RESEARCHREPORT

AN EMPIRICAL EDUCATION REPORT

Year 1 Interim Report of Reading Apprenticeship/RAISE Scale-up

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Jenna Zacamy

Sophia Gray

Andrew Jaciw

Denis Newman

Empirical Education

Empirical Education Inc. · 425 Sherman Avenue, Ste 210, Palo Alto, CA 94306 · empiricaleducation.com · 650.328.1734

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About Empirical Education Inc.

Empirical Education Inc. is a Palo Alto, California-based research company that provides rigorous and independent evidence to inform school system decisions. The company brings its expertise in research, data analysis, engineering, and project management to customers that include the US Department of Education, educational publishers, foundations, leading research organizations, and state and local education agencies.

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Overview

In October 2010, WestEd's Strategic Literacy Initiative (SLI) won an i3 "Validation" grant to scale up and validate the Reading Apprenticeship (RA) model in three core secondary content area classes: U.S. history, biology, and English language arts.[1] WestEd's proposal stated two goals.

Goal 1: To transform academic literacy teaching and learning in high school subject areas so that students are able to achieve high standards.

Goal 2: To build LEA capacity to disseminate, support, and sustain academic literacy improvement in high school subject areas within and beyond their regions. *Participating LEAs will sustain improvement of academic literacy proficiency in their schools and districts and become resources for scale-up beyond their LEAs.*

Empirical Education Inc. is conducting the independent research component of the project, which evaluates the success of RA in achieving both these goals. Goal 1 is being addressed through a longitudinal randomized control trial (RCT) conducted in approximately 40 schools in Pennsylvania and California. Goal 2, the focus of this report, is being addressed through a formative evaluation of the scale-up process ("Scale-up Study"). The scale-up is taking place in four states: Utah, Michigan, Indiana, and Pennsylvania (schools other than those participating in the RCT).

The RCT and the Scale-up Study have distinct research questions and are designed around complementary theories of how Reading Apprenticeship works. The primary outcome of interest in the RCT is student achievement in the content areas and reading. The theory of action for the RCT is focused on changing teacher practices so as to support an apprenticeship process in the classroom and thereby improve student cognitive capacities measured by achievement tests and attitude measures. The theory operates primarily at the teacher-classroom-student level. In contrast, the primary outcome for the Scale-up Study is the project's success in scaling-up and in building a self-sustaining capacity to build and maintain the improvements. For scale-up, the logic model operates primarily at organizational levels above the classroom: the support structures at the school, district (LEA), intermediate agency, and state levels. The theory sees the elements at all these levels as forming potentially positive feedback loops and indicates potential sources that block successful scale-up.

The purpose of this interim report is to provide formative feedback to the SLI team, site coordinators, and implementing schools, districts, and states regarding the scale-up process in the first year of implementation. Specifically, this report provides a brief review of the scale-up literature/research and the logic model guiding this evaluation; an overview of key

[1] The developers have used the term "Reading Apprenticeship Improving Secondary Education" (RAISE) to describe the focus of this project. For more information on Reading Apprenticeship approach, framework, and professional development, and resources visit http://www.wested.org/cs/ra/print/docs/ra/home.htm

RAISE project events in Year 1; RAISE participation at the teacher, school, district, and state levels from Year 1; and a subset of descriptive statistics from the Year 1 teacher and administrator surveys to assess the extent to which the project's goals are being recognized.

A more comprehensive report on Year 1 is currently being prepared. This report will include a more thorough overview of the recent scale-up literature/research and description of key RAISE project events in Year 1. Additionally, it will include statistical hypothesis tests of specific results in the current report to assess whether differences in the distributions of responses—across states, for example—are large enough that they are unlikely to occur solely by chance. We will also include a series of analyses showing associations between (1) measures of dimensions of scale-up including levels of buy-in, capacity to implement, and ownership, and (2) levels of participation in and satisfaction with the reform (for example, attendance at monthly meetings and reported levels of effectiveness). We will also consider whether these associations are moderated by a limited set of contextual variables including the specific state in which the reform is being conducted, prior RA exposure, and other background variables at the teacher, administrator, or school level. In the more comprehensive report, we will examine variation in scale-up across states, across schools within states, as well as how much of the variation in the measures of scale-up processes is not accounted for through activities that are posited a-priori to affect the success of scale-up. The report may also examine the relationships among the theoretically posited dimensions of scale up and among the activities and behaviors posited to be predictive of scale up.

Reading Apprenticeship Framework and Scale-up Literature Review

READING APPRENTICESHIP FRAMEWORK

Reading Apprenticeship is a model of academic literacy instruction and has been shown to transform subject-area instruction and increase adolescents' literacy engagement, academic identity, and achievement (Greenleaf et al., 2009). The approach applies instructional strategies such as explicit comprehension strategy instruction; vocabulary and academic language development techniques; text based discussion and writing to learn and consolidate understanding in order to equip students with the literacy skills, habits, and self- confidence necessary to successfully engage academic texts and develop content specific literacy skills and knowledge. RA's unique professional development is designed to transform teachers' understanding of their role in adolescent literacy development and build enduring capacity for literacy instruction in the academic disciplines. These changes in teacher attitudes and instructional approach are hypothesized to result in changes in student attitudes and motivation while simultaneously building skills and knowledge for subject-specific literacy tasks, strengthening students' view of themselves as readers and learners, and yielding substantial gains in student achievement (Snipes, J., 2012). RA is closely aligned with subject-area learning goals and the Common Core Standards.

This overall RAISE project intends to use the RA model to build the capacity of teachers and LEAs to equip struggling readers, English Language Learners (ELLs), and other students with the academic literacy skills and self-confidence necessary to meet rigorous standards as

measured by aligned high-quality assessments. Over the five years of the project, the goal is to expand from an initial cohort to a much larger set of teachers, schools and districts.

SCALE-UP LITERATURE

The review of scale-up literature documents a distinction between what we call studies of scale-up *impact* and studies of scale-up *process*. While this distinction is not always clearly drawn, approaches to scale-up and studies that instantiate the approaches can usefully be categorized this way. In perhaps the most common or traditional approach, a scale-up study seeks to measure impacts on a larger number of participants as a program is expanded in new and different contexts (McDonald, 2006). There are accepted norms of research to measure the impact of a program through experimental studies. However, the nature of these studies can constrain the natural expansion of a program because of specific recruitment requirements, procedures to reduce contamination, and other controls put in place in order to produce an unbiased impact estimate. Scale-up studies can also, however, focus on the spread of reform-related norms, beliefs, and principles within a classroom, school, and district and the *process* of growth and expansion. From our review of scale-up research in education, we have concluded that a unified theory of the scale-up "process" is in very early stages, and few empirical studies have investigated this process. Sternberg et al. (2011) contend that "little—arguably, almost nothing—is known about the factors that lead to successful scaling up" and that there has "not been a systematic review of the available knowledge, either at the level of theory or at the level of empirical evaluation of hypotheses and observations on the process of upscaling." The scale-up studies that have been conducted in education have been primarily focused on the quantitative impact of such reforms rather than the processes of reaching larger numbers of schools and students or the processes of transfer of ownership and commitment from schools, as posited by Coburn (2003).

The focus of this study is to understand the processes involved in scaling up RA in different states and contexts, as well as the stages of transition that occur as ownership is transferred from the developers to local districts and schools. Thus, this study is best suited to build on Adelman and Taylor's (1997) four phases of scale-up as well as Coburn's (2003) four dimensions of scale-up.

Adelman and Taylor's (1997) model depicts four overlapping phases of scale-up. In the first stage, *Creating readiness*, efforts are directed toward disseminating program information, building interest, and negotiating policy frameworks for involvement. The second phase, *Initial implementation*, includes guiding the adaptation of the intervention by creating temporary mechanisms to facilitate implementation (e.g., mentors or coaches). The third phase, *Institutionalization*, ensures long term ownership and sustainability of the intervention which requires ongoing leadership to take responsibility for the intervention, and coordination mechanisms to keep the intervention running. The fourth phase, *Ongoing evolution*, is concerned with accountability and continually informing practices for improvement through formative and summative evaluation. Within each of these four phases are activities carried out by the scale-up staff, as well as collaborative efforts between scale-up staff, organizational leadership, and stakeholders.

Coburn (2003) proposed an expanded "conceptualization of scale consisting of four interrelated dimensions."

1. Depth
2. Spread
3. Sustainability
4. Shift in reform ownership

Depth refers to "change that goes beyond surface structures or procedures (such as changes in materials, classroom organization, or the addition of specific activities) to alter teachers' beliefs, norms of social interaction, and pedagogical principles as enacted in the curriculum" (p. 4). Depth of reform-centered knowledge also includes changes in the teachers' underlying assumptions about expectations of students and how student learn.

Spread pertains to increasing the number of schools or classrooms using a program, as well as the spread of reform-related norms, beliefs, and principles within a classroom, school, and district. This idea of spread includes an increase in the number of participants across sites (external spread), as well as within classrooms, schools, and districts (internal spread). Spreading the reform within classrooms, schools, and districts can be a "key mechanism for normative coherence" to support the reform becoming embedded in school and district policy, routines, and culture (p. 7).

Sustainability is the distribution, adoption, and maintenance of an innovation over a long term. She identifies some of the biggest challenges of sustainability as competing priorities in schools, changing demands (within the school and larger policy demands), and teacher and administrator turnover. Coburn encourages the external reform developers to continually think about and implement strategies for "providing schools with the tools they will need to sustain the reform" especially after the "short-term influx of resources, professional development, and other forms of assistance that dissipates over time as external developers turn their attention to other sites" (p. 6). While investment in deepening the reform-centered knowledge at the teacher and/or administrator level is an important strategy for sustainability, Coburn points out that teachers and administrators are part of a larger multilevel system, and supports at each of those levels need to be in place. Examples of these supports include a professional community of colleagues that "reinforces normative change and provides continuing opportunities to learn, knowledgeable and supportive school leadership, connections with other schools and teachers engaged in similar reforms, and normative coherence or alignment between the district policy context and the reform" (p. 6).

Shift in reform ownership concerns the ultimate goal of reform efforts—to transfer the reform-centered knowledge, authority, and agency from the "external" providers to the "internal" actors (e.g., teachers, schools, and districts) thereby sustaining the "reform in ways that make a difference to students." The external developers need to work toward creating conditions and building capacity to shift the ownership to the internal actors so that the reform can become self-generative. Coburn sites existing research that suggests preliminary indicators of the shift in ownership, including "(a) the presence of structures and mechanisms

for ongoing teacher learning about reform (e.g., professional development, teacher study groups); (b) the presence of established strategies to provide continued funding for reform activities; (c) the degree to which districts have taken responsibility for continued spread of reform; and (d) the use of reform-centered ideas or structures in school or district decision making" (p. 8).

This expanded conceptualization of scale moves away from the idea of replication to conceptual, organizational, and philosophical changes that can be sustained over time.

RAISE Scale-up Logic Model

The following four features of scale-up have guided the development of the structure of the RAISE scale-up logic model.

1. Scale-up takes place in multilevel organizational settings (classroom, school, LEA, state, region).
2. It is a continuous and recursive process that evolves over time.
3. It is a formative and cyclical process, with outputs at one point in time being inputs that influence later outcomes.
4. It takes place over several different contexts so scale-up may depend on specific features of the settings.

The traditional logic model, with inputs on the left, outputs or intermediate outcomes in the middle, and final outcomes on the right, does not lend itself to representing this complex, multilevel, iterative process. Instead we developed an interactive logic model that shows four stages of development from initial project development to the project goal of RA being broadly institutionalized (see Goal 2 in the overview of this report). The stages of the logic model have also been guided by Adelman and Taylor (1997) and Coburn (2003) scale-up frameworks. In the following section, we provide a brief overview of the stages of the RAISE scale-up logic model. See Appendix A for the accompanying figures and comprehensive narrative description of each stage.

OVERVIEW OF RAISE SCALE-UP LOGIC MODEL

The RAISE scale-up logic model consists of four stages.

1. Stage 1: Development activities
2. Stage 2: Increased ownership
3. Stage 3: Sustained ownership
4. Stage 4: RA broadly institutionalized

Stage 1 comprises the design and construction of the four development activities (i.e., Professional Development for Reading Apprenticeship facilitators and teachers; Instructional Support Resources; Recruitment and Retention; and Project Development and Coordination). The processes and materials for these activities, which we call "WestEd's RAISE" are

developed through the i3 grant funds. Additionally, this stage includes the uptake of these activities within the recruited and implementing schools and districts. This stage is similar to Adelman and Taylor's (2007) first two phases: Creating readiness and Initial Implementation. These activities are not only designed to spread the enactment of RA activities in the participating schools, but they are also expected to instill participant buy-in and capacity to the extent that, in the ensuing stages, the developers are able to transfer responsibility for and ownership of RA to local districts and schools, as described in Coburn's model.

In Stage 1 of the logic model, we introduce green arrows which depict the influence of WestEd's RAISE on the five intermediate outcomes (indicated with blue boxes in the figures in Appendix A).[2]

1. Increased participation in RA
2. Classroom fidelity of RA
3. Buy-in to the RA framework
4. Increased capacity to implement and disseminate RA practices
5. Student achievement

Our first two intermediate outcomes—Increased participation in RA and Classroom fidelity of RA—correspond to Coburn's (2003) first two dimensions of scale-up: Spread and Depth. Our second two intermediate outcomes—Increased local capacity and Buy-in—are expected to lead to increased local ownership of RA in Stages 2 through 4. Finally, the development activities are expected to lead to increased student achievement. SLI has conducted several studies on the effect of RA on student achievement. These studies collectively suggest that RA "improved student achievement on state-mandated criterion referenced tests in English language arts, reading comprehension, and science" (SLI, 2010).

These intermediate outcomes will also interact with each other. As buy-in and commitment to RA increase, we hypothesize that districts, schools, and teachers will dedicate the time and resources necessary to increase capacity to implement and disseminate RA at the local level. As capacity and support builds, we expect districts and schools to increase the numbers of teachers implementing RA; that is, schools will send more teachers to RA training and spread the RA ideas to other districts and schools. We also expect classroom fidelity of RA to lead to increases in student achievement, as evidenced by improved standardized student test scores (Corrin, Somers, Kemple, Nelson, & Sepanik, 2008; Greenleaf et al., 2009; Greenleaf, Schneider, & Herman, 2005).

Stage 2 (Increased ownership) and Stage 3 (Sustained ownership) are hypothesized to result from the intermediate outcomes. These stages correspond to Coburn's Shift in reform ownership dimension. Stages 2 through 4 are also similar to the third phase in Adelman and

[2] The arrows in the logic model represent relationships or interactions between different components of the process. They change color and directionality through the different stages of the model.

Taylor's model, Institutionalizing new approaches. In Stage 2, our model introduces purple arrows which indicate the local level taking ownership of the development activities and adapting them to meet their needs.

Stage 4 is RAISE's ultimate goal, RA broadly institutionalized, where all activities are fully implemented at the local level. Once the intermediate outcomes are realized, we hypothesize two end outcomes: policy shifts and RA spreading with depth beyond the original LEAs that were recruited to join the project (SLI, 2010). Black arrows indicate the influences and feedback loops that are active during this stage. Our final stage corresponds to Coburn's dimension of Sustainability.

Research Questions, Methods, and Data Collection

RESEARCH QUESTIONS

This formative Scale-Up Study is guided by three sets of research questions investigating the spread of RAISE, the scale-up process, and contextual factors that affect scale-up. In addition to measuring the study's intermediate outcomes,[3] these questions investigate the transfer of responsibility for and ownership of the RAISE initiative from the RA developers to the local level, which is represented by movement through the stages of our logic model.

Spread Research Questions

The first set of questions investigates the extent to which RAISE is reaching more districts, schools, teachers, and students (i.e., increased participation in RA). These questions address one of the more conventional definitions of scale by examining the number of "units" the initiative has reached (Rosenberg & Westmoreland, 2010). The questions are as follows.

1. In each of the four regions, what is the outcome of the scale-up process of RA in terms of numbers of teacher leaders trained, teachers trained, schools participating, and students taught by RAISE-trained teachers?
2. How does the rate and distribution of scale-up in the four regions compare to the target numbers as set out in the i3 grant proposal?

Research Questions Regarding the Scale-Up Process

The second set of questions focus on the *process* of scaling-up RA by attempting to understand *how* school systems build capacity to implement and disseminate education reforms and work toward making the programs sustainable. To understand how the scale-up process evolves toward sustained local ownership and the goal of having RA broadly institutionalized, we address two questions.

3. Do the development activities help schools and districts buy in to the RA framework and build capacity to sustain RA on their own? If so, how?

[3] We will not measure classroom fidelity of RA implementation or the effect of RA on student achievement in this study since a concurrent large-scale longitudinal RCT is exploring these outcomes.

4. Do schools/districts change to take responsibility for and ownership of RA? If so, how?

As described in our logic model narrative, the process of scaling-up RA is expected to be a complex, multilevel, iterative process that will result in organizational and philosophical changes that can be sustained over time. This second set of research questions attempts to understand this process by evaluating the development activities (project development and coordination, recruitment and retention, professional development, and instructional support resources).

- Measure implementation of the development activities to determine the extent to which they are sustained and expanded over time.
- Explore if/how these activities help schools and districts to buy into the RA framework and build capacity to implement, as outlined in the logic model.

In addition, these questions address the intermediate outcomes, buy-in, and increased capacity to implement and disseminate RA practices which are hypothesized to lead to increased ownership and sustainability. Finally, these questions evaluate the extent to which schools, districts, and states take on ownership of the development activities, moving from Stage 1 through Stage 4 in our logic model.

Context Research Questions

Since scale-up of RA will occur in varied and complex educational contexts, we seek to understand the factors that influence successful scale-up. To understand the *contextual factors* that influence the scale-up process, we will address the following two research questions.

5. What are the contextual factors that are either positively (potential supports) or negatively (potential barriers) associated with the scale-up process?
6. How do these contextual factors result in differences in rate and distribution of RA in the four states?

We will attempt to address the five contextual factors Sternberg et al. (2011) identified as affecting the success of scale-up efforts in general (i.e., available resources, district working environment, commitment of district leadership to the innovation, readiness to change, and level of organization experience among both teachers and administrators), as well as contextual factors that are specific to the RA scale-up.

RESEARCH METHODS

To address the research questions, we are using a mixed methods approach with both quantitative analyses and a qualitative strategy of inquiry. The following section will explain, by research question, the methods used to assess the process and outcomes of the RAISE scale-up project.

Methods Used to Assess Spread

To measure participation in RAISE and how the rate and distribution of participation compares to the projected target numbers (research questions 1 and 2), we are tracking the number of districts, schools, teachers, and students participating in each year, by state.

During the planning stage of this project, SLI developed a "numbers served" chart that lists the estimated numbers of participating schools, teacher leaders (TL) trained, teachers trained, and students reached by the scale-up efforts. This information is disaggregated by state and by year of the project (year 1-5). They projected that a total of 266 schools, 210 TLs, 2,394 teachers, and 354,500 students would be served by the end of the five year grant period.[4] These estimations were calculated based on the resources provided by the grant, the expected number of schools each state thought would participate, an approximation of nine RA trained teachers per school,[5] and an approximation of 750 students per school (in grades 9-11 only; with smaller numbers in the first year and additional cohorts of students reached each year).

To track participation, we are collecting participant information from each of the state site coordinators as schools apply and are accepted to join RAISE each year. This information is being entered into an Excel database and shared often with the site coordinators (to compare the records) and the SLI team. We are also collecting and entering attendance data from each of the trainings (Summer 2011, Winter 2011/12, Summer 2012). If schools or teachers choose to no longer participate in RAISE, we are tracking their reasons for discontinuing participation (to the best of our ability). To provide SLI with evidence as to whether they met their projected goal, we will track and report—by state and year—the number of participants and compare these numbers to the target numbers projected in the "numbers served" chart.

Methods Used to Assess the Scale-up Process and Context

As explained in the literature review of scale-up research, the variables associated with a successful scale-up process are not well known (Sternberg et al., 2011). Therefore, we are using descriptive methods and a qualitative strategy of inquiry in early stages of the study to evaluate the RAISE scale-up process and the contextual factors that influence that process (research questions 3-6) (Creswell, 2003). Ongoing communication with the SLI team and site coordinators, as well as the inputs, outcomes, and interactions described in the scale-up logic model will continue to guide and inform key areas of investigation. The qualitative methods and areas of investigation may be adjusted based on emerging patterns in the data (Merriam, 2002). Through these descriptive and qualitative methods, we will do the following.

- Document key RAISE activities to provide a timeline and record of the initiative and to inform future scale-up researchers about the RAISE process.

[4] These numbers do not include the "numbers served" in the RCT study.

[5] SLI reasons that nine teachers per school (three in each content area) are important to ensure a critical mass of RA teachers for collaboration and support, to build capacity and sustainability, and to reach a larger number of students.

- Assess, using descriptive statistics, the extent to which the development activities are implemented and how the activities help teachers/schools to build capacity, buy into the RA framework, and take ownership of RA.
- Conduct case studies of schools to gather a more in-depth understanding of how the scale-up process evolves, as well as to understand the contextual factors that are associated with the process.

