a student to the School-Based Health Center health care provider.
d. A student may be referred to the School-Based Health Center health care provider through the OnTrack Teams (Early Warning and Response System).
e. A student may refer another student to the School-Based Health Center health care provider.

Q50. The following is a list of health and/or health-related services. Please indicate if the service is available at your school.

Responses: 1) Yes, available at my school, 2) No, not available at my school, and 3) Unsure if available at my school

   a. Sports Physicals
   b. Care for acute illness (such as cough/cold, allergies, headache, or stomach-ache)
   c. Immunization management
   d. Chronic illness management (such as asthma, high blood pressure, etc.)
   e. ADHD evaluations with physicians
   f. Referrals for specialty care (such as an endocrinologist or gastroenterologist)

[Page Break]

   g. Referral to primary care practice for a "medical home"
   h. Assistance with Medicaid eligibility application
   i. Assistance with accessing health-related community resources
   j. Diagnosis and treatment of illnesses with over-the-counter medicine available at school
   k. Treatment of illnesses with over-the-counter medicine sent from home in original bottle with parent permission
   l. Diagnosis and treatment of illnesses with a prescription medicine

[Page Break]

   m. Decision-making around sending a child back to class, home, or to hospital, based on clinical judgment
   n. Basic first aid
   o. Wound care (e.g. removing stitches or redressing a bandage)
   p. Administration of prescription medicine that is sent to school with doctor's note and in original bottle

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Q51. [DISPLAY ONLY THOSE OPTIONS SELECTED IN Q50]. Below are some of the health and/or health-related services that you said are available at your school. Please check the appropriate box(es) for who at your school provides that service. **If services are provided by both the School Nurse and the School-Based Health Center health care provider, please check both columns.**

Responses: 1) School Nurse, 2) School-Based Health Center health care provider, 3) Unsure

   a. Sports Physicals
   b. Care for acute illness (such as cough/cold, allergies, headache, or stomach ache)
   c. Chronic illness management (such as asthma, high blood pressure, etc.)

[Page Break]

   d. Assistance with accessing health-related community resources
   e. Diagnosis and treatment of illnesses with over-the-counter medicine available at school
   f. Treatment of illnesses with over-the-counter medicine sent from home in original bottle with parent permission

[Page Break]

   g. Decision making around sending a child back to class, home, or to hospital based on clinical judgment
   h. Wound care (e.g. removing stitches, redressing a bandage)

Q52. Have you interacted with the School-Based Health Center staff at your school this school year?
   a. Yes
   b. No
   c. Don't know

Q53. What are the names of the School-Based Health Center staff at your school? [Open response]

Q54. Have you referred a student to the School-Based Health Center this school year?
   a. Yes
   b. No
   c. Don't know

Q55. What additional services, if any, would you like to see provided by the School-Based Health Center staff at your school? [Essay-sized text box]

Q56. Are there barriers to students accessing the School-Based Health Center staff?
   a. Yes
   b. No
   c. I don't know

Q57. DISPLAY IF Q56=YES. What are the barriers to students accessing the School-Based Health Center staff? [Essay-sized text box]

Q58. DISPLAY IF Q56=YES. Do you have any recommendations on how to remove potential barriers and encourage more students to use the School-Based Health Center services that are available? [Essay-sized text box]

End of Survey Questions

Q59. Use the space below to comment on any aspects of OnTrack Greenville that we have not covered or to provide any general impressions that would be helpful for us to know. [Essay-sized text box]

Q60. What is your gender?
   a. Female
   b. Male
   c. Prefer not to say

Q61. What is your race/ethnicity? [Select all that apply.]
   a. Black
   b. Asian American
   c. White
   d. Hispanic American
   e. Native American
   f. Prefer not to say [MAKE MUTUALLY EXCLUSIVE]
   g. Other (please specify): _____

Appendix H. PEP Teacher Interview Protocol

Explain the Purpose of Study and Gain Consent
Researchers will provide an overarching summary of the study, and explain that the teacher must sign the **Teacher Informed Consent Form**.

Prompt
"Thank you so much for agreeing to participate in this interview. Over the next 30-45 minutes, we will engage you in discussion about Public Education Partners (PEP) literacy coaching and how participation in coaching has impacted you and your students. For purposes of this interview, we will be asking specifically about literacy practices that you learned through your work with your PEP coach. Hereafter we will refer to these as PEP literacy practices.

While I will ask questions, another researcher will take notes on the computer. We will not use a recording device. Please be assured that your comments will not be attributed in any way to you personally or to your school or district. Your individual responses will not be shared with your principal, instructional coach, or anyone else beyond the research team.

Do you have any questions before we begin?"

1) First, I would like to ask you for some demographic information:
    a. How many years have you taught?
    b. How long have you taught ELA/Math?
    c. How long have you been at this school?

2) On average, how often did you work with a PEP literacy coach?
    - Daily
    - Weekly
    - Monthly
    - Once a quarter
    - Never
    - Other_____

3) On average, how often do you use the PEP literacy practices that you learned through coaching?
    - Daily
    - Weekly
    - Monthly
    - Once a quarter
    - Never
    - Other_____

4) Please give an example of a PEP literacy practice that you regularly use in your classroom. What does it look like in action?

5) On average, how often do you incorporate this PEP literacy practice into your classroom instruction?
   - ☐ Daily
   - ☐ Weekly
   - ☐ Monthly
   - ☐ Once a quarter
   - ☐ Other_____

6) Please describe how you formatively assess students when using this particular PEP literacy practice.

7) Please describe a time when a PEP literacy practice you used was not as successful as you would have liked. Why was it unsuccessful?

8) Which PEP literacy strategy do you feel has been the most beneficial to you in your teaching? Why?

9) On a scale from 1-10 (1 being least equipped and 10 being most equipped), how well-equipped do you feel to utilize specific PEP literacy strategies in your content area?

   a. What, if anything, would make you feel more comfortable with utilizing PEP literacy strategies?

10) How does your use of PEP literacy practices influence how you communicate with your students?

11) How does your use of PEP literacy practices influence your relationships with your students?

12) On a scale from 1-10 (1 being least engaged and 10 being most engaged) how engaged do you think your students are in instruction?

13) How does your use of PEP literacy practices influence engagement in your classroom?

14) Is there anything else you want to add or say about the PEP literacy strategies before we finish this interview?

Thank you for your time.

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