As an iterative process, we also expect that as data are collected and analyzed, and as the process develops, we will be able to better define specific components of the logic model and their interactions. We will then be able to test our expanding theory with more advanced methods, especially to quantify differences and associations among outcomes. We may use certain analytic tools, such as Hierarchical Linear Models (HLM) (Raudenbush & Bryk, 2002; Singer & Willett, 2003) to examine trends in responses and how they vary depending on context and over time.

In the following sections, we describe these methods in greater detail.

Documentation of Key RAISE Activities

Researchers are documenting key RAISE activities throughout the project to be able to create a timeline and provide a description, including participants involved, the topics of concern, and event outcomes. Key activities include recruitment and professional development activities, planning for additional cohorts of schools, related meetings/conferences held at state or local levels, and critical decisions/communications that appear to facilitate or hinder successful scale-up. We will continue to document these activities by means of observation, collection of agendas and related documents, informal emails, and interviews with participants.

Descriptive Analyses

To measure the general implementation of the development activities and the extent to which they help districts and schools buy into the RA framework, build capacity, and take ownership of RA, we survey all RAISE teachers and at least one school administrator per school annually. Interviews/focus groups may also be conducted with a subsample of teachers and administrators to clarify or build upon survey responses. We will collect descriptive statistics to examine the uptake of the development activities, as well as the teachers' and principals' perspectives on several components of the logic model including the following.

- Overall RAISE project management
- Recruitment processes
- Effectiveness of training to prepare teachers/schools to implement RA
- Use and effectiveness of instructional support resources, including teacher leader webinar, school team meetings, and *Thinking Aloud* site
- General effectiveness of development activities to build capacity and buy-in for RA

- Overall level of commitment to RA and challenges in implementing RA
- Transfer of ownership of RA and plan to sustain RA in classroom/school
- Factors that hinder or support scale-up

As the scale-up proceeds, we will quantify changes over time in the prevalence and incidence of development activities, as measured by the responses to the teacher and principal surveys. The goal will be to measure changes consistent with the stages of the logic model in order to better understand when the transitions through the stages occur. Importantly, descriptive trends analyses will allow us to assess the timing and characteristics of changes; for example, how long the 'ramp-up' period is for practices to reach specific levels and whether there are critical periods or 'tipping points' where buy-in happens suddenly. Also, we will examine the degree to which the program is sustained at the local level as the direct involvement from the developers is scaled back.

Case Studies

Using a purposive sample of four scale-up schools in one state, the case studies will be an in-depth exploration into if and how the scale-up process evolves toward sustained local ownership, as well as how key contextual factors are associated with this process. Case studies are well suited as a methodological approach to understanding how phenomena occur in real life settings (Yin, 2009). Drawing upon grounded-theory analytic techniques (Glaser & Strauss, 1967), these case studies will provide data to inform ongoing theory building around scale-up and form additional research questions as data are gathered (Corbin & Strauss, 1990). The qualitative methods and analyses will capture the rich and varied perspectives of teachers and administrators over time.

While there are many contextual factors associated with successful scale-up that are under-researched (Sternberg et al., 2011), in the context of RAISE we have identified two school team processes as particularly important to study: 1) building capacity of the RAISE school team[6] to implement RA and work toward local ownership; and 2) connections to professional networks. SLI has not planned to provide ongoing, formal professional development for teachers after they have completed the 10-day RAISE institute. Therefore, the successful transition toward local ownership and sustainability will be particularly dependent on the capacity and collaboration of the school team and their connections to wider RAISE networks.

In order to study these processes, we will restrict our sample to schools with the contextual conditions most likely to support a shift in ownership in terms of having a:

- favorable state context,
- favorable district context, and
- a critical mass of teachers to build capacity and an adequate leadership team.

[6] We define RAISE school team as the school administrators, RAISE teacher leader, RAISE trained teachers, and other RAISE trained instructional support staff.

Once we have identified the state with the conditions that are most likely to support a shift in ownership, we will select the case study schools in two steps.

In the first step we will divide the entire pool of study schools into two groups: 1) schools with prior (and successful) RA experience, and 2) schools that are new to RA through RAISE. We anticipate that issues of buy-in, capacity building, and collaboration will inevitably be different where RA scale-up practices are being deepened rather than initiated. As cited earlier, Coburn (2003) also suggests a research design for examining sustainability that includes studying schools which are in their initial implementation stage, as well as those that have moved beyond that stage to sustain the reform efforts over time. By differentiating the sample in this way, we will be able to observe the process evolve for the new schools and gather more information regarding the process that schools with prior experience undertake to address sustainability.[7]

In the second step, in order to focus the case studies on the school team processes that are important to ownership and sustainability, we will attempt to remove two district-level barriers to scale-up that are furthest from the control or influence of the school team. Therefore, in each of the two groups, we will select the two schools that are strongest in terms of the following two district-level characteristics: 1) districts with resources to implement and sustain RA, and 2) a supportive and congruent district policy of academic literacy instruction.

All RAISE participants from the selected school, including teachers, teacher leaders, administrators, and instructional support staff, as well as district-level administrators will be asked to participate in the longitudinal case studies. Data collection will include monthly surveys of teachers (starting in the fall of year 2); bi-annual surveys of school administrators; school site visits that include in-person interviews and focus groups with teachers, instructional support staff, and school and district administrators; and possible observations of the team monthly RAISE meetings. We will code the data and conduct crosschecks of a sample of the interpretations. We will triangulate the data sources both within the same sample of participants (e.g. teachers) and across samples of participants (e.g. teachers, administrators, and instructional support staff) to strengthen conclusions. Additionally, we expect our case study analysis and findings to inform revisions to the logic model and suggest additional areas to investigate with the larger sample of RAISE participants. See Appendix B for detailed information regarding participant selection, data analysis, and limitations.

[7] By "experienced" schools, we mean schools that have created a foundation for RA implementation and collaboration.

DATA COLLECTION

Researchers are collecting multiple sources of data for qualitative and quantitative analysis including professional development observations; principal and teacher surveys; interview/focus groups with teachers, instructional support staff, administrators, and site coordinators; and site visits. Data from informal interviews, emails, and discussions may also be included in our reporting. Table 1 presents the data collection schedule by source and by year.

Professional Development Observations and Attendance Records

Throughout the study, researchers will conduct observations of professional development in order to gain a strong understanding of the Reading Apprenticeship framework, expectations for teacher and school implementation, and how the training agendas are designed to build capacity and engage participants in the RAISE initiative. Researchers will also use components of the training to inform survey design. We collect artifacts (e.g., handouts, agendas, resource materials) from observed sessions and will continue to collect and enter all professional development attendance records in order to track participation across states and subject areas.

In Year 1, we observed/collected the following.

- Facilitator and consultant-in-training (CIT) in-person professional development institutes
- Full 10-Day RAISE Institutes in Michigan, 5-Day Summer Institute in Utah
- Attendance records from state site coordinators/SLI from full 10-Day RAISE Institutes in each state

Principal/School Administrator Surveys

Throughout the study, researchers conduct annual surveys of principals and/or school administrators in order to gather the school leadership perspective on the RAISE initiative. Specific domains measured will be guided by the logic model and may include buy-in, commitment to RAISE, and sustainability of the initiative beyond the grant funding.

In Year 1, the administrator survey was deployed in May and included the following domains.

Administrator Background

We collected the following administrator background data.

- Current position at school (e.g. principal vs. curriculum director)
- Years served as administrator overall
- Years served as administrator at current school
- Years served in any position at current school

Uptake of Development Activities

We asked questions regarding recruitment and retention processes to gauge the extent to which these efforts were successful. Specifically, we asked how the administrators heard about the RAISE initiative, why they choose to participate, and whom they contact with questions about RAISE.

While administrators are not required to attend the RAISE professional development or monthly team meetings, they are encouraged to do so in order to support their RAISE teachers. Therefore, we asked administrators if they participated in these activities. Additionally, we asked what types of support for RA implementation are provided to teachers by administrators at their school, and what kinds of discussions administrators have with their teachers about RAISE.

Finally, in order to gauge variability in resources/capacity of the leadership at each school involved in RAISE, we asked the role of the primary administrator who oversees RAISE (e.g. principal, literacy/curriculum director) and the administrator's level of involvement with the RAISE initiative.

Buy-in and Shift in Ownership

In order to gauge the level of buy-in of the school administrators, we asked about their level of commitment to RAISE and their agreement with the statement that RA is an appropriate framework for literacy instruction at the school and will increase student achievement.

An early indicator of "shift in reform ownership" is if the local level (i.e. participating district/LEA, schools, teachers) takes more responsibility for not only disseminating information about the initiative, but also recruiting additional schools and/or teachers to join the reform. Therefore, we asked the administrators several questions about if/why they had recommended RAISE to others. Additionally, in order for administrators to appropriately "use reform-centered ideas or structures in schools or district decision making," they must have a strong foundation of the reform-centered knowledge (Coburn, 2003). Therefore, we asked the administrators to rate their own level of understanding of the RA model.

Sustainability and Contextual Factors

In order to gain an understanding of specific sustainability issues, we asked administrators about challenges of sustaining RAISE in their school, to describe any district policy constraints that made the implementation of the RAISE initiative difficult, and if they believe RAISE would continue in their school without federal funding.

Sternberg et al. (2011) cite several contextual factors that are important for successful scale-up and sustainability, including a stable school/district working environment and administrators who encourage new practices/initiatives. Therefore, we asked administrators several question about the stability of the school environment, including teacher retention rates and available resources/data to inform decisions, and we asked how administrators generally feel about teachers implementing new instructional strategies.

Teacher Surveys

We will continue to refine, adapt, and expand the teacher surveys to measure implementation of the development activities, as well as how those activities help teachers build capacity to implement RA and take ownership of the scale-up process. Teacher surveys will also ask about the local context, including barriers and facilitators of implementation and sustainability.

In year 2 of the project, researchers will deploy monthly surveys to case study teachers. These surveys will capture more in-depth and detailed data on the scale-up process than the surveys deployed to all other RAISE teachers. The surveys for case study teachers will include multiple open-ended questions. Open-ended questions are less constrained by our expectations and will, therefore, allow for a more authentic response. Given the complexity of the questions and the overall time it will take to complete the questions, we will deploy the surveys on a monthly basis to spread out the questions over the year. We may also repeat the same questions across multiple surveys to examine whether responses have changed over time. Follow-up interviews to clarify survey responses may also be conducted.

All other participating RAISE teachers will receive three surveys per year (deployed in fall, winter, and spring) in each study year. These surveys will continue to gather a more general understanding of the scale-up process in all RAISE schools. A majority of the surveys will include multiple choice or ordinal/interval scale questions lending to more efficient coding and analysis.

In Year 1, the three surveys to all participating RAISE teachers were deployed in February, March, and May and included the following domains.

Teacher Background and Number of Students Taught per Subject

To help describe the context of implementation and/or to see if there are differences in our expected outcomes based on this measure, we asked teachers how many years of classroom teaching experience they have. Since there were several schools that had implemented RA prior to RAISE, we asked teachers how many hours of previous RA training they had received in order to examine differences in scale-up based on prior experience.

In order to track the number of students reached by RAISE, we asked the RAISE-trained teachers how many course sections and students they taught during Year 1, in each of the focal subject areas.

Uptake of Development Activities

A majority of the survey questions centered on the development activities. Many of these questions were repeated across the three surveys in order to examine differences/changes in implementation during the school year. We asked questions about the uptake of the following development activities.

- Attendance at and preparedness and effectiveness of the RAISE Institutes
- Attendance at, helpfulness of, and activities that took place during the teacher leader webinars

- Attendance at, helpfulness of, and activities that took place during the monthly RAISE school team meetings
- Use and helpfulness of the *Thinking Aloud* site
- Availability, types, and helpfulness of support for implementing RA in classrooms

We also asked teachers about their reasons for choosing to participate in RAISE and to rate the overall organization of the RAISE initiative. Additionally, we asked how often they used the RA pedagogical practices in their classroom.

Building Capacity and Buy-in

In the first and third surveys, we asked teachers which activities were most effective in building their capacity to implement RA in their classroom. In order to gauge the level of teacher buy-in, we asked about their level of commitment to RAISE and their agreement with the statement that RA is appropriate framework for literacy instruction at school and will increase student achievement.

Shift in Ownership

The second survey focused on assessing the extent to which teachers were taking ownership of the RAISE initiative. Similar to what we asked administrators, we asked teachers to rate their own level of understanding of the RA model and if they had or would recommended RAISE to others. We also asked if they had or would consider taking on a RAISE-related teacher leadership position (e.g. teacher leader for school team, CIT). Additionally, we asked teachers about their level of responsibility/sense of agency for the success of RAISE at their school.

Sustainability and Contextual Factors

The third survey focused on sustainability and the contextual factors that may hinder or support successful scale-up. Specifically, we asked about the beneficial aspects of participating in RAISE, the challenges of implementing RA, and teachers' potential plans to use the RA framework to inform instruction in their classroom in the next school year. As we did with the administrators, we asked the teachers to describe any school or district policy constraints that made the implementation of the RAISE initiative difficult, and if they believe RAISE would continue in their school without federal funding.

Site Visits

Starting in Year 2 of the study, researchers will conduct site visits at all case study schools. These site visits will not involve in-depth, formal studies of classroom practices but will involve "snapshots" or walk-throughs of classrooms and schools each year as they scale-up and take ownership of RA. Thus, the focus of site visits is to glean information about what scaling up "looks like" from the perspective of an outsider with focus on structural and environmental changes in the classroom and in the school.

Interviews and Focus Groups with Teachers, Administrators, and Site Coordinators

Also in Year 2, researchers will conduct semi-structured interviews and focus groups with case study participants, a subsample of other schools/district administrators, instructional support staff, and site coordinators. Interviews and focus groups are important because they generally capture more in-depth, detailed information than what is captured through surveys. Focus groups also allow for an interactive setting where the participants can build off each other's ideas. Interview and focus group topics may include a timeline of events, the process of capacity building, resource allocation, level of commitment, and the impediments and successes of scale-up.

TABLE 1. DATA COLLECTION BY SOURCE AND YEAR

Source	Year 0 2010 - 2011	Year 1 2011 - 2012	Year 2 2012 - 2013	Year 3 2013 - 2014
Professional Development Data				
Observations of sample of facilitator PD	Spring	Spring		
Observations of sample of teacher PD and collect attendance records		Summer, winter	Summer, winter	Summer, winter
Principal/School Administrator Data				
Surveys of all case study principals and/or school administrator			Spring	Spring
Interviews of subsample of case study principals and/or school administrator			Spring	Spring
Surveys of all other RAISE principals and/or school administrator		Spring	Spring	Spring
Teacher Surveys data				
Surveys of all case study teachers			Monthly	Monthly
Surveys of all RAISE teachers		Fall, winter, spring	Fall, winter, spring	Fall, winter, spring
Site visits of case study schools				
Visit case study schools and conduct "walk-throughs"			Spring	Spring
Interviews/focus groups data				
Interviews with case study teachers			Spring	Spring
Interviews/focus groups with school/district administrators			Spring	Spring
Interviews with site coordinators			Spring	Spring

Year 1 Results

In this section, we provide a subset of the results of the first year of the project. In particular, we provide a timeline of the key RAISE events in Year 1, the number of schools, teachers, and administrators participating in Year 1, maps of each state showing participating districts/LEAs and schools, and a description of the scale-up process in Year 1 using a preliminary set of results from the teacher and administrator surveys.

TIMELINE OF KEY RAISE EVENTS IN YEAR 1

In Table 2, we present a brief description of the key events from the project's initiation in October 2010 through Summer 2012. As expected in this early phase of the project, each of these events involved planning for or providing schools and districts with the necessary resources, information, and skills to implement RAISE (see description of *Stage 1: Development activities and intermediate outcomes* in the scale-up logic model narrative in Appendix A). These events can be categorized into one or more of the "development activities" that are part of the scale-up logic model: project development and coordination, recruitment and retention, professional development for Reading Apprenticeship facilitators and teachers, and instructional support resources.

TABLE 2. TIMELINE OF KEY RAISE PROJECT ACTIVITIES

Date	Event	Corresponding development activity	Brief description
October 2010	RAISE Cross-Site Leaders Meeting	Project development and coordination	SLI central RAISE team (SLI Co-Directors, lead PD team) host a meeting in Oakland, CA to "kick-off" the project with the state site coordinators and evaluation team
November-December 2010	RAISE Site Kick-off Meetings	Project development and coordination Recruitment and retention	The site coordinators in each state host a meeting/conference with state officials, administrators, and teachers to introduce the RAISE project. November 30, 2010: Utah December 1, 2010: Pennsylvania December 2, 2010: Michigan December 7, 2010: Indiana
January-February 2011	Recruitment and applications (Cohort 1)	Recruitment and retention	The state site coordinators disseminate recruitment flyers to district and school administrators and teachers. School applications are due in February and acceptance letters are sent out mid-February.
March 1, 2011	RAISE Scale-up Design Meeting	Project development and coordination	Empirical Education hosts meeting with scale-up evaluation team and SLI co-directors in Palo Alto, CA, to discuss the scale-up logic model and evaluation plan.

TABLE 2. TIMELINE OF KEY RAISE PROJECT ACTIVITIES

Date	Event	Corresponding development activity	Brief description
March-May 2011	RAISE Facilitator Institutes	Professional development for Reading Apprenticeship facilitators and teachers	RAISE facilitators and Consultants-in-Training (CITs) are invited to participate in a 4-week online training that commences with a 2-day in-person content specific professional development to practice with the institute modules and plan for the summer institutes. March 1-5, 2011: Science FIT in PA April 14-15, 2011: History FIT in CA May 10-11, 2011: ELA FIT in CA
April 12, 2011	RAISE Cross-site Planning Meeting	Project development and coordination Recruitment and retention Instructional support resources	SLI hosts site coordinators at meeting in Oakland, CA to discuss project planning, role of and support for teacher leader, and online administrator course.
Summer 2011	RAISE 5-Day Summer Institute (Cohort 1)	Professional development for Reading Apprenticeship facilitators and teachers	Teachers attend RAISE 5-Day Summer Institute in content specific groups in each state. June 6-10, 2011: Utah July 11-15, 2011: Indiana August 1-5, 2011: Pennsylvania August 15-19, 2011: Michigan
Fall 2011	Invitation to join *Thinking Aloud* Site	Instructional support resources	All RAISE trained teachers are sent an email invitation to join the online *Thinking Aloud* site, which is described as "a place where participating teachers can connect, share ideas and resources and questions and work together between institutes".
October 7-8, 2011	Consultant-in Training-Institute	Professional development for Reading Apprenticeship facilitators and teachers	SLI professional development team hosts CITs in Oakland, CA, to review CIT role, reflect on Summer Institute, and practice facilitation skills.
Winter 2011-12	RAISE 2-Day Winter Turnaround Institute (Cohort 1)	Professional development for Reading Apprenticeship facilitators and teachers	Teachers attend RAISE 2-Day Winter Turnaround Institute in content specific groups in each state. December 5-6, 2011: Utah January 17-18, 2012: Michigan January 23-24, 2012: Pennsylvania January 30-31, 2012: Indiana

TABLE 2. TIMELINE OF KEY RAISE PROJECT ACTIVITIES

Date	Event	Corresponding development activity	Brief description
January-February 2012	Recruitment and applications (Cohort 2)	Recruitment and retention	The state site coordinators disseminate recruitment flyers and hold information sessions with interested districts, school administrators and teachers. Schools initially apply via Eventbright registration, so SCs can systematically collect data from interested schools. Site coordinators review schools applications and decide which schools/teachers will be accepted as part of Cohort 2 and send acceptance letters. Those that are accepted then complete their registration through Eventbright.
March 22-23, 2012	RAISE Cross-site Planning Meeting	Project development and coordination Recruitment and retention Instructional support resources	SLI hosts site coordinators at meeting in San Francisco, CA, to discuss project planning and, in particular, to discuss how to plan for and support sustainability in each site.
Spring 2012	CIT Recruitment and application process	Professional development for Reading Apprenticeship facilitators and teachers Recruitment and retention	Interested RAISE trained teachers apply to become Consultants-in-Training (CITs) for Cohort 2 and are notified of their acceptance.
Summer 2012	Development of online school administrator course	Instructional support resources	PA and MI RAISE site coordinators develop and pilot online course for school/district administrators. The goal of the course is to help administrators gain a better understanding of the RA framework and support their RAISE teachers. The fully developed course will be ready to implement in Fall 2012.
Summer 2012	RAISE 3-Day Summer Springboard Institute (Cohort 1)	Professional development for Reading Apprenticeship facilitators and teachers	Teachers attend RAISE 3-Day Summer Springboard Institute in content specific groups in each state. June 12-14, 2012: Utah June 18-12, 2011: Michigan July 11-13, 2012: Indiana August 7-9, 2012: Pennsylvania

TABLE 2. TIMELINE OF KEY RAISE PROJECT ACTIVITIES

Date	Event	Corresponding development activity	Brief description
Summer 2012	RAISE 5-Day Summer Institute (Cohort 2)	Professional development for Reading Apprenticeship facilitators and teachers	Cohort 2 teachers attend RAISE 5-Day Summer Institute in content specific groups in each state. July 16-20, 2012: Utah July 16-20, 2012: Indiana July 30- August 3, 2012: Pennsylvania August 13-August 17, 2012: Southeast Michigan August 20-August 24, 2012: Northern Michigan
Summer 2012	RAISE Scale-up Evaluation feedback meeting	Project development and coordination	SLI hosts evaluation team in Oakland, CA to review study design and preliminary Year 1 results (June 7, 2012); Evaluation team hosts study advisory, Cynthia Coburn, in Palo Alto, CA to review study design and preliminary Year 1 results (July 24, 2012).

YEAR 1 PARTICIPATION: SPREAD OF RAISE

In this section, we address one of the intermediate outcomes: Increased participation in RAISE. In the tables below, we have provided detailed information regarding the number of schools, teachers, and administrators that are participating in RAISE as part of Cohort 1.[8] Additionally, we have created maps of each state showing participation of RAISE schools and districts.

Year 1: Participation in RAISE Institute by Subject Area

In this section, we provide an overview of the attendance records from the Cohort 1 10-Day RAISE Institute (Summer 5-Day Institute, Winter 2-Day Institute, and Summer 3-Day Institute). Table 3 shows the total number of schools and teachers, by subject area, that attended the trainings, across all states. In Appendix C, we provide the same information disaggregated by state.

Across the four states, 391 teachers from 65 schools attended the RAISE Summer 5-Day Institute, 340 teachers from 62 schools attended the RAISE Winter 2-Day Institute, and 308 teachers from 62 schools attended the RAISE Summer 3-Day Institute as part of Cohort 1. At each of the institutes, there were more English language arts (ELA) teachers trained than biology or history teachers.

[8] We refer to the group of teachers and schools that participated in Year 1 of the project as Cohort 1. This reference will be useful to distinguish additional cohorts as they join the project in subsequent years.

TABLE 3. COHORT 1: TEACHER PARTICIPATION IN 10-DAY RAISE INSTITUTES

Subject	No. of schools attended	No. of teachers attended all days	No. of teachers attended some days
RAISE Summer 5-Day Institute			
Biology	59	115	10
ELA	61	147	9
History	61	102	8
Total	65	364	27
RAISE Winter 2-Day Institute			
Biology	54	101	3
ELA	60	142	3
History	55	90	1
Total	62	333	7
RAISE Summer 3-Day Institute			
Biology	50	81	5
ELA	60	130	5
History	51	80	7
Total	62	291	17

Note. Attended "some days" means that the participant attended at least one and fewer than five days of the Summer 5-Day; at least one and fewer than two days of the Winter 2-Day; at least one day but fewer than three days of the Summer 3-Day.

Source. RAISE Institute attendance records

School administrators, instructional coaches, and other school personnel were not required to attend the training with their teachers; however, they were encouraged to attend where space was available. Attendance at the training is an indication of their commitment to RAISE and will allow them to better support teachers' implementation. Table 4 shows—across the four states—the number of school administrators, instructional coaches, and other personnel whom attended the Summer 5-Day Institute, Winter 2-Day Institute, and Summer 3-Day Institute.

TABLE 4. COHORT 1: ADMINISTRATOR, INSTRUCTIONAL COACH, AND OTHER PERSONNEL PARTICIPATION IN 10-DAY RAISE INSTITUTES

	No. of school administrators attended all days	No. of school administrators attended some days	No. of instructional coaches attended all days	No. of instructional coaches attended some days	No. of other personnel attended all days	No. of other personnel attended some days
RAISE Summer 5-Day Institute						
Total	8	8	12	3	14	10
RAISE Winter 2-Day Institute						
Total	7	3	7	1	14	6
RAISE Summer 3-Day Institute						
Total	4	5	5	1	6	2

Note. Attended "some days" means that the participant attended at least one and fewer than five days of the Summer 5-Day; at least one and fewer than two days of the Winter 2-Day; at least one day but fewer than three days of the Summer 3-Day. The counts for "school administrators" include principals, assistant principals, and other schools administrators as long as they are assigned to a specific school (i.e. not district administrators). The counts for "other personnel" include district personnel, state department of education personnel, secondary science specialist, curriculum supervisor, reading specialist, educational specialist. We do not present these counts by the subject area training they attended because we do not have consistent information for each participant in these categories. Several administrators, and other personnel attended multiple subjects and/or we did not receive information for which subject they attended. Administrators, instructional coaches, and other personnel may not have "signed-in" at each of the trainings as consistently as the teachers did (i.e. they may not have been required to do so). We are presenting the data we have based on the attendance records, but this information is not consistent with the data from the administrator survey presented in a later section of this report.

Source. RAISE Institute attendance records

While teachers were highly encouraged and expected to attend all ten days (65 hours) of the training, not all of the teachers followed this expectation. Table 5 shows that, in total, 268 out of 396 teachers attended all ten days.

TABLE 5. COHORT 1: ADDITIONAL INFORMATION REGARDING TEACHER PARTICIPATION IN 10-DAY RAISE INSTITUTES

Subject	No. of teachers who attended all ten days	No. of teachers who attended more than one half-day but fewer than ten days
Biology	75	51
ELA	120	40
History	73	37
Total	**268**	**128**

Source. RAISE Institute attendance records

Additionally, we track the number of teachers who were entered into our database at one time (i.e. they originally signed up to be part of RAISE and appeared on the lists from the site coordinators or were included on attendance training records at one point), but are no longer participating in RAISE. There are a variety of reasons why teachers are no longer participating. We have distinguished between those that originally signed up to be part of RAISE but did not attended any of the RAISE trainings and those that attended at least one day of the training, but are no longer participating because they no longer teach the focal subjects, have left or are temporarily away from the focal school, or chose to discontinue participation. Table 6 shows, by subject, the number of teachers that are not participating within each of these categories. In total, 187 teachers have been marked inactive in our database. Of those, 111 teachers originally signed up to be part of RAISE, but did not attend any training, and 76 teachers attended at least one day of training and are no longer participating.

TABLE 6. COHORT 1: REASONS FOR DISCONTINUING PARTICIPATION

Subject	No. of teachers who signed up but did not attend project trainings	No. of teachers who attended training, no longer teach the focal subjects or grades	No. of teachers who attended training, but have left or are temporarily away from focal school	No. of teachers who attended training, but no longer wish to participate in RAISE	Total no. of teachers no longer participating in RAISE
Biology	26	3	15	14	58
ELA	35	0	17	8	60
History	50	1	7	11	69
Total	111	4	39	33	187

Year 1: Comparison of "Numbers Served" Estimates and Actual Participation in RAISE

As described in the Methods section, SLI projected the number of schools and teachers that would be participating in RAISE, by year and state, and presented this information in their i3 proposal. Table 7 shows the number of schools and teachers projected to be reached by the scale-up efforts in Year 1 compared to the actual number of participating schools and teachers trained. Overall, more schools were represented at the training than projected, while the teachers estimates matched the actual number of teachers trained.

TABLE 7. COMPARISON OF PROJECTED NUMBERS TO ACTUAL PARTICIPATION

	Year 1 SLI Projection		Year 1 Actual Participation	
State	Estimated Number of Schools	Estimated Number of Teachers	Number of Schools Trained	Number of Teachers trained
Indiana	8	72	7	49
Michigan	20	180	33	208

TABLE 7. COMPARISON OF PROJECTED NUMBERS TO ACTUAL PARTICIPATION

	Year 1 SLI Projection		Year 1 Actual Participation	
State	Estimated Number of Schools	Estimated Number of Teachers	Number of Schools Trained	Number of Teachers trained
Pennsylvania	10	90	11	68
Utah	6	54	14	71
Total	**44**	**396**	**65**	**396**

Year 1: State Maps Identifying Participating Districts and Schools

For each state, we have created a map identifying the districts/intermediate units and schools that are participating in RAISE (Figures 1-4). Districts with at least one school participating in RAISE are highlighted and the locations of the participating schools are marked with a gray or blue circle. Schools that originally signed up to participate in RAISE and sent at least one teacher to the training, but are no longer participating are marked with a red dot. The purpose of the maps is for the SLI team and site coordinators to identify "hubs" of participation in each state, to inform decisions about investment of further time and resources allocated to building capacity at the district or school level, and to help inform strategic recruitment for future cohorts.

The site map key (Table 8-11) includes the color of the highlighting for the districts, as well as the names of districts/intermediate units.

As the maps show, most of the Year 1 schools are fairly concentrated in one area of each of the states. In Indiana, this concentration is centered around Indianapolis Public Schools (IPS); in Michigan, this concentration is in the southeastern region, centered around Washtenaw and Livingston; in Pennsylvania, this concentration is in the eastern region, centered around Intermediate Units (IUs) 20 and 21; and in Utah, this concentration is in the north-central region (with one school in the southern region). The schools in these concentrated areas were recruited for Year 1 because the site coordinator(s) were most familiar with, or had a prior relationship with, these or neighboring schools and their personnel. Additionally, many of these schools had prior experience with RA and wanted to deepen their practice with RAISE.

"Burden of Spread" Based on Geographic Location of Participants

As RAISE spreads to new areas in subsequent years/cohorts and the location of the schools is less centralized, the SLI team and site coordinators will need to consider the capacity of the site coordinators to support and be responsive to all schools in the same way. The site coordinators play a critical role not only in recruiting new schools into RAISE, but also in supporting implementation and addressing retention issues in existing RAISE schools. As RAISE spreads, additional supports and resources will need to be put in place to address the issues of (1) supporting the increased number of participating schools and teachers, and (2)

traveling to other regions of the state to visit classrooms, sit in on monthly team meetings, or offer in-person support to schools that need it.

At the cross-site planning meeting in March 2012, the team discussed a few potential solutions to this "burden of spread." One solution is to increase the use of technology to connect with RAISE schools, such as through the *Thinking Aloud* site or through "Skyping" into school team meetings. The team also discussed the need for "assistant" site coordinators (what they called "clone" site coordinators) in each state, that would work closely with schools and districts and also have the deep understanding of RAISE goals and principles allowing them to offer the necessary support. The feasibility of these and additional solutions should continue to be discussed.

Additionally, this "burden of spread" brings up the issue of the increased cost and practicality of teachers and administrators traveling greater distances—depending on their geographic proximity to the training site—to attend the professional development institutes. One solution is to hold separate institutes based on location, as Michigan is doing for Cohort 2. However, holding multiple institutes across all sites would likely require a larger team of skilled content area facilitators. Addressing these issues requires strategic planning of recruitment, location of the professional development institutes, and facilitator training.

TABLE 8. INDIANA MAP KEY

Color	Participating districts
	Avon Community School Corporation
	Brown County School Corporation
	Eastern Hancock County Community School District
	Indianapolis Public Schools
	Shelbyville Central Schools
	Tell City-Troy Township School Corporation

Note. Schools that are no long participating in RAISE are represented with a red dot (●).

FIGURE 1. INDIANA MAP

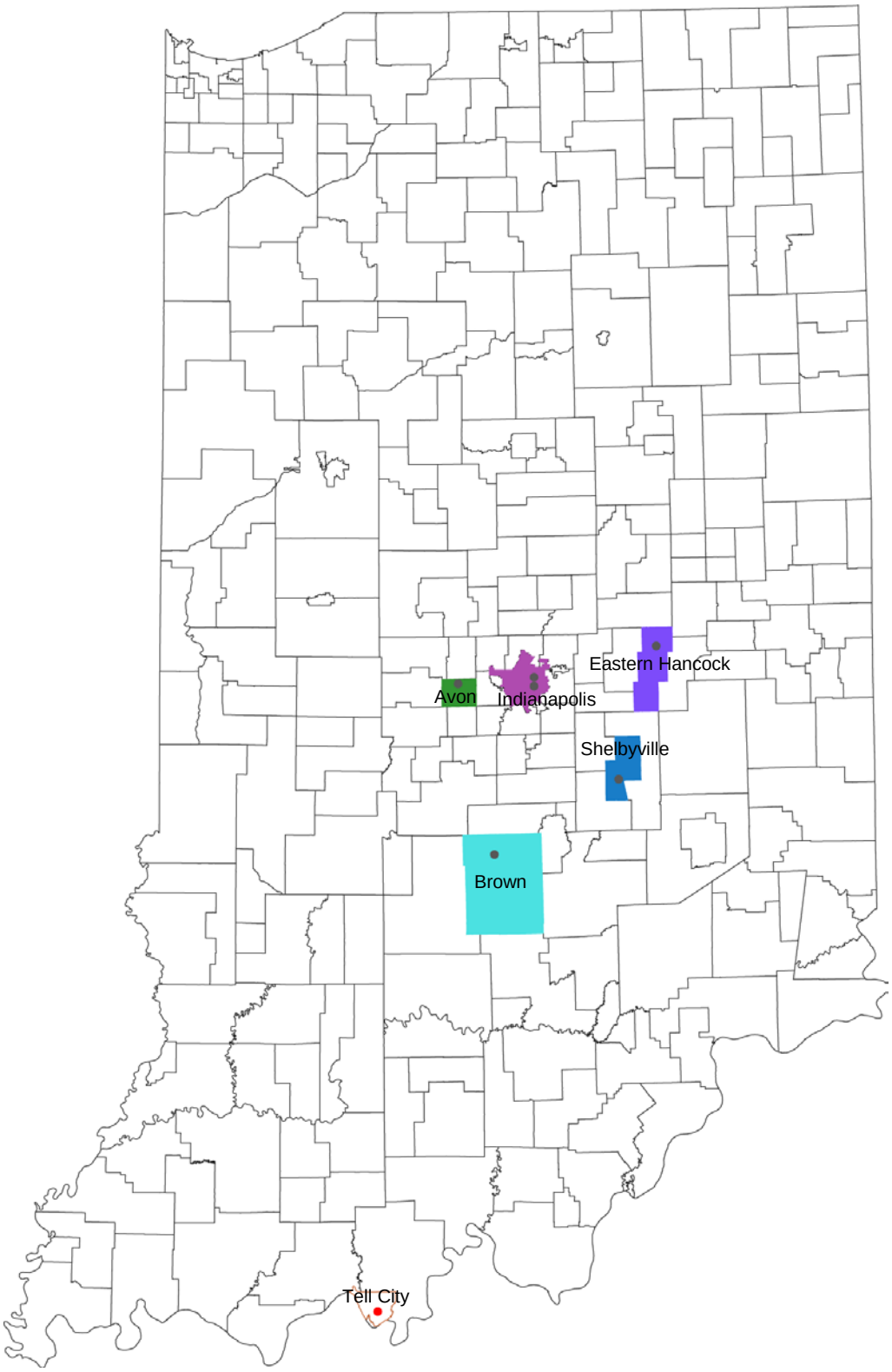


TABLE 9. MICHIGAN MAP KEY

Intermediate School District	Color	Participating Districts
Jackson County Intermediate School District		Napoleon School District
Lapeer Intermediate School District		Lapeer School District
Livingston Educational Service Agency		Brighton School District
		Hartland School District
		Howell School District
		Pinckney School District
Oakland Intermediate School District		Berkley School District
		Clarenceville School District
		NA
		Clarkston School District
		Ferndale School District
		Novi School District
		Oxford School District
		South Lyon School District
		Waterford School District
Washtenaw Intermediate School District		Ann Arbor Public School
		Chelsea School District
		Lincoln School District
		Milan School District
		Ypsilanti School District
Wayne County Regional Educational Service Agency		Dearborn City School District
		Livonia School District
		Plymouth-Canton Community Schools
		NA
		Van Buren School District

Note. Because charter and private schools are not incorporated into a particular district, we have represented their location with a blue dot (●). Schools that are no long participating in RAISE are represented with a red dot (●).

FIGURE 2. MICHIGAN MAP

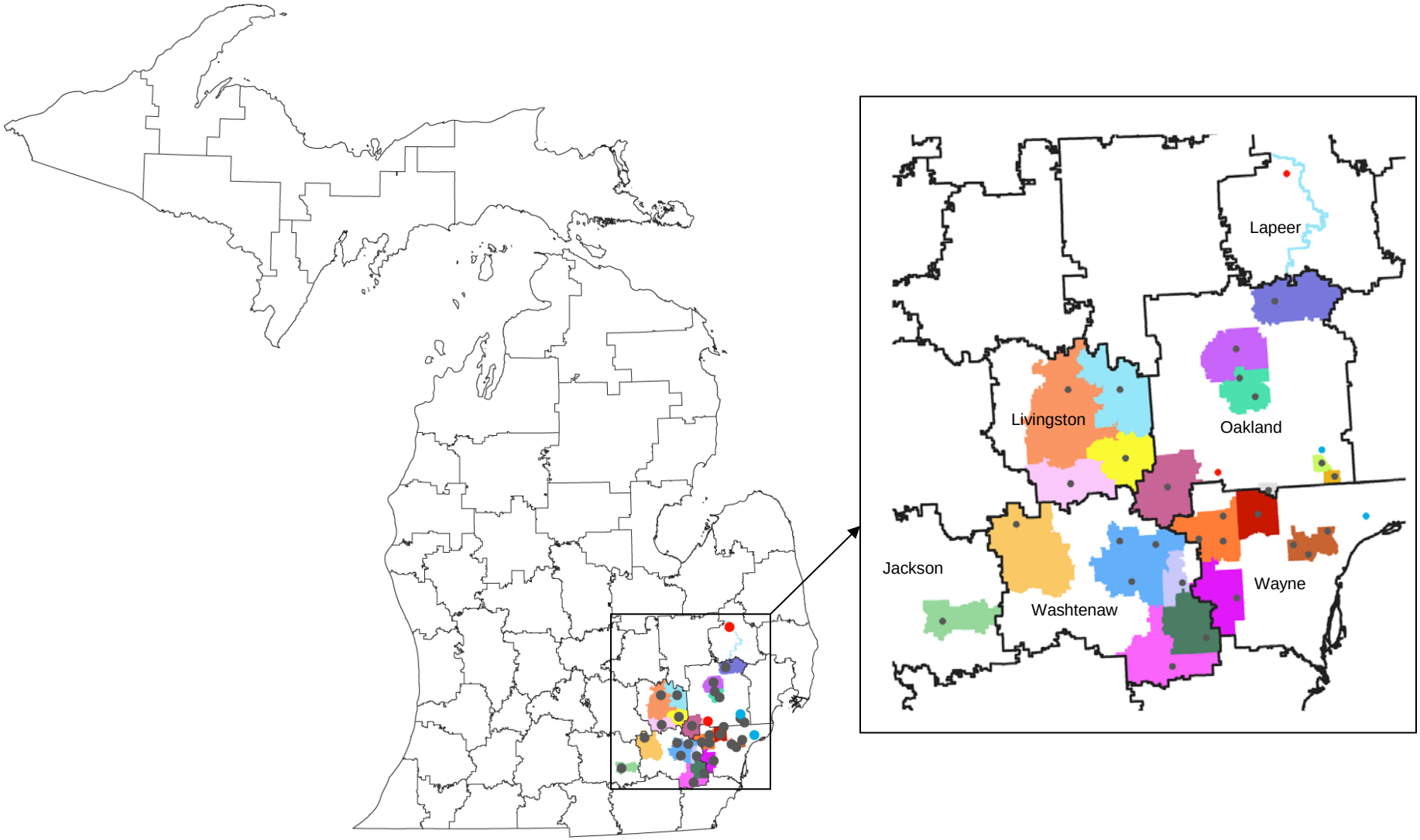


TABLE 10. PENNSYLVANIA MAP KEY

Intermediate unit	Color	Participating districts
Berks County Intermediate Unit 14		Boyertown Area School District
Colonial Northampton Intermediate Unit 20		Bethlehem Area School District
		Delaware Valley School District
		East Stroudsburg Area School District
		Northampton Area School District
		Pleasant Valley School District
		Stroudsburg Area School District
Carbon-Lehigh Intermediate Unit 21		Whitehall-Coplay School District
Montgomery County Intermediate Unit 23		North Penn School District

FIGURE 3. PENNSYLVANIA MAP

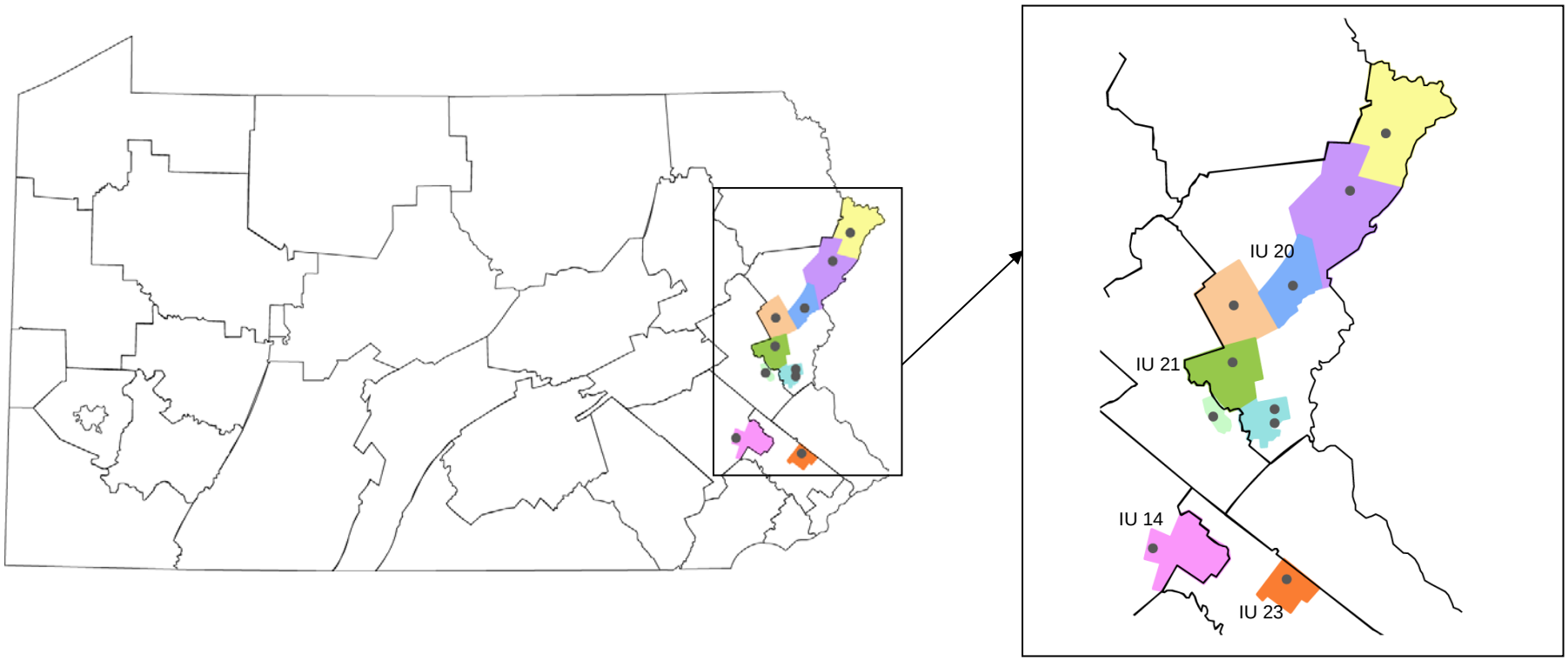
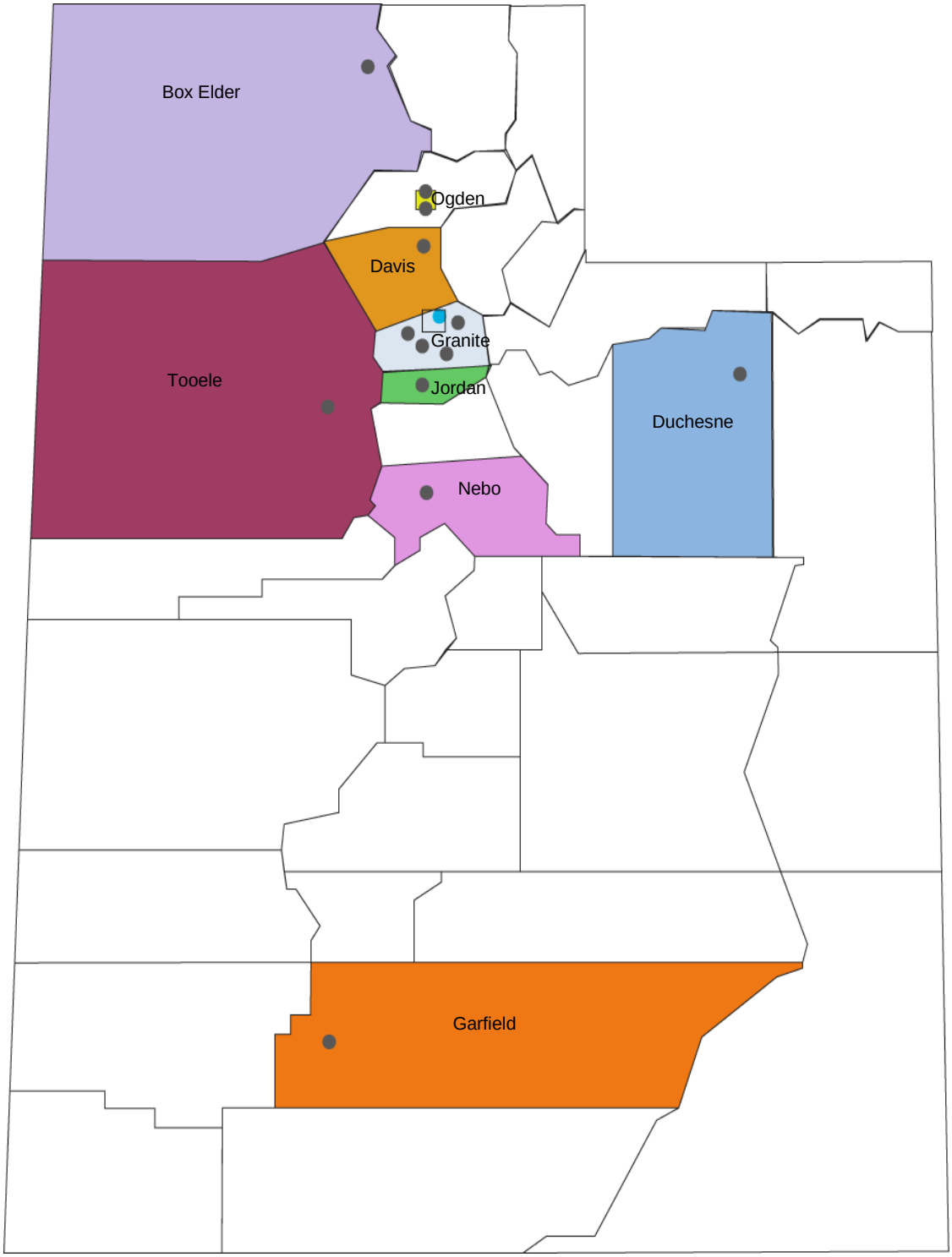


TABLE 11. UTAH MAP KEY

Color	Participating Districts
	Box Elder School District
	NA
	Davis School District
	Duchesne School District
	Garfield School District
	Granite School District
	Jordan School District
	Nebo School District
	Ogden School District
	Tooele School District

Note. Because charter and private schools are not incorporated into a particular district, we have represented their location with a blue dot (●).

FIGURE 4. UTAH MAP



YEAR 1: ADMINISTRATOR AND TEACHER SURVEY RESULTS

In this section, we provide a description of the scale-up process in the schools implementing in Year 1 through a subsample of the teacher and administrator survey results. These results will inform SLI, the current RAISE districts and schools, and those districts and schools that may join RAISE in the future about: 1) the general implementation of the development activities in Year 1, 2) the extent to which these activities have helped schools buy into the RA framework and build capacity, and 3) how the Year 1 schools have begun to take ownership of RAISE. We obtained data for this section through three online teacher surveys (deployed in February, March, and May of 2012) and one online administrator survey (deployed in May 2012). We report quantitative survey data using descriptive statistics.[9]

Year 1: Administrator Survey Results

Table 12 shows the number of administrators that consented to participate in this study (i.e. complete one annual survey) and the number of consented administrators that completed the survey, by state and overall. In total, 83% (n = 48) of the administrators consented to participate in the study and of those, 81% (n = 39) completed the survey. This response rate represents 62% of the total schools.

[9] In this section we present descriptive results without inferential statistics. A subsequent report will report standard errors and results of statistical hypothesis tests where appropriate. The expanded report will also examine the outcomes reported here and others in relation to other variables to provide a more in-depth account of the scale-up process.

TABLE 12. SURVEY RESPONSE RATE: ADMINISTRATORS

	No. of schools	No. of administrators consented to participate in the formative evaluation	No. of administrators completed survey
Indiana	7	5 (71%)	5 (100%)
Michigan	33	24 (77%)[a]	19 (79%)
Pennsylvania	11	8 (73%)	8 (100%)
Utah	14	11 (79%)	7 (64%)
Total	**65**	**48 (76%)[a]**	**39 (81%)**

[a] One educational park in Michigan contains three schools with one principal. Therefore, we calculated the response out of 31 schools in Michigan.

Note. The percentage of administrators that consented to participate in the formative evaluation is calculated out of the number of schools that participated in RAISE in Year 1. The percentage of administrators that completed the survey is calculated out of the number of administrators we expected to complete the survey (i.e. the number of administrators that consented to participate in the formative evaluation).

Source. Participant database and administrator survey data.

Administrators in several different roles in the participating schools were charged with overseeing the RAISE initiative. However, we asked that only one principal or assistant principal at the school complete the survey, in order to capture the school leadership position about RAISE. Of the 39 administrators that completed the survey, 59% (n = 23) were principals and 41% (n = 16) were assistant principals.

Uptake of Development Activities

Recruitment

In Year 1, the state site coordinators were primarily responsible for recruiting schools to participate in RAISE. While there are several reasons why districts and schools may choose to join RAISE, we asked administrators to select the primary factors that led to their school's participation. The most selected options are shaded in **Table** 13**.** Across the four states, the most selected options were:

- There is prior research showing that Reading Apprenticeship is effective at improving student achievement (54% [n = 21]).
- The pedagogy corresponds to the literacy practices advocated by my school (45% [n = 18]).
- It was highly recommended to me (other than by teachers) (41% [n = 16]).

This result suggests that SLI and the site coordinators continue to focus on the strong research base behind RA and alignment with current practices during their recruitment efforts.

TABLE 13. PRIMARY FACTOR(S) THAT LED TO SCHOOL PARTICIPATION IN RAISE.

	It was required by the district	Our teachers wanted to participate	It was highly recommended to me (other than teachers)	It is free professional development for our teachers	The pedagogy corresponds to the literacy practices advocated by my school	There is prior research showing that Reading Apprenticeship is effective at improving student achievement	It is aligned to Common Core Standards	Other	I am not aware of the reason(s) our school decided to participate
Indiana (*n* = 5)	0 (0%)	1 (20%)	3 (60%)	2 (40%)	5 (100%)	1 (20%)	2 (40%)	2 (40%)	0 (0%)
Michigan (*n* = 19)	1 (5%)	7 (37%)	7 (37%)	4 (21%)	6 (32%)	13 (68%)	0 (0%)	2 (11%)	0 (0%)
Pennsylvania (*n* = 8)	1 (13%)	2 (25%)	2 (25%)	1 (13%)	5 (63%)	5 (63%)	1 (13%)	2 (25%)	1 (13%)
Utah (*n* = 7)	1 (14%)	2 (29%)	4 (57%)	1 (14%)	2 (29%)	2 (29%)	2 (29%)	1 (14%)	0 (0%)
Total (*n* = 39)	3 (8%)	12 (31%)	16 (41%)	8 (21%)	18 (46%)	21 (54%)	5 (13%)	7 (18%)	1 (3%)

Note. While administrators were able to select all response options that applied, we asked them to select no more than three of the options. Shaded cells reveal the most selected options.

Source. Administrator Survey

Attendance at RAISE Institute and Monthly Team Meetings

While administrators were encouraged to attend the RAISE Institutes with their teachers to gain a better understanding of the RA framework and how they can support their RAISE teachers, it was not required. Of the 39 administrators responding to the survey, 56% (n = 22) said that they attended the Year 1 RAISE professional development sessions in either the summer or winter sessions, or both.[10] Likewise, it is not required that administrators attend their RAISE team's monthly meeting; however, they may do so to further support their teachers, help resolve issues, or listen about the successes and challenges of RA implementation. Across the

[10] As explained in Table 4, the data presented here is inconsistent with the data from the attendance records. We note that administrators, instructional coaches, and other personnel may not have "signed-in" at each of the trainings as consistently as the teachers did (i.e. they may not have been required to do so). However, not all administrators completed the survey, so we may not have a complete and accurate record of administrator attendance.

state, 64% (n = 25) of the administrators responded that they had attended at least one monthly team meeting at their schools during the school year. As the online administrator course is rolled out, we will also assess participation and effectiveness of this resource to allow administrators to further support their RAISE teachers.

Support for RA Instruction

The teacher leaders at each school are expected to provide a majority of the RA instructional support. However, in order for RAISE to be successful, we expect that administrators are also providing support for instruction. Table 14 shows the types of support that administrators reported providing. A majority of the administrators said that they provided space for monthly meetings (82% [n = 32]), materials for RA implementation (82% [n = 32]), and time for monthly meetings (77% [n = 30]).[11] While this type of administrative support (e.g. securing time, space and materials for instruction and meetings) is likely to be important for implementation, there were a number of kinds of support that were provided somewhat less frequently, e.g., "allowance for teachers to adjust pacing of content covered" and "change to policy." These kinds of changes require more substantive efforts and are the type of administrative work that we might expect as buy-in increases and RAISE becomes more embedded in the school's practice.

[11] There were three additional answer options to this question that are not shown in this table. No administrator selected "Other" or "School administration has not provided support for RA instruction." One administrator selected "I do not know what support administrators have provided for RA instruction."

TABLE 14. TYPES OF SUPPORT FOR RA INSTRUCTION PROVIDED BY SCHOOL ADMINISTRATION

	Time for monthly meetings	Space for monthly meetings	Materials needed for RA implementation	Planning time for teacher for RA instruction	Coaching/ mentoring	Observation/ feedback	Classroom management help	Allowance for teachers to adjust pacing of content covered	Political support[a]	Changes to school/ district policy
Indiana (*n* = 5)	4 (80%)	4 (80%)	4 (80%)	1 (20%)	3 (60%)	4 (80%)	1 (20%)	2 (40%)	2 (40%)	0 (0%)
Michigan (*n* = 19)	16 (84%)	17 (89%)	17 (89%)	12 (63%)	8 (42%)	7 (37%)	2 (11%)	12 (63%)	14 (74%)	1 (5%)
Pennsylvania (*n* = 8)	5 (63%)	5 (63%)	6 (75%)	1 (13%)	4 (50%)	3 (38%)	3 (38%)	2 (25%)	4 (50%)	0 (0%)
Utah (*n* = 7)	5 (71%)	6 (86%)	5 (71%)	4 (57%)	4 (57%)	3 (43%)	1 (14%)	2 (29%)	3 (43%)	0 (0%)
Total (*n* = 39)	**30 (77%)**	**32 (82%)**	**32 (82%)**	**18 (46%)**	**19 (49%)**	**17 (44%)**	**7 (18%)**	**18 (46%)**	**23 (59%)**	**1 (3%)**

[a] In the survey, we defined "political support" as "someone to 'back them up' in a conflict over implementation of RA instruction."

Note. For this question, administrators were asked to select all response options that applied. Shaded cells reveal the most selected options.

Source. Administrator Survey

Buy-in and Increased Ownership

Level of Commitment and Buy-in

Figure 5 displays that, across the four states, 95% (n = 37) of the administrators responded that they were either fully committed or fairly committed to making RA work at their schools. Only 5% (n = 2) responded that they were willing to give RAISE a chance. None of the administrators selected "Not a priority," "Not willing to do it," or "I don't know enough about RA or the RAISE initiative to respond." It is important to point out that this survey was deployed in May, giving the administrators a year of RAISE implementation in their schools to resolve their commitment level.

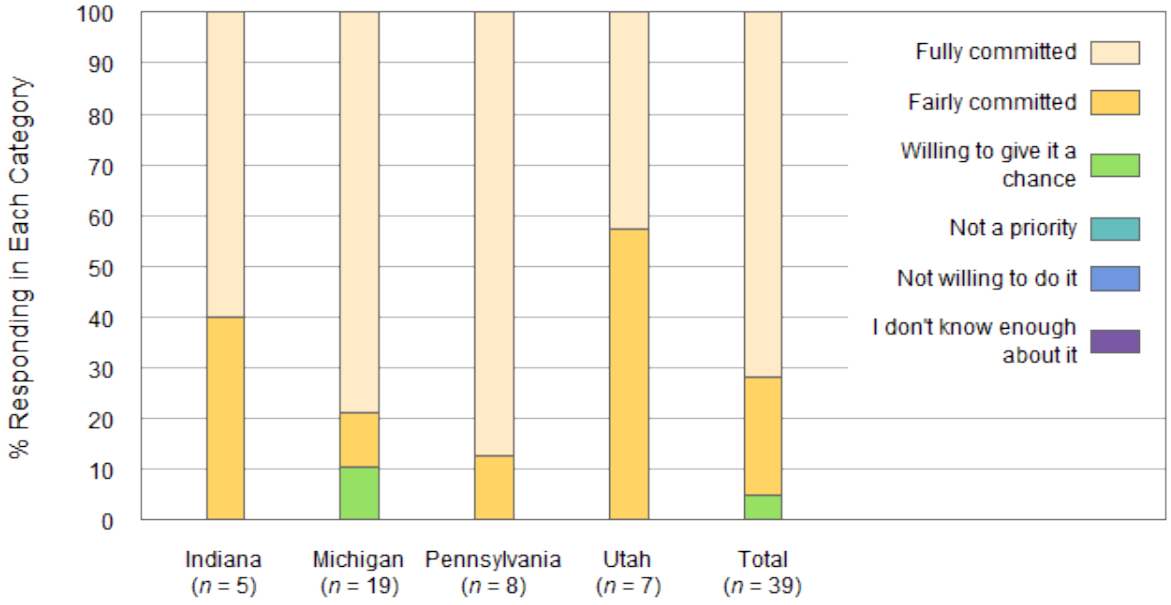


FIGURE 5. ADMINISTRATOR COMMITMENT TO RA

Note. For this question, administrators were asked to select the one response option that they felt best answered the question.

Source. Administrator Survey

As explained in our scale-up logic model, we defined buy-in as commitment to RA as an appropriate strategy for literacy instruction and as a means of improving student achievement. Therefore, we asked administrators the extent to which they agreed with those statements. As shown in Figure 6, 67% (n = 26) of administrators said they strongly agreed with the statement that "Reading Apprenticeship is an appropriate framework for literacy instruction at my school" and 74% (n = 29) strongly agreed that "The implementation of Reading Apprenticeship will improve student achievement at my school."

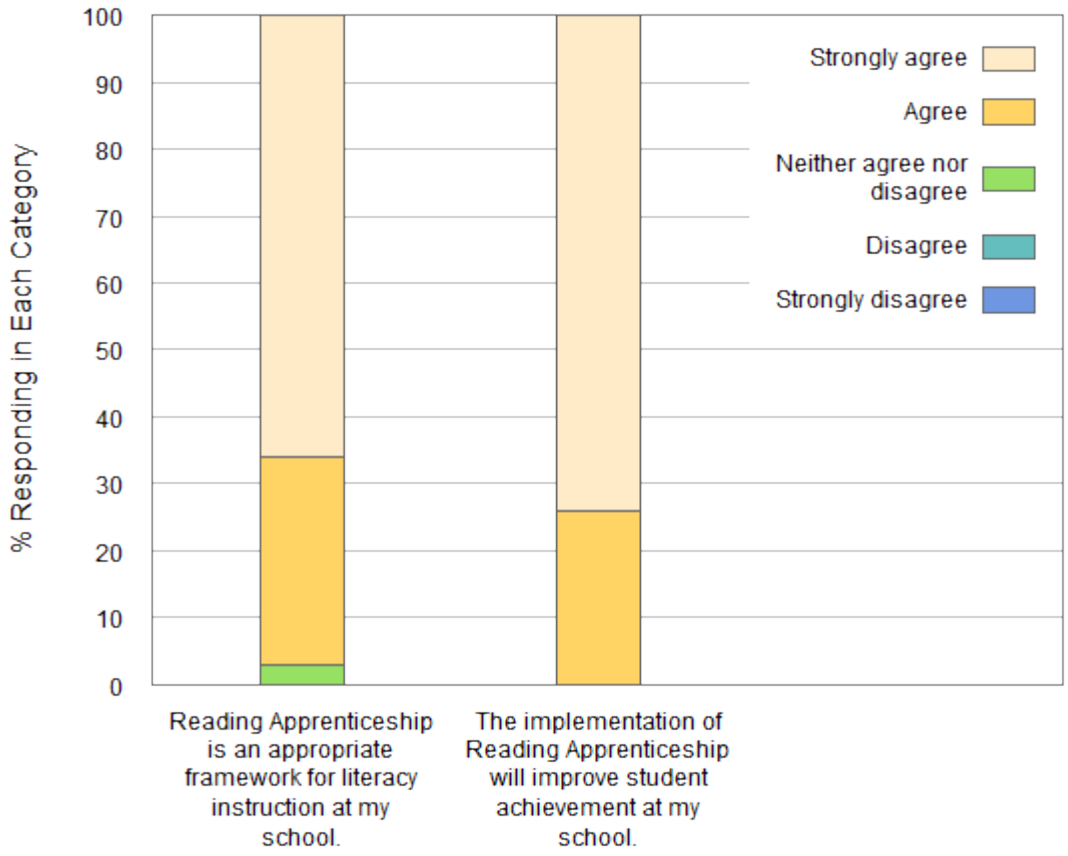


FIGURE 6. ADMINISTRATOR AGREEMENT WITH BUY-IN STATEMENTS

Note. For this question, administrators were asked to select the one response option that they felt best answered the question. *n* = 39

Source. Administrator survey

Shift in Ownership

One expected indicator of a "shift in ownership" and a factor contributing to spread is that the recruitment and retention processes are transferred to the local level, with administrators and teachers recruiting or recommending that other schools/teachers join RAISE in subsequent years. Table 15 shows that 85% (*n* = 33) of administrators responded that they had recommended joining RAISE to other teachers at their school, and two responded that they had not because all teachers in the appropriate subject areas at their schools were already participating in RAISE, indicating that this transfer of responsibility is already occurring.

TABLE 15. ADMINISTRATORS RECOMMENDING JOINING RAISE TO OTHER TEACHERS AT THEIR SCHOOL

	Yes	No, all teachers in the appropriate subject areas at my school are already participating in RAISE	No, I have not recommended RAISE to the non-participating teacher at my school
Indiana (*n* = 5)	5 (100%)	0 (0%)	0 (0%)
Michigan (*n* = 19)	15 (79%)	2 (11%)	2 (11%)
Pennsylvania (*n* = 8)	7 (88%)	0 (0%)	1 (13%)
Utah (*n* = 7)	6 (86%)	0 (0%)	1 (14%)
Total (*n* = 39)	**33 (85%)**	**2 (5%)**	**4 (10%)**

Note. For this question, administrators were asked to select the one response option that they felt best answered the question. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Administrator Survey

We asked the four administrators who responded that they had not recommended RAISE to the non-participating teachers at their school to indicate why, and all selected "I plan to, but haven't done it yet." Additionally, two administrators responded that someone else at their schools is talking to them about joining RAISE, and one administrator selected "I don't think there is enough instructional support available."

We also asked the administrators that had recommended RAISE to other teachers at their school to select the reasons why they chose to do so. Table 16 shows that 97% (*n* = 32) said that they believe student learning at their school will improve if more teachers join RAISE. One of the administrators that selected "Other" specified that "When more teachers are involved together, they can support each other and our students more effectively across the curricular areas."

TABLE 16. REASON(S) WHY ADMINISTRATOR RECOMMENDED JOINING RAISE TO TEACHERS AT THEIR SCHOOL.

	My school would benefit if more teachers joined RAISE.	The instructional practices of other teachers at my school would benefit from the RAISE training.	Student learning at my school will improve if more teachers joined RAISE.	Other
Indiana (*n* = 5)	5 (100%)	5 (100%)	5 (100%)	0 (0%)
Michigan (*n* = 15)	14 (93%)	15 (100%)	15 (100%)	1 (6%)

TABLE 16. REASON(S) WHY ADMINISTRATOR RECOMMENDED JOINING RAISE TO TEACHERS AT THEIR SCHOOL.

	My school would benefit if more teachers joined RAISE.	The instructional practices of other teachers at my school would benefit from the RAISE training.	Student learning at my school will improve if more teachers joined RAISE.	Other
Pennsylvania (*n* = 7)	7 (100%)	6 (86%)	6 (86%)	0 (0%)
Utah (*n* = 6)	5 (86%)	5 (86%)	6 (100%)	1 (17%)
Total (*n* = 33)	**31 (94%)**	**31 (94%)**	**32 (97%)**	**2 (6%)**

Note. For this question, administrators were asked to select all response options that applied.
Source. Administrator Survey

Additionally, 67% (*n* = 26) of the administrators said that they had recommended joining RAISE to other school personnel (e.g. administrators, instructional coaches, or teachers from other schools).

Sustainability and Contextual Factors

We asked several questions related to the specific contextual factors that may hinder or support successful scale-up and sustainability. Table 17 shows how administrators responded to the question asking them what they thought the biggest challenges to sustaining RAISE in their school long term would be. The following three response options were most selected.

- Competing initiatives (56% [*n* = 22])
- Budget constraints (33% [*n* = 13])
- Misalignment between RAISE and teacher preferences (67% [*n* = 26])[12]

Additionally, 23% (*n* = 9) of the administrators responded that they did not think there would be any challenges to sustaining RAISE in their school long term. Because a majority of administrators are concerned about competing initiatives, SLI and the site coordinators should continue to discuss with school and district administrators how RA may be embedded within new initiatives, rather than replaced by or seen as "competing" with new reforms. For example, it makes sense to continue providing cross-walks between RAISE and the Common Core, an important initiative being implemented in many of our districts.

[12] There were three additional answer options to this question that are not shown in this table. No administrators selected "RA is too difficult for our students," "Misalignment between RAISE and district literacy policies," or "I don't know enough about the RAISE initiative to respond."

TABLE 17. CHALLENGES TO SUSTAINING RAISE IN SCHOOL LONG TERM

	Insufficient district support	Competing initiatives	Budget constraints	Misalignment between RAISE and teacher preferences	Administrator turnover	Teacher turnover	Other	I don't think there would be any challenges to sustaining RAISE in our school long term
Indiana (*n* = 5)	0 (0%)	1 (20%)	0 (0%)	0 (0%)	0 (0%)	1 (20%)	0 (0%)	3 (60%)
Michigan (*n* = 19)	4 (21%)	13 (68%)	8 (42%)	6 (32%)	1 (5%)	2 (11%)	1 (5%)	3 (16%)
Pennsylvania (*n* = 8)	0 (0%)	4 (50%)	4 (50%)	3 (38%)	0 (0%)	0 (0%)	0 (0%)	2 (25%)
Utah (*n* = 7)	1 (14%)	4 (57%)	1 (14%)	0 (0%)	0 (0%)	0 (0%)	2 (29%)	1 (14%)
Total (*n* = 39)	**5 (13%)**	**22 (56%)**	**13 (33%)**	**9 (23%)**	**1 (3%)**	**3 (8%)**	**3 (7%)**	**9 (23%)**

Note. For this question, administrators were asked to select all response options that applied. Shaded cells reveal the most selected options.

Source. Administrator Survey

With the ongoing concern of funding and budget constraints, we asked if the administrators thought that RAISE would continue in their schools without the i3 federal funding. Figure 7 shows that, across the four states, 38% (*n* = 15) said "Yes," 26% (*n* = 10) said "No," and 36% (*n* = 14) said "I don't know."

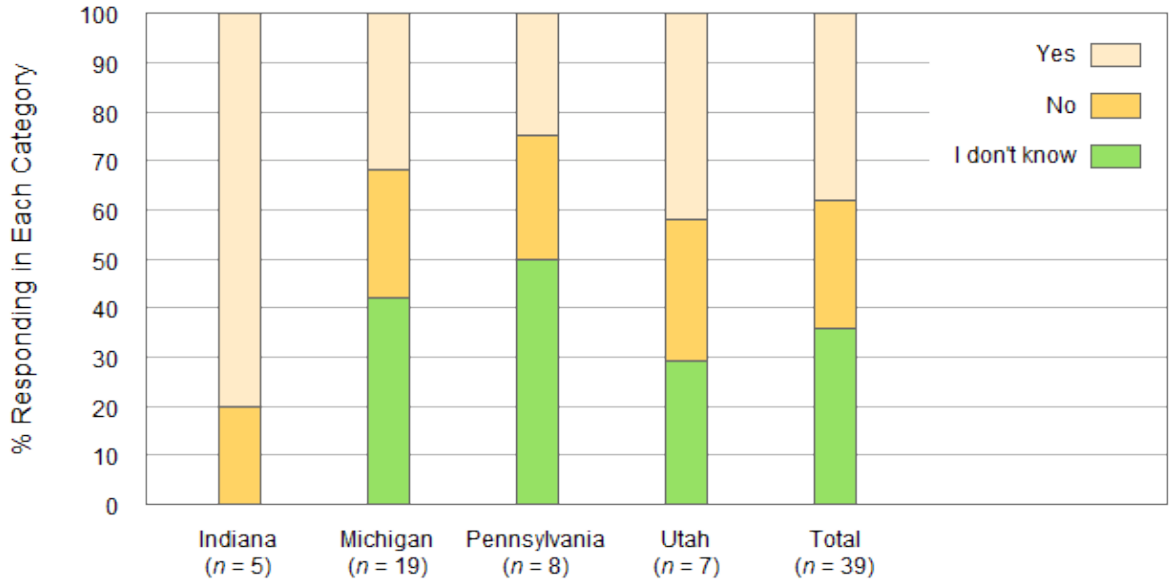


FIGURE 7. WITHOUT FEDERAL FUNDING, DO YOU THINK RAISE WOULD CONTINUE IN YOUR SCHOOL?

Note. For this question, administrators were asked to select the one response option that they felt best answered the question.

Source. Administrator survey

For the administrators that selected "No" or "I don't know," we asked them if they would seek supports (e.g. alternative funding sources, instructional resources, professional development opportunities) to sustain RAISE. Of the 24 administrators responding to this question, 63% (n = 15) said "Yes," 4% (n = 1) said "No," and 33% (n = 8) said "I don't know."

Year 1: Teacher Survey Results

Table 18 shows the number of teachers that consented to participate in the study and the number of consented teachers that completed each survey, by state and overall. In total, 82% (n = 325) of the teachers that attended any of the RAISE Institutes consented to participate in the study and of those, 91% (n = 296) completed Survey 1, 86% (n = 278) completed Survey 2, and 80% (n = 261) completed Survey 3.

TABLE 18. SURVEY RESPONSE RATE: TEACHERS

	No. of teachers that attended RAISE Institute	No. of teachers consented to participate in formative evaluation	No. of teachers completed each survey		
			Survey 1	Survey 2	Survey 3
Indiana	49	37 (76%)	33 (89%)	33 (89%)	34 (92%)
Michigan	208	177 (85%)	162 (92%)	148 (84%)	138 (78%)
Pennsylvania	68	59 (88%)	56 (95%)	54 (92%)	49 (83%)
Utah	71	52 (73%)	45 (87%)	43 (83%)	40 (77%)
Total	**396**	**325 (82%)**	**296 (91%)**	**278 (86%)**	**261 (80%)**

Note. The percentage of teachers that consented to participate in the formative evaluation is calculated out of the number of teachers that attended any of the RAISE Institutes. The percentage of teachers that completed each survey is calculated out of the number of teachers that consented to participate in the formative evaluation.

Uptake of Development Activities

Professional Development Institute

On Survey 1, we asked the teachers if they attended the RAISE Summer 5-Day and Winter 2-Day Institute in order to inform subsequent questions/results. In total, 295 teachers attended the Summer 5-Day and 286 attended the Winter 2-Day.[13] Table 19 shows the subject area for which the survey respondents attended the RAISE Summer 5-Day Institute. Across the states, 32% (n = 95) attended the Biology training, 41% (n = 122) attended the ELA training, and 26% (n = 78) attended the U.S. History training.

[13] We expected all surveyed teachers to have attended at least one day of the RAISE Summer 5-Day teachers, since the surveys are intended for RAISE-trained teachers.

TABLE 19. TEACHER SUBJECT AREA

	Biology	ELA	US History
Indiana (*n* = 33)	10 (30.3%)	14 (42.42%)	9 (27.27%)
Michigan (*n* = 162)	54 (33.33%)	65 (40.12%)	43 (26.54%)
Pennsylvania (*n* = 56)	20 (35.71%)	21 (37.5%)	15 (26.79%)
Utah (*n* = 44)	11 (25%)	22 (50%)	11 (25%)
Total (*n* = 295)	**95 (32%)**	**122 (41%)**	**78 (26%)**

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Survey 1

In order to measure the effectiveness of the professional development institutes, we asked teachers the extent to which they agreed with the following statements (separately) about the RAISE Summer 5-Day Institute and Winter 2-Day Institute.

- Helped me collaborate with my colleagues to better understand the needs of my students
- Provided me with adequate resources and materials to implement what I learned in the professional development activities
- Led to changes in my classroom teaching practices

Figure 8 shows that, across the four states, 82% (*n* = 241) of the teachers agreed or strongly agreed that the Summer 5-Day Institute helped them collaborate with their colleagues, 85% (*n* = 251) agreed or strongly agreed that they were provided with adequate resources and materials, and 90% (*n* = 265) agreed or strongly agreed that it led to changes in their teaching practices.

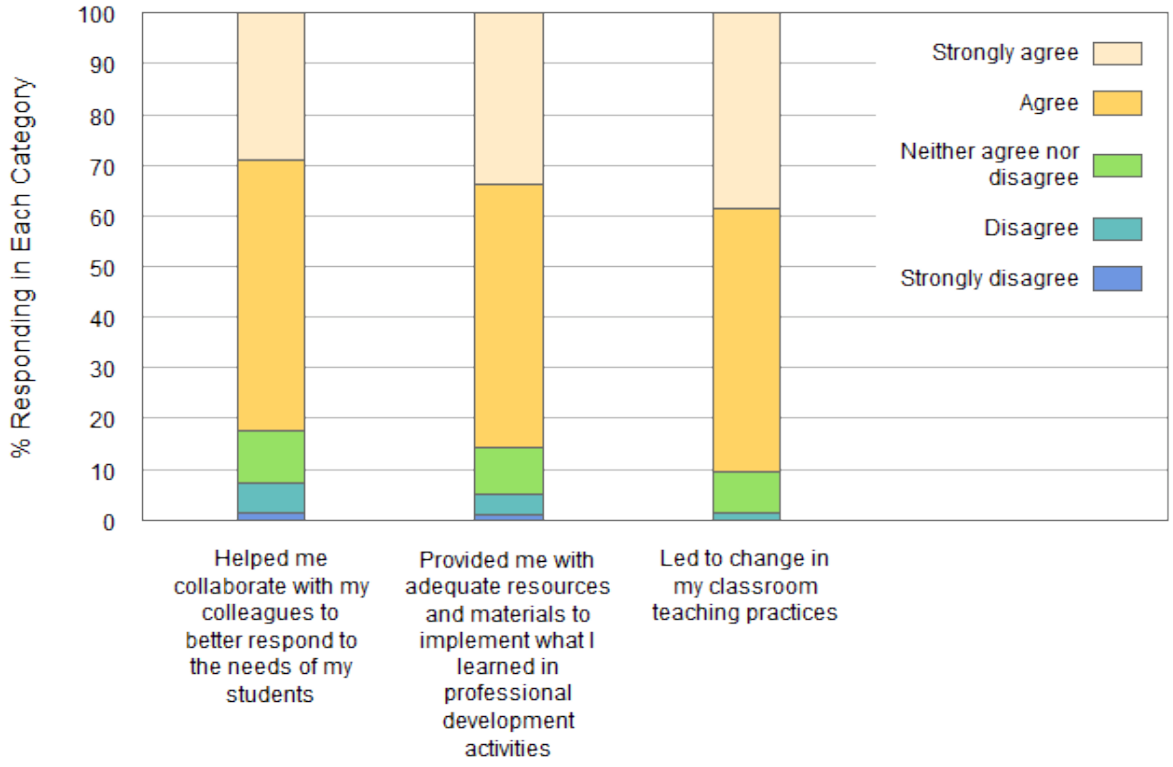


FIGURE 8. EFFECTIVENESS OF RAISE SUMMER 5-DAY INSTITUTE

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. *n* = 293

Source. Teacher Survey 1

Likewise, Figure 9 shows that across the four states, 81% (*n* = 229) of the teachers agreed or strongly agreed that the Winter 2-Day Institute helped them collaborate with their colleagues; 81% (*n* = 230) agreed or strongly agreed that they were provided with adequate resources and materials; and 81% (*n* = 230) agreed or strongly agreed that it led to changes in their teaching practices. Appendix D shows these results disaggregated by state.

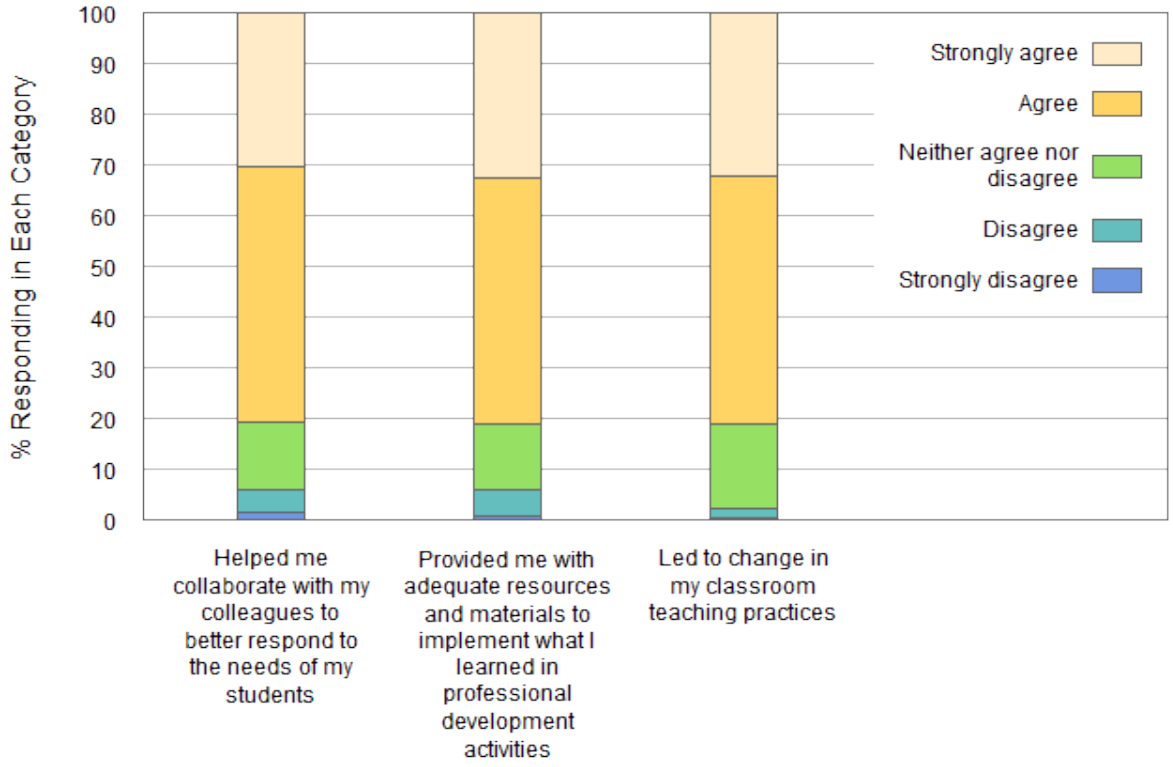


FIGURE 9. EFFECTIVENESS OF RAISE WINTER 2-DAY INSTITUTE

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. *n* = 284

Source. Teacher Survey 1

Monthly RAISE School Team Meetings

On each of the three surveys, we asked teachers if they had attended monthly RAISE school team meetings during a given period. Table 20 shows 97% (*n* = 261) attended a monthly meeting between the beginning of the school year and January, 86% (*n* = 212) attended a monthly meeting in February and/or March, and 73% (*n* = 191) attended a monthly meeting in April and/or May.[14]

[14] In a subsequent report, we will formally (statistically) test the hypothesis that there is an overall decline in attendance between the beginning of the school year and the May team meeting. We will also examine how much variation there is in attendance trends and whether school-level factors account for these differences.

TABLE 20. ATTENDANCE AT MONTHLY RAISE SCHOOL TEAM MEETINGS

	Date Range	Yes	No
Survey 1 (*n* = 268)	Beginning of school year- January	261 (97%)	7 (3%)
Survey 2 (*n* = 247)	February- March	212 (86%)	35 (14%)
Survey 3 (*n* = 261)	April-May	191 (73%)	70 (27%)

Note. For this question, teachers were asked to select all response options that applied. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Surveys 1-3

On the third survey, we asked teachers how often they used the RA pedagogical practices in their classroom, on average, during the 2011-2012 school year. Figure 10 shows that 67% (*n* = 174) of the teachers said they use these practices at least a few times a week, with 27% (*n* = 70) using them in each lesson. Table 20 shows the same data disaggregated by state. While the RA pedagogical practices are expected to be integrated throughout each lesson, it may take teachers several years to learn, become comfortable with, and fully incorporate new instructional strategies. Within the first year of RAISE (and prior to teachers receiving the full professional development), over two-thirds of the teachers reported meeting the use expectation.[15]

[15] In a subsequent report, we will formally (statistically) test whether there is a difference among states in the distribution of responses.

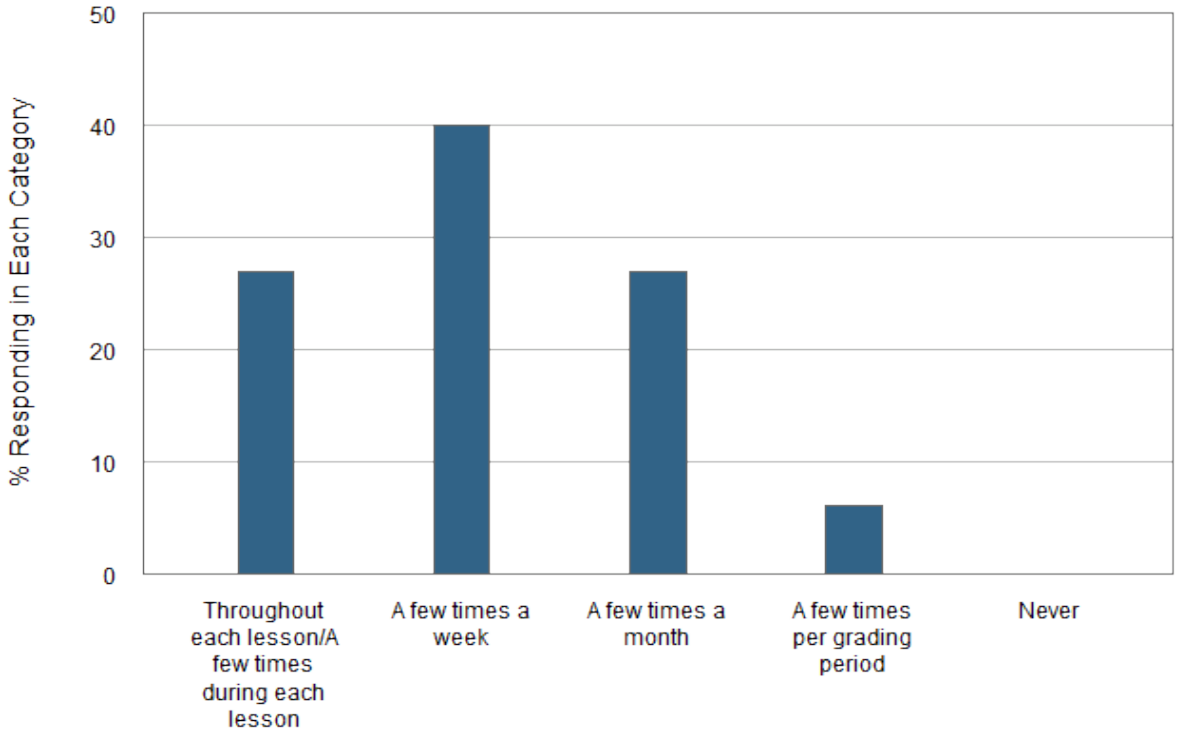


FIGURE 10. AVERAGE USE OF RA PEDAGOGICAL PRACTICES

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. *n* = 261

Source. Teacher Survey 2

TABLE 21. AVERAGE USE OF RA PEDAGOGICAL PRACTICES

	Throughout each lesson/A few times during each lesson	A few times a week	A few times a month	A few times per grading period	Never
Indiana (*n* = 34)	5 (15%)	17 (50%)	10 (29%)	2 (6%)	0 (0%)
Michigan (*n* = 138)	44 (32%)	51 (37%)	36 (26%)	7 (5%)	0 (0%)
Pennsylvania (*n* = 49)	9 (18%)	23 (47%)	16 (33%)	1 (2%)	0 (0%)
Utah (*n* = 40)	12 (30%)	13 (33%)	9 (23%)	6 (15%)	0 (0%)
Total (*n* = 261)	70 (27%)	104 (40%)	71 (27%)	16 (6%)	0 (0%)

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Survey 2

Building Capacity and Buy-in

There are several RAISE related activities/resources that are designed to help teachers build capacity to implement RA. Therefore, on the third survey, we asked teachers which of these activities were most effective in building their capacity to implement RA in their classrooms during the 2011-2012 school year. Figure 11 shows that a majority of the teachers (60% [*n* = 165]) said that collaboration with other teachers was most effective at building their capacity. In fact, the number of teacher citing this aspect, exceeds all the other categories combined. While there are several opportunities for collaboration built into RAISE (e.g. at the Institute, the monthly meetings and *Thinking Aloud* site), SLI and the site coordinators should consider if there are additional ways to support effective teacher collaboration around RAISE/RA implementation, given this result.

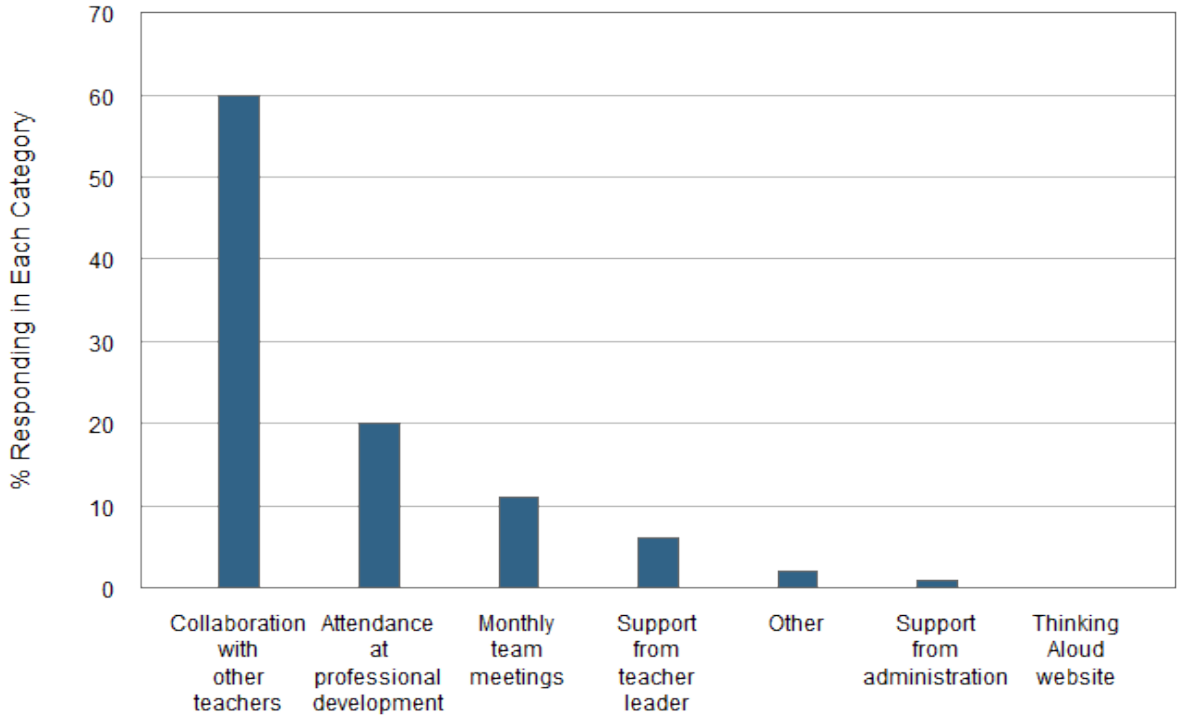


FIGURE 11. MOST EFFECTIVE ACTIVITIES AT BUILDING CAPACITY TO IMPLEMENT RA

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. *n* = 259

Source. Survey 3

On the third survey, we asked teachers how committed they were to making RA work in their classrooms and in their schools. Figure 12 shows that 82% (*n* = 215) of the teachers responded that they were either fully committed or fairly committed to making RA work in their classrooms, with 14% (*n* = 36) willing to give it a chance. Seventy percent (*n* = 176) of teachers responded that they were either fully committed or fairly committed to making RA work at their schools, with 24% (*n* = 63) willing to give it a chance.

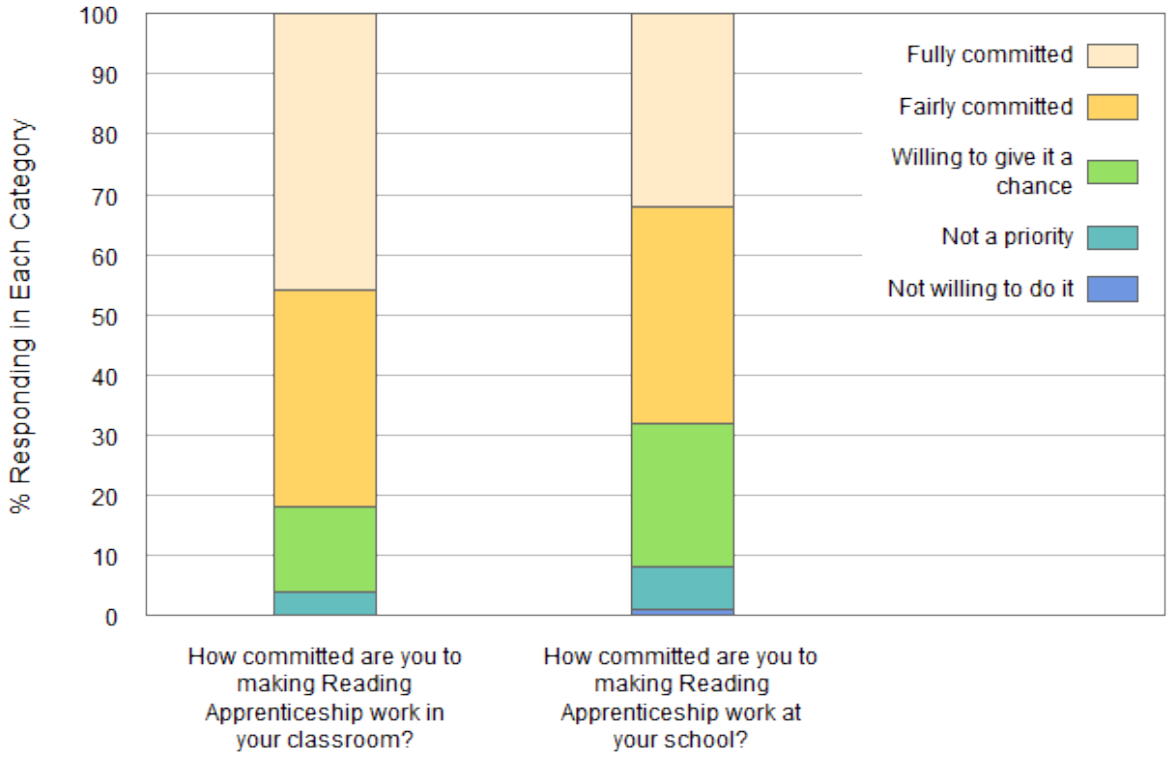


FIGURE 12. TEACHER COMMITMENT TO RA

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. *n* = 261 (classroom); *n* = 259 (school)

Source. Teacher Survey 3

On the third survey, we also asked teachers the extent to which they agreed with the statements that RA is an appropriate strategy for literacy instruction and a means of improving student achievement. As shown in Figure 13, 92% (*n* = 239) of teachers said they agreed or strongly agreed with the statement that "Reading Apprenticeship is an appropriate framework for literacy instruction in my classroom," and 90% (*n* = 236) agreed or strongly agreed that "The implementation of Reading Apprenticeship will improve student achievement at my class/school/district."

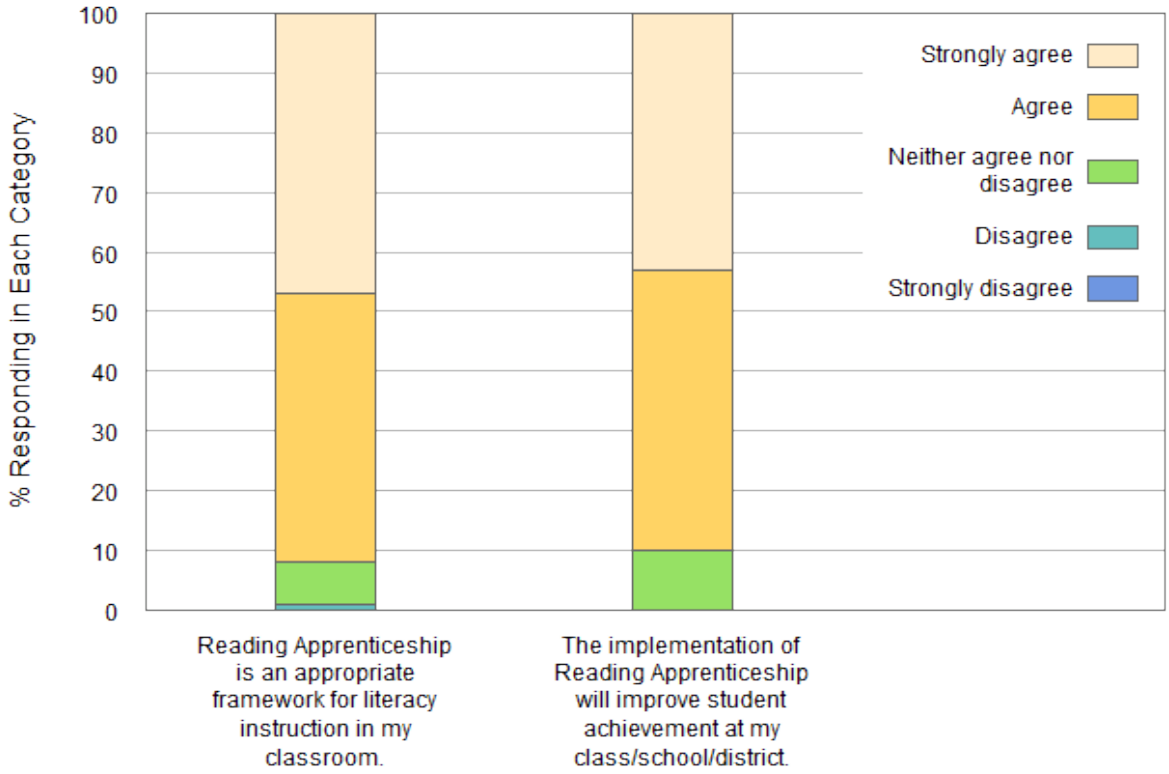


FIGURE 13. TEACHER AGREEMENT WITH BUY-IN STATEMENTS

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. *n* = 261

Source. Teacher Survey 3

An important component of the RAISE initiative is to ensure a critical mass of RA teachers at each school or district for collaboration and support, capacity building and sustainability, and reaching a larger number of students.[16] In response to a question on Survey 2, 88% (*n* = 245) of the teachers said that they strongly agreed or agreed with the following statement: "My school would benefit if more teachers participated in RAISE." Only three teachers (out of 277) said that they disagreed or strongly disagreed with that statement. This result suggests that participating teachers recognized the importance of collaboration in order for RAISE to be implemented to its full potential.

Shift in Ownership

In order to gauge if teachers have "a strong foundation of the reform-centered knowledge," which Coburn (2003) describes as an important factor in order for the shift of ownership to occur, we asked teachers to select the statement that best describes their own level of understanding of the RA framework. Table 22 shows these results by state, and overall. In

[16] As explained in the Methods section, this is why SLI recommends that school teams send nine teachers (three in each subject area) to the RAISE trainings.

response to this question, 34% (n = 94) of the teachers said they get it and are referring to it often as they plan and reflect on their teaching, and 49% (n = 136) said that it is starting to make more sense as they work with the approach to integrate it into their daily practice. Again, in the first year of implementation, we would expect most teachers to be in the "learning phase" and that they will increase their knowledge and practice over time. We will continue to track this result with this cohort of teachers as they move into their second and third year of implementation to see if their reported level of understanding increases. We will also collect the same information from new cohorts of teachers to see if they report the same level of understanding in their first year of RAISE.

TABLE 22. TEACHER LEVEL OF UNDERSTANDING OF THE RA FRAMEWORK

	I get it and am referring to it often as I plan and reflect on my teaching	It is starting to make more sense to me as I work with the approach to integrate it into my daily practice	I understand some aspects of it, but I do not understand how it would translate into daily practice	I do not get it	Other
Indiana (n = 33)	9 (27%)	12 (36%)	7 (21%)	0 (0%)	5 (15%)
Michigan (n = 146)	54 (37%)	76 (52%)	11 (8%)	0 (0%)	5 (3%)
Pennsylvania (n = 54)	21 (39%)	27 (50%)	5 (9%)	0 (0%)	1 (2%)
Utah (n = 43)	10 (23%)	21 (49%)	10 (23%)	0 (0%)	2 (5%)
Total (n = 276)	**94 (34%)**	**136 (49%)**	**33 (12%)**	**0 (0%)**	**13 (5%)**

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Survey 2

On the second survey, we also asked a series of questions about if and why teachers had recommended joining RAISE to others. Across the four states, 70% (n = 195) of the teachers said that they had recommended joining RAISE to other teachers at their school.[17] Thirty-six percent (n = 99) said that they recommended joining RAISE to other school personnel (e.g. administrators, instructional coaches, teachers from other schools). As with the similar result from the administrator survey, this is an indication that the transfer of responsibility of recruitment and spread is already occurring.

[17] Additionally, 9% (n = 25) of the teachers said that they did not recommend joining RAISE to other teachers at their school because all teachers in the appropriate subject areas were already participating in RAISE, and 21% (n = 58) said that they had not recommended RAISE to non-participating teachers at their school.

While we may not expect teachers to have a strong sense of authority or agency for an initiative in the first year of implementation, we wanted to see if there was an early indication that this transfer (from the developers to the local level) was emerging. Therefore, on the second survey, we asked teachers to indicate which of the following statements most closely reflects how they felt about their responsibility for the success of RAISE at their school.

- I feel that I am part of a team in which we are responsible for the successful implementation and long-term sustainability of RAISE at my school.
- I feel that I can contribute somewhat to the successful implementation and long-term sustainability of RAISE at my school.
- I feel that I can contribute to the successful implementation and long-term sustainability of RAISE in my subject area department or grade-level team.
- I am responsible for implementing RA in my classroom, but beyond that, I have no influence over whether it lasts at my school.

We designed this question with the understanding that, depending on the contextual factors of particular schools (e.g. collaborative nature of the school, comfort of teachers to discuss/suggest policy with administration), teachers may feel that they have influence over or responsibility for policies within their classroom, but not beyond that (i.e. within their subject area department or at the school level). However, as the process continues and in order to sustain the initiative long-term, it will be important for teachers to feel responsible for the success of RAISE within and beyond their classroom.

We present the results to this question by state and overall in Table 23. Across the four states, 34% (n = 92) of the teachers selected the statement that indicates the strongest commitment to RAISE as a school-wide initiative (i.e. "I feel that I am part of a team in which we are responsible for the successful implementation and long-term sustainability of RAISE at my school") while 27% (n = 74) of the teachers selected the statement that is least aligned (i.e. "I am responsible for implementing RA in my classroom, but beyond that I have no influence over whether it lasts at my school").

TABLE 23. TEACHER AGREEMENT WITH RESPONSIBILITY STATEMENTS

	I feel that I am part of a team in which we are responsible for the successful implementation and long-term sustainability of RAISE at my school.	I feel that I can contribute somewhat to the successful implementation and long-term sustainability of RAISE at my school.	I feel that I can contribute to the successful implementation and long-term sustainability of RAISE in my subject area department or grade level team.	I am responsible for implementing RA in my classroom, but beyond that I have no influence over whether it lasts at my school.
Indiana (*n* = 29)	9 (31%)	0 (0%)	7 (24%)	13 (45%)
Michigan (*n* = 145)	56 (39%)	30 (21%)	30 (22%)	29 (20%)
Pennsylvania (*n* = 54)	13 (24%)	6 (11%)	14 (26%)	21 (39%)
Utah (*n* = 42)	14 (33%)	13 (31%)	4 (10%)	11 (26%)
Total (*n* = 270)	**92 (34%)**	**49 (18%)**	**55 (20%)**	**74 (27%)**

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Survey 2

Sustainability and Contextual Factors

In this last section, we focus on additional factors that may support or hinder successful scale-up and sustainability. To gauge which factors may support successful scale-up of RAISE, we asked teachers which aspect of participating in RAISE they considered most beneficial. Table 24 shows the responses ordered by most to least selected. The following responses were most frequently selected.

- My students' literacy skills improved (22% [*n* = 57])
- My literacy instruction improved (19% [*n* = 50])

Both of these address measurable changes. While these changes are not directly measured in this study of scale-up, it is notable that teachers see the value for such improvements. No teachers responded that there are no beneficial aspects of participating in RAISE.

TABLE 24. MOST BENEFICIAL ASPECT OF PARTICIPATING IN RAISE

My students' literacy skills improved	My literacy instruction improved	Opportunities to collaborate with other RAISE trained teachers	My students were more engaged	My understanding of literacy (how readers make sense of text) improved	The professional development institutes
57 (22%)	50 (19%)	37 (14%)	37 (14%)	33 (13%)	15 (6%)
RA is aligned with existing materials and instructional approaches at my school	**RA is aligned with new or recently adopted standards**	**My content area instruction improved**	**Other**	**My understanding of my content area improved**	**There are no beneficial aspects of participating in RAISE**
9 (3%)	9 (3%)	7 (3%)	4 (2%)	2 (<1%)	0 (0%)

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Survey 3 (n = 260)

To gauge which factors may hinder successful scale-up of RAISE, we asked teachers what challenges they faced in implementing RA during the 2011-2012 school year (teachers were able to check all that apply). Table 25 shows the responses ordered by most to least selected. The three most selected responses were the following.

- Competing priorities (54% [n = 141])
- Student behavior (41% [n = 108])
- Student ability (36% [n = 93])

It is notable that teachers, like administrators, see competing priorities as the major impediment. As with their work with administrators, SLI and the site coordinators should continue to support and guide the RAISE teachers toward thinking about how RA can be embedded within, or a solution to, competing priorities, rather than potentially being seen as having a conflicting or divergent agenda.

TABLE 25. CHALLENGES FACED IN IMPLEMENTING RA

Competing priorities	Student behavior	Student ability	Misalignment between RA and required curriculum	Other	Insufficient school administrat or support	Insufficient district support
141 (54%)	108 (41%)	93 (36%)	44 (17%)	41 (16%)	33 (13%)	33 (13%)

Insufficient understanding of how to implement RA in class	RA is too much work	Insufficient materials	Insufficient parent support	I have not faced any challenges implementing RA	Insufficient training on RA
32 (13%)	30 (12%)	28 (11%)	25 (10%)	18 (7%)	7 (3%)

Note. For this question, teachers were asked to select all response options that applied. *n* = 261

Source. Teacher Survey 3

We also asked teachers to rate how challenging RA was to implement during the 2011-2012 school year. Figure 14 shows that result disaggregated by subject area, and overall. Overall, 50% (*n* = 128) of the teachers said that implementing RA was moderately challenging. When examining this by subject area, we found that 58% (*n* = 46) of the biology teachers, 42% (*n* = 47) of the ELA teachers, and 50% (*n* = 35) of the History teachers said that implementing RA was moderately challenging.[18]

[18] In a subsequent report, we will formally (statistically) test whether there is a difference across subject areas in the distribution of responses.

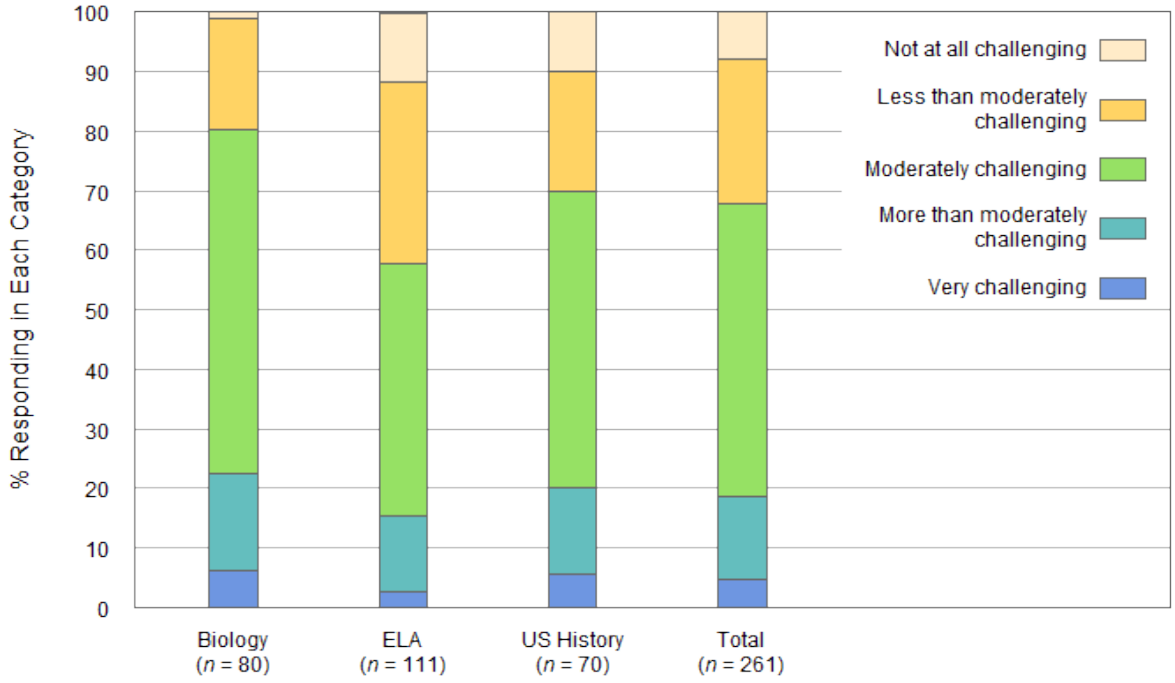


FIGURE 14. RATING OF HOW CHALLENGING RA WAS TO IMPLEMENT

Note. For this question, teachers were asked to select the one response option that they felt best answered the question.

Source. Teacher Survey 3

Finally, we asked teachers if they plan to use the RA framework to inform their instruction during the next school year (2012-2013). As shown in Table 26, 91% (n = 238) of the teachers said yes. In subsequent years of the project, we will continue to survey the Cohort 1 teachers to see if their practice is consistent with the high expectations reported here.

TABLE 26. DO TEACHERS PLAN TO USE THE RA FRAMEWORK TO INFORM THEIR INSTRUCTION NEXT YEAR?

	Yes	No	I don't know
Biology (*n* = 80)	75 (94%)	2 (3%)	3 (4%)
ELA (*n* = 111)	104 (94%)	0 (0%)	7 (6%)
History (*n* = 70)	59 (84%)	2 (3%)	9 (13%)
Total (*n* = 261)	**238 (91%)**	**4 (2%)**	**19 (7%)**

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Survey 3

Discussion and Looking Ahead

STUDY OVERVIEW AND SIGNIFICANCE

This report presents the preliminary findings from the formative evaluation of the scale up of WestEd's Reading Apprenticeship (RA) program. This five year study spans four states and the overall goal is to understand *how* school systems build capacity to implement and disseminate RA and sustain these efforts. We distinguish the focus of this study, which is on the scale-up *process*, from more "traditional" studies of scale-up *impact*.

In our review of the literature in this area, we found that unified theory of scaling-up education reforms is in its early stages, and few empirical studies have investigated this process. Through this study, we will develop working hypotheses to guide the scale-up process. This is also one of the first empirical studies of a scale-up process across multiple states and contexts. Our goal in this study is to begin to investigate how the program becomes rooted across several different contexts under authentic conditions of implementation. From this we can develop hypotheses and begin to build generalizations about the conditions for successful scale-up of RA in various settings, thereby contributing to the aims of i3 leading to widespread improvements in education. The results of this study will add to the research knowledge and literature on educational scale-up as well as scale-up of literacy programs. In addition, this project will inform the development and elaboration of scale-up logic models and theory.

In developing the logic model guiding this evaluation, we built upon literature emphasizing the "shift in reform ownership" from the program developers to the local level. The logic model consists of four stages that illustrate the process of how the activities and resources developed through the i3 funds (i.e., professional development for Reading Apprenticeship facilitators and teachers, instructional support resources, recruitment and retention efforts; and general project development and coordination) are hypothesized to lead to short-term outcomes of participant buy-in and capacity to implement and disseminate RA practices, to longer-term outcomes of the initiative being self-sustained within the districts and schools.

The study research questions address the spread of RAISE (across states, schools, teachers, and students), the scale-up process through the stages of the logic model, and contextual factors that affect scale-up. While the logic model guides our questions and data collection, improvement of the logic model through our observations is also an aim of the research long-term.

RESEARCH METHODS AND DATA COLLECTION IN YEAR 1

We use a mixed methods approach to this study, with both quantitative analyses and a qualitative strategy of inquiry. In the first year of the study, we have observed and documented key project activities; tracked the numbers of schools, teachers, and students served by this initiative; and surveyed participating teachers and administrators. Through the surveys, we were able to measure general implementation of the RAISE project activities, the extent to which they help districts and schools buy into the RA framework and build capacity, and how they take ownership of RA.

PRELIMINARY RESULTS FROM YEAR 1

In the first year of the RAISE project, SLI trained nearly 400 teachers from 65 schools, across Indiana, Michigan, Pennsylvania, and Utah. While SLI met the projected goal in terms of "numbers served", 76 of the teachers that attended at least one day of the training are no longer participating in RAISE, either because they no longer teaching the focal subjects, they have left or are temporarily away from the focal school, or they chose to discontinue participation.

Cautions for Interpreting the Results

These results represent teacher and administrator self-reports from the first year of RAISE implementation. The data are from 62% of the school administrators and 66-70% of the RAISE trained teachers (depending on the survey). We do not know the implementation, commitment, or buy-in levels of those participants that did not consent to be part of the evaluation or complete the data collection activities.

Evidence of Buy-in

Results from the teacher and administrator survey data suggest considerably high levels of buy-in and commitment from this initial cohort of RAISE participants. Across the four states,

- 95% of the *administrators* responded that they were either fully committed or fairly committed to making RA work at their schools.
- 82% of the *teachers* responded that they were either fully committed or fairly committed to making RA work in their classrooms.
- 97% of the *administrators* said that they believe student learning at their school will improve if more teachers join RAISE.
- 92% of *teachers* said that they strongly agreed or agreed with the statement that "Reading Apprenticeship is an appropriate framework for literacy instruction in my classroom".

Additionally, teachers reported high ratings of effectiveness of the RAISE professional development, with 90% of these teachers strongly agreeing or agreeing that the Summer 5-Day Institute led to changes in their teaching practices. The results also suggest high levels of implementation, with 67% of the teachers reporting using the RA pedagogical practices at least a few times a week, and 27% using them in each lesson in the first year. While half of the teachers reported that implementing RA was moderately challenging, 91% said that they plan to use the RA framework to inform their instruction during the next school year (2012-2013 school year).

Potential Barriers to Sustainability

Administrators identified competing initiatives (56%) and budget constraints (33%) as the two primary challenges to sustaining RAISE long-term. Additionally, when asked if they thought RAISE would continue in their schools without the i3 federal funding, 26% said "No", and 36% said "I don't know". Over half of the teachers identified competing priorities as a primary challenge that they faced in implementing RA during the 2011-2012 school year.

These results indicate that WestEd and the state site coordinators should continue to work with the local level stakeholder to develop supports and plans to addresses these concerns and potential barriers to sustainability. For example, as states are actively working toward implementing the Common Core State Standards and new teacher evaluation systems, WestEd should incorporate activities within their professional development or other support resources to show decision makers how adopting RA can be a beneficial mechanism through which they can meet state mandated requirements, rather than feeling overwhelmed with transitions and "one more initiative". That is, local level administrators and teachers need to understand how to map RA onto existing reforms and make productive connections between RA and new initiatives.

BUILDING ON THESE RESULTS AND NEXT STEPS

These initial results serve as a strong baseline measures for subsequent cohorts of RAISE schools and teachers. The early indications of particularly positive attitudes toward RA are promising. It will be important to continue to track the extent to which these attitudes continue with this cohort as they move into their second and third years of implementation. Because the RAISE scale-up will occur in varied and complex educational contexts, it is also important to track if the new cohorts of RAISE participants present the same levels of buy-in and commitment.

In future reports we will attempt to relate observed changes to observed practices. For example, we will consider the extent to which principals' and teachers' buy-in, capacity, ownership and sustainability are related to aspects of practice, participation and perceived support; also, we will consider whether levels of participation and satisfaction vary across states and schools.

In Cohort 2, an additional 561 teachers from 128 schools (104 news schools and 24 returning Cohort 1 schools) were trained at the 2012 Summer 5-Day Institute.

Strategic Literacy Initiative is currently working closely with the state site coordinators and other state and district stakeholders to develop actionable sustainability plans around RAISE. These plans are based on the goals of sustainability beyond the i3 funding, where each state/LEA is with RAISE now, and what resources are available at the school, district, state, external funders, institutes of higher education, and wider communities. By preparing and implementing these plans now, there is a greater chance of identifying and addressing barriers to sustainability and making strategic decisions about recruitment of additional cohorts.

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Appendix A: Scale-Up Logic Model

In this appendix, we provide a comprehensive narrative description of each stage of the RAISE scale-up that is guiding our study. We also present the accompanying logic model figures. As described in the methods section of this report, the arrows in the logic model figures represent relationships or interactions between different components of the process. They change color and directionality through the different stages of the model.

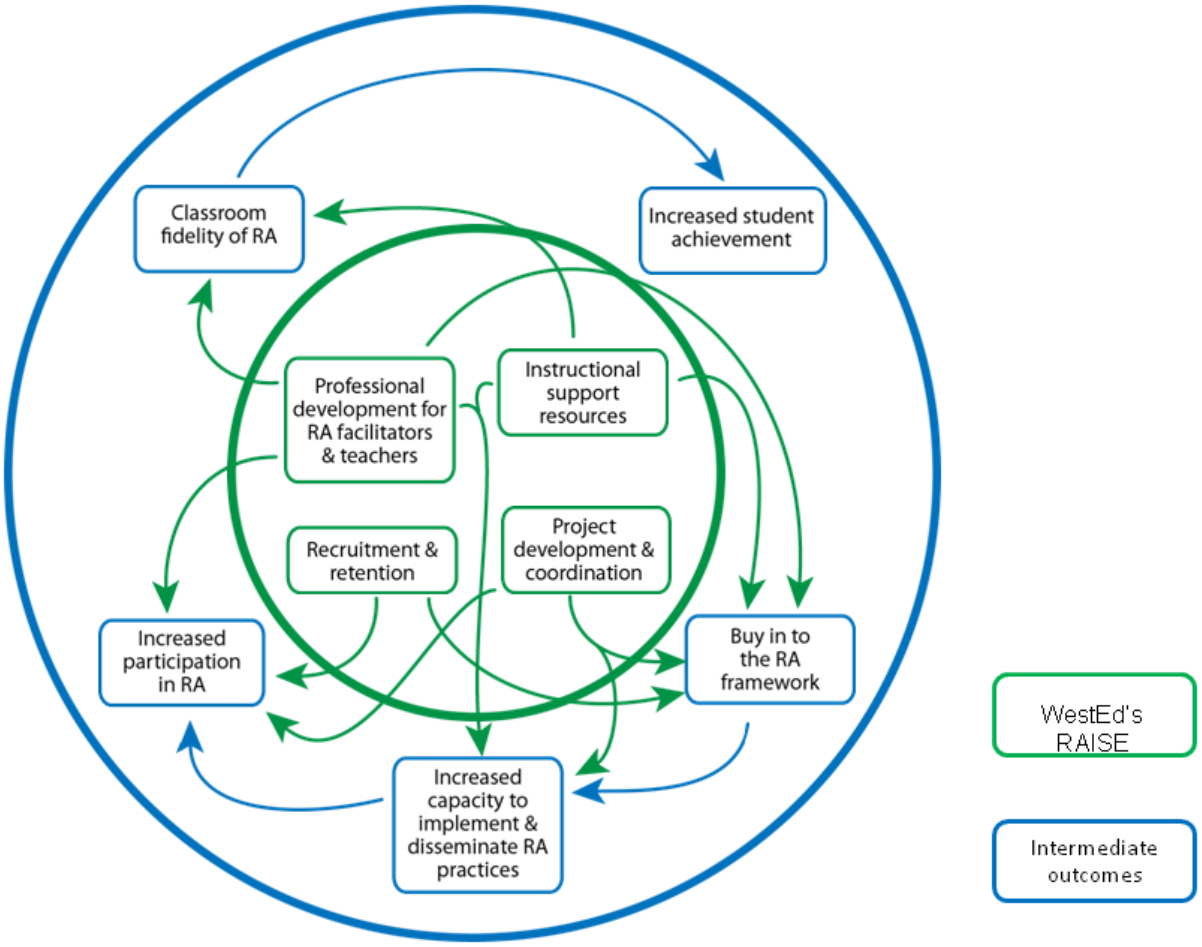

FIGURE A1. STAGE 1: DEVELOPMENT ACTIVITIES

STAGE 1: DEVELOPMENT ACTIVITIES AND INTERMEDIATE OUTCOMES

The Stage 1 diagram (Figure A1) consists of two concentric circles. The inner green circle, which represents the money and management of WestEd's RAISE, contains the four key development activities. The outer blue circle contains the intermediate outcomes, which are the result of direct uptake of the development activities.

Development Activities

The program developers provide schools and districts with the resources, information, and skills to implement RA. Here we describe the four activities.

1. Project development and coordination
2. Recruitment and retention
3. Professional development for Reading Apprenticeship facilitators and teachers
4. Instructional support resources

The Project development and coordination and Recruitment and retention activities are similar to Adelman & Taylor's (2007) Creating readiness stage, which refers to developing interest and dissemination of information, and creating agreements and policies for implementation. The Professional development and Instructional support resources activities align with Adelman & Taylor's Initial implementation, which involves supporting and guiding the adaptation and employment of the intervention in new contexts by creating temporary mechanisms to facilitate implementation (e.g., mentors or coaches).

Project Development and Coordination

The Strategic Learning Initiative (SLI) co-directors are responsible for overall project leadership and guidance in management of the scale-up process. They will maintain project budgets, make key decisions, and guide the process during each phase. SLI will secure funds to supplement the i3 grant through partnerships with private sector organizations for materials, resources, salaries, and stipends for project development. In addition, the SLI co-directors will lend their expertise in the RA method, the RA philosophy, and orientation to instruction to lead the core intellectual work. SLI administrative staff will supply general project coordination (e.g., reserving space for trainings, communicating with teachers/administrators). This core group is similar to what Adelman & Taylor call the "change team." They are responsible for developing and following through with the "big picture" process of scale-up through developing linkages of resources across sites, resolving large-scale problems systematically, and ensuring effective diffusion. Furthermore, as part of RAISE scale-up, the evaluation team will collect quantitative and qualitative data on the scale-up process and provide formative feedback to the SLI co-directors to inform practice.

Recruitment and Retention

The site coordinators (SCs) are responsible for identifying and recruiting districts, schools, teacher leaders, and teachers to participate in RA professional development and adopt the RA framework. The site coordinators from each state, as well as the multi-site coordinator join the "change team" and provide regional knowledge and management of their local sites. Site coordinators will be responsible for recruitment and site management through assessing the interest and need of districts and schools, building relationships with participants, addressing barriers or concerns to participation, and disseminating information. The co-directors and support staff will work with the SCs, district contacts, and school

administrators to identify and recruit teacher leaders. Teacher leaders are recruited from among teachers who have already had training and experience implementing RA and/or have experience and capacity in leading teachers.

Retention of schools and districts will involve frequent and ongoing communication between schools/districts and site coordinators. Retention of teachers will include ongoing support and professional development as well as a ladder of movement in which outstanding RA teachers will be identified and asked to be trained as teacher leaders, and potentially will be trained as RA facilitators. Model RA classrooms also will be identified as exemplars for training and professional development purposes.

Professional Development

Professional development is the primary vehicle for bringing RA principles and pedagogy into districts, schools, and classrooms. The professional development team at SLI consists of three subject area leads and support staff who are responsible for updating existing RA professional development and implementing the plan for the RAISE professional development.[19] This team will also identify, recruit, and train a group of RA facilitators who will conduct the RAISE Institutes. In addition, the professional development team will develop the training modules and materials for the facilitator and teacher trainings.

Facilitator professional development. The professional development team will select the facilitation team from a group of RA certified consultants and previously trained RA teachers and coaches. The facilitation team will attend a two-day intensive training and collaborate through an online resource website to deepen their understanding of the RA model and framework, content-specific RA training modules, and work in facilitation teams to plan which team member will be responsible for implementing each module at the upcoming RAISE Institutes.

Teacher professional development. The RAISE Institutes consist of 65 hours of training on the RA model and philosophy as follows.

a) Five full days of training in the first summer prior to implementation focusing on the foundation of RA
b) Two full days of training during the first year of implementation focusing on formative assessment, differentiation, and planning for implementation
c) Three full days of training in the summer following the first year of implementation focusing on formative assessment and planning for implementation

The goals for professional development are fivefold.

[19] The professional development team works in consultation with the SLI co-directors.

a) Articulate and define the RA model and framework (social, cognitive, knowledge building, and personal dimensions)
b) Define, model, explore, and practice RA instructional strategies that foster metacognitive inquiry, collaboration that facilitates metacognitive inquiry and conversations; and students' use of reading comprehension strategies
c) Describe the teachers' role in an RA classroom including formative assessment and differentiation of instruction
d) Teach discipline-specific reading comprehension strategies and instructional practices
e) Plan for implementation

A key aspect of the professional development is working to change teachers' perspectives from seeing themselves as only teachers to seeing themselves as learners as well. As learners, teachers continually improve their practices, learn from the experiences of other RA teachers and teacher leaders, and approach the implementation of RA as a learning process, similar to those of their students. SLI intends to accomplish this through inquiry-based, collaborative discussion of metacognitive processes, with a lot of professional reading and small-group discussion.

Instructional Support Resources

Instructional support resources will also be available in four forms: (a) monthly webinars for teacher leaders,[20] (b) monthly on-site support meetings for teachers led by teacher leaders, (c) administrator online course, and (d) *Thinking Aloud* website.

Monthly webinars for teacher leaders. In addition to attending the RAISE Institute, teacher leaders participate in monthly webinars focusing on the following.

a) Articulating the RA model and framework
b) Methods for providing on-site support to teachers
c) Tools and resources for teachers

During the first year, the SLI staff will present the teacher meeting agendas to the teacher leaders, but in future years the SLI staff will work more collaboratively with the teacher leaders during the webinars to prepare and review the teacher meeting agendas.

Monthly on-site support meetings for teachers. The teacher leaders will take what they have discussed and learned during the monthly webinars and facilitate one monthly on-site meeting with their school's RAISE teachers. These meetings will be similarly structured during the first year of implementation and the agenda for meetings will be prepared by site

[20] In Year 2, these webinars were replaced with three one-day-long, in-person meetings with all teacher leaders in the state. The goals of the webinars and in-person meetings are the same.

coordinators and SLI for continuity across schools and districts. During the meetings, the teacher leaders will provide support to teachers, help them problem solve, and provide tools to facilitate implementation. These meetings will be designed to foster a professional community among the RA teachers through teacher collaboration and learning. Activities may include sharing of practices, reviewing student work, using RA protocols to guide discussion and reflection about practices, reviewing videos of practice, and reading and discussing professional articles.

Administrator online course. Administrators will also have the opportunity to participate in an online course about RA so they can support RA instruction in their school classrooms. The course will be developed in collaboration with SLI and the site coordinators and will be designed to prepare administrators to articulate the RA model and framework, recognize RA practices, provide an infrastructure for supporting teachers (e.g., space for monthly meetings, supplies and materials, allowing for time for collaboration), and provide tools and resources for teachers (e.g., model lessons, rubrics for practice, protocols for collecting and reviewing student work). The course will not focus on evaluating teachers. While the course will be optional, administrators will be encouraged to attend.

Thinking Aloud website. Additional resources for facilitators, administrators, teachers, and teacher leaders will be provided through an online portal, called *Thinking Aloud* (to be developed in years 1-2 of the initiative). The *Thinking Aloud* website will provide the means for educators to support one another, share ideas, ask questions, discuss strategies, and build a stronger professional network of the RA community.

Intermediate outcomes

Here we describe the hypotheses regarding *how* the Stage 1 development activities will lead to the five intermediate outcomes, as depicted by the green arrows in our logic model.

Buy-in to the RA Framework

We define buy-in as commitment to RA as an appropriate strategy for literacy instruction and as a means of improving student achievement. Our model contains four green arrows leading from the four development activities to buy-in. Project coordination includes communication with teachers/administrators that is intended and designed specifically to increase staff buy-in, and is the channel through which schools and districts will get the support and materials to implement and expand RA. Recruitment and retention will also lead to increased buy-in; recruitment offers teachers and schools the chance to participate, and retention offers incentives for participants to continue use, as well as to evolve in their practice. The professional development and instructional support are designed to convince staff at all levels of the district, from teachers to administrators, that RA will be an appropriate and effective method for teaching literacy instruction and improving student achievement.

Increased Capacity to Implement and Disseminate RA Practices

Our model contains green arrows leading from three development activities (project development and coordination, professional development, and instructional support resources) to increased capacity. Project development and coordination, as well as

recruitment and retention activities are expected to directly lead to the increased capacity of states, districts, and schools to implement RA through allocation of funding and dissemination of information. In addition, as a result of participation in the RA professional development activities and as a result of receiving instructional support, teachers, teacher leaders, and principals are expected to have increased capacity to implement and disseminate RA practices. As teachers, teacher leaders, and administrators become well versed in RA, it is hypothesized that they will put in place and maintain structural supports (e.g. meeting space for teachers, time for collaboration) and will create and sustain resources (e.g., materials and tools for teachers).

Increased Participation in RA

A key outcome in most scale-up work is to spread ideas and interventions to larger and more diverse populations (Schneider & McDonald, 2007). This intermediate outcome corresponds to Coburn's dimension of spread, which she describes as the spread of reform-related norms, beliefs, and principles within a classroom, school, and district. In our logic model, this outcome relates to both spread from within, as well as outward expansion to more districts, schools, and classrooms. There are three development activities from our logic model (project development and coordination, active recruitment, and professional development) that are hypothesized to increase the number of teachers, schools, and districts using the RA framework. Specifically, project development and coordination will help with funding and building of local partnerships, which will allow for more schools to implement RA. Active recruitment and retention will also result in more involvement from teachers, schools, and districts. By the end of the grant period, SLI's goal is to have trained 2,800 teachers and 240 teacher leaders, and have impacted 410,000 students (SLI, 2010). The professional development is the primary method of disseminating RA norms, beliefs, and principles.

Classroom Fidelity of RA

The goal of the RA professional development is to transform academic literacy teaching. In this logic model, we operationalize this goal as classroom fidelity of RA. This outcome corresponds to Coburn's dimension of depth, which is defined by changes in teachers' beliefs, norms of social interaction, and pedagogical principles enacted in the curriculum. At the classroom level, fidelity will be characterized by increased numbers and varieties of texts, collaborative activities and assignments for students, use of metacognitive inquiry, and instruction promoting equity. Our model contains two arrows leading from two development activities (professional development and instructional support resources) to classroom fidelity of RA. Professional development will provide teachers with the skills to implement RA with fidelity and continually improve on their practices, and the instructional supports will further improve teachers' understanding of RA practices. Furthermore, it is hypothesized that use of instructional supports will lead to changes in teachers' and administrators' beliefs about literacy instruction, as well as provide a forum for collaboration and support, thus resulting in higher classroom fidelity.

Increased Student Achievement

The fifth intermediate outcome in this process is student achievement. RA has been shown to have positive effects on student achievement in previous studies (Corrin et al., 2008; Greenleaf et al., 2009; & Greenleaf, Schneider, & Herman, 2005). While there are no direct links between the development activities and this outcome, it is a critical intermediate outcome in this process.

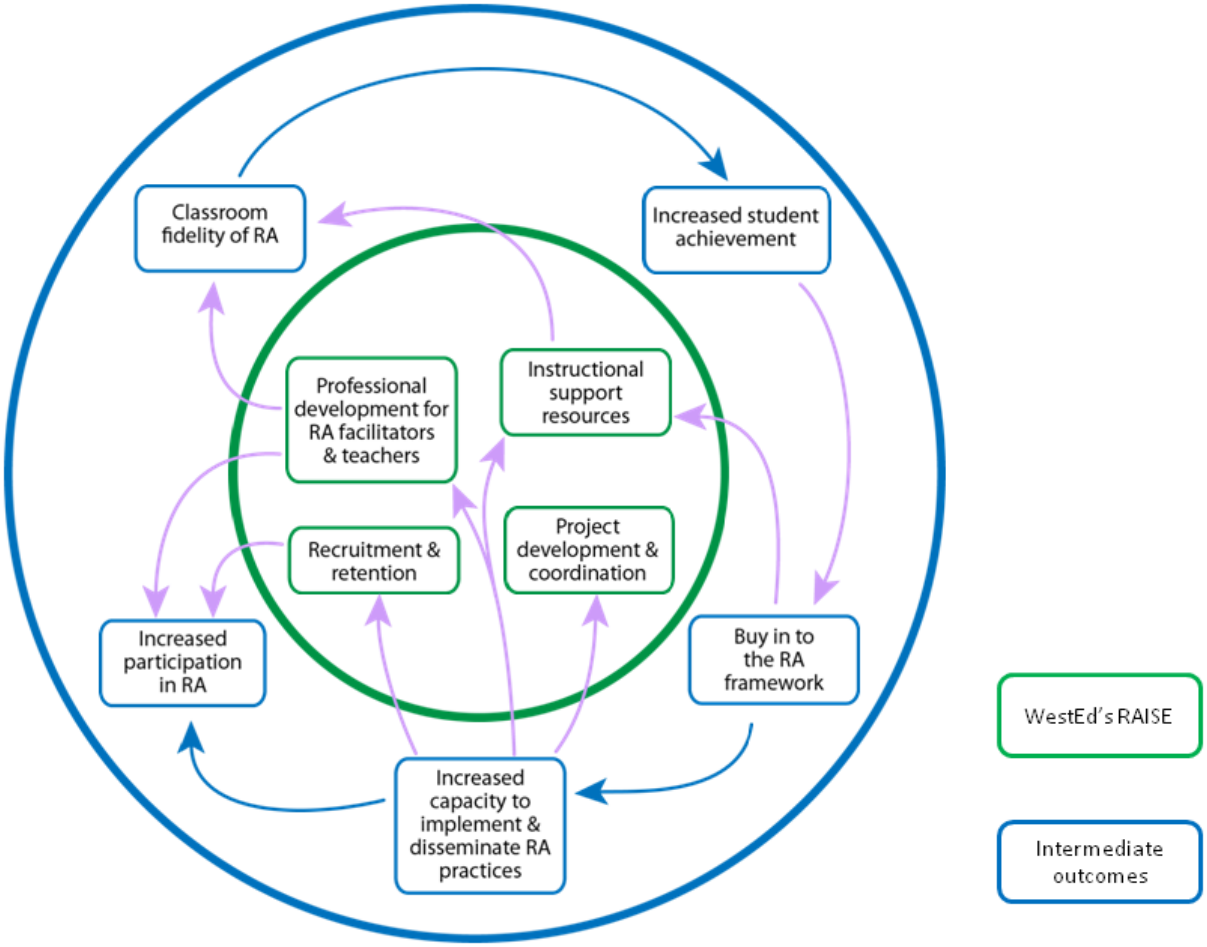

FIGURE A2. STAGE 2: INCREASED OWNERSHIP

STAGE 2: INCREASED OWNERSHIP

At Stage 2 of our model (Figure A2), ownership of RAISE begins to transition from the developers to the districts, schools, and teachers and a dynamic "cycle of improvement" develops. This stage, together with Stage 3, corresponds to Coburn's dimension—Shift in reform ownership—which refers to a transfer in ownership from the "external" providers to the "internal" actors. Adelman and Taylor describe ensuring long-term ownership and sustainability of the intervention, which requires (a) ongoing (local) leadership to take responsibility for the intervention, and (b) maintenance of planning, implementation, and coordination mechanisms to keep the intervention running. They state that "institutionalizing new approaches entails ensuring that the organization assumes long-term ownership and that a blueprint exists for countering forces that erode progress" (Adelman & Taylor, 2007, p. 220). Here we describe how the initial development activities become a shared responsibility between the SLI team and the local organizations (in this case, schools and districts).

Project Development and Coordination

The SLI co-directors continue to be responsible for overall management of the scale-up process as well as securing funds to supplement the i3 grant. Schools and districts also begin to examine local funding sources that can be dedicated to continuing and expanding RA. External formative evaluations will be ongoing, but the local level will also begin to develop tools to be able to evaluate their implementation and needs for future self-assessment. Local actors will also take more responsibility for organizing the dissemination of information about the overall pedagogical principles of RA in general, and specifically about the RAISE project development, professional development, and support opportunities that will be available to their local schools and teachers.

Recruitment and Retention

The SCs continue to identify, recruit, and retain districts, schools, teacher leaders, and teachers to participate in the RA professional development and adopt the RA framework in their schools. Local district and school administrators work closely with the SCs to identify and recruit additional teachers and schools from existing RAISE schools and districts (i.e. horizontal spread) to join the scale-up efforts. Districts and schools will also play an active role in reaching out to neighboring schools and districts to share their experience with RA and invite them to join (i.e. vertical spread). Retention of RA teachers, teacher leaders, and schools becomes increasingly complicated as more actors are now involved. The SCs will depend more on local administrators to support retention efforts and alert them to issues that may jeopardize retention.

Professional Development

Professional development for new teachers will continue to include 65 hours of professional development (RAISE Institutes) on the RA model and philosophy. As veteran RA teachers and teacher leaders increase their depth of understanding of the RA model, they will play an important role in supporting newly trained RA teachers during the training and at their local sites. There will also be increased opportunities for RAISE trained teachers to apply for and join the professional development facilitation team.

Instructional Support Resources
The monthly meetings continue to occur, however, there will be more leeway and flexibility for teacher leaders to prepare their own agendas and respond to specific school needs. Furthermore, the *Thinking Aloud* website will be monitored by the SLI team, but at the local level, teachers and administrators will use the website to develop networks with RA teams in other states.

CYCLE OF CONTINUOUS IMPROVEMENT

The four development activities from Stage 1 (project development and coordination, recruitment and retention, professional development, and instructional support resources) become shared responsibilities between the developers and the local actors. Each of these activities will be adapted to local contexts and needs and should be planned with the idea of sustaining RA locally. The intermediate outcomes are established and reinforced, and are beginning to become independent from the resources, funding and involvement of the SLI team. This cycle of improvement is characterized by continuous interactions and feedback loops between the development activities and intermediate outcomes.

As the cycle develops, not only do we expect a higher measure of each of the intermediate outcomes as the process evolves (i.e. increase in participants, more capacity to implement, deeper classroom fidelity, higher student achievement, more buy-in), but also that, as they increase, they are reinforced and supported from within (the classroom, school, district, state) rather than by the developer (i.e. the transfer of ownership). Here we describe each of these arrows in the cycle in relationship to the intermediate outcomes.

Buy-in of RA Framework
Our model contains one purple arrow leading from increased student achievement to buy-in. As student achievement increases, we hypothesize that teachers, schools, districts and states will become more committed to implementing and expanding RA. That is, the results will feed back into the uptake or buy-in of RA. Furthermore, our model depicts one purple arrow leading from buy-in to instructional support resources. We hypothesize that as teachers, schools and districts take ownership of RA, teachers, teacher leaders and administrators will use the instructional support resources to supplement and inform their practices, as well as to develop networks with other RA professionals. Teachers, teacher leaders, and administrators will provide feedback to their site coordinators and the SLI team about how these resources are used and whether additional instructional supports are needed at their local level.

Increased Capacity to Implement and Disseminate RA Practices
The purple arrow leading from increased capacity to instructional support resources, shows that teachers and administrators will take ownership of the instructional supports, such as the monthly school team meetings and web portal, and adapt these supports to fit their local contexts. Our model also depicts one purple arrow leading from increased capacity to professional development. As schools, districts and states build capacity to support the implementation of RA, we hypothesize that local actors will play a more active role in the

professional development by providing feedback to inform the professional development of teachers and teacher leaders and becoming trained RA facilitators. Furthermore, as districts and states begin to develop their own professional development to support the sustainability of RA, additional feedback will be provided to improve the overall RAISE project. The local level actors will also build the capacity to take more ownership of project coordination and recruitment and retention activities, as represented by the two purple arrows leading from this intermediate outcome to those development activities.

Increased Participation in RA

There is a purple arrow leading from professional development to more teachers, schools, districts using RA. As the development of teachers, teacher leaders, and administrators is increasingly supported at the local level, more students will be impacted by RA.

Classroom Fidelity of RA

Our model contains two purple arrows leading from two development activities to classroom fidelity. These two purple arrows are the same as the green arrows described in Stage 1. As these development activities become increasingly shared between the SLI team and local actors, support and guidance to address challenges and issues with implementation in schools will occur more from the local level. Furthermore, through the web portal resources, RA teachers and teacher leaders become linked with a wider network of professionals engaged in RA. Through building this support network, teachers, teacher leaders and administrators will strengthen their commitment. Within this process, schools build capacity, improve performance, and maintain fidelity to the RA model.

Student Achievement

In our model, one purple arrow from student achievement leads to buy-in. As participating states, districts, and schools receive information regarding effects on student achievement, their support for RA will increase. As support continues to build, more resources will be put towards RA professional development, development of teacher leaders, and ownership over the tools and systems once provided by the developers.

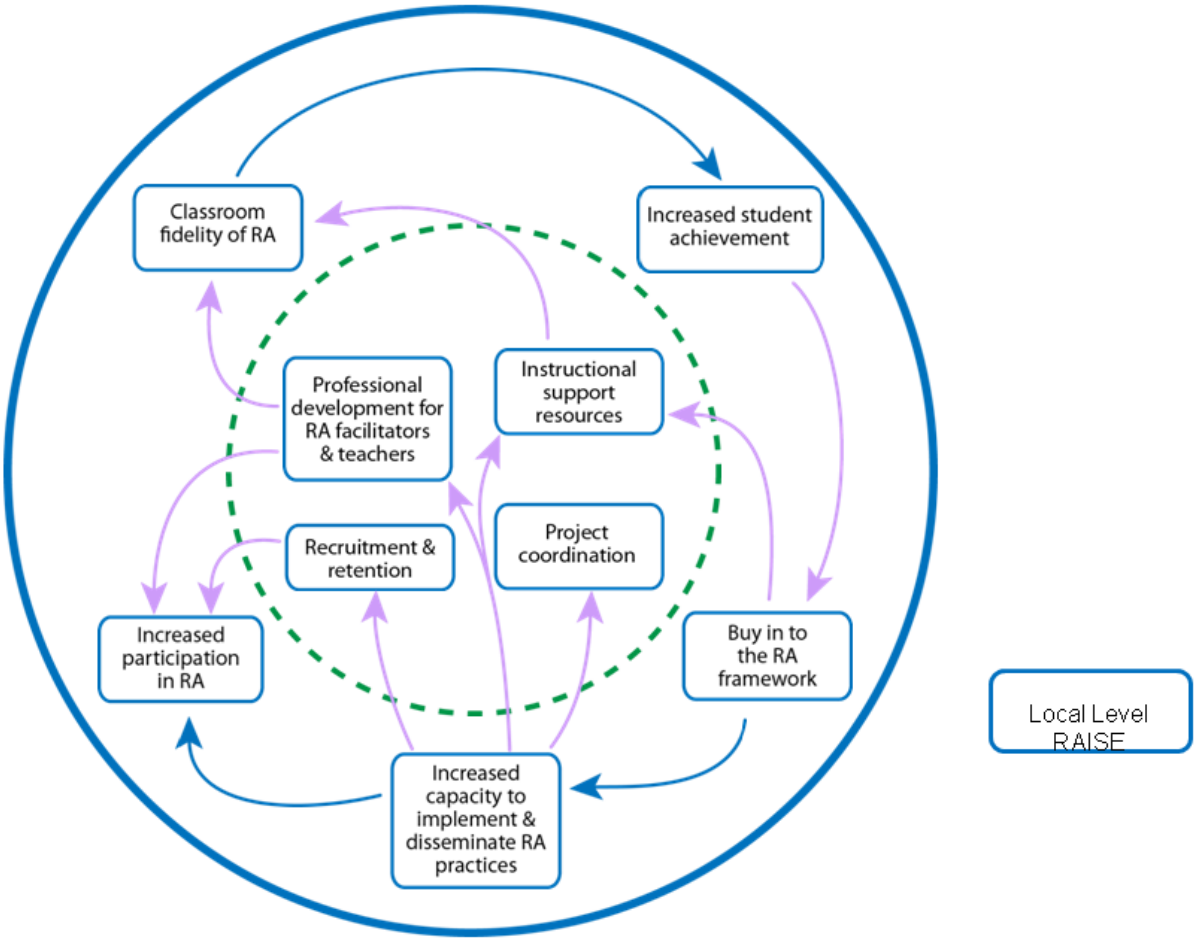

FIGURE A3. STAGE 3: SUSTAINED OWNERSHIP

STAGE 3: SUSTAINED OWNERSHIP

The third stage in our logic model (Figure A3), Sustained ownership, involves a withdrawal of resources and support from the SLI team and a transfer of more responsibility and ownership of the activities to sustain RA to the local schools and districts. In this stage, the green outlines around the development activities begin to fade, signifying the diminishing presence of the SLI team and sustained ownership of the RAISE project goals at the local level. Furthermore, the schools and districts take responsibility for the intermediate outcomes and the interactions among them, thus the blue arrows are also replaced by purple arrows, signifying that the cycle is sustained at the local level. Responsibilities for recruitment and retention, professional development, and instructional support resources are transferred to the local level. Project coordination is also transferred to the local level.

In this stage, we expect that RA has been fully implemented in a large number of schools and districts and that there are many teachers, teacher leaders, and administrators involved. While the developers are minimally involved in the project coordination, we hypothesize that states or districts have either sought external funding or have allocated internal resources for

implementing and retaining RA in schools. Furthermore, states, in collaboration with school districts, will recruit and train new and replacement teachers on an as needed basis, as well as continue to provide incentives for teachers and teacher leaders who are doing exceptionally well to serve as models for others, or be trained at a higher level. Professional development opportunities and instructional support resources will be offered by states and districts. The *Thinking Aloud* website portal will continue to be used to create and maintain social networks for RA professionals. Schools and districts will begin to shift their academic policies in support of broadly implementing RA long term. Districts will have developed evaluation tools for identifying needs, strengths, and areas of change for self-assessment. This stage is similar to the fourth and last phase of Adelman & Taylor's model, ongoing evolution, and is concerned with accountability in outcomes as well as in continually evolving practice for improvement through formative and summative evaluation.

The cycle of improvement continues in this stage. The purple arrows depicted in Stage 3 are the same as the purple arrows in Stage 2. However, these relationships between activities and intermediate outcomes have strengthened over time, and continue to evolve as ownership of the RAISE reform efforts is more thoroughly transferred to the local level.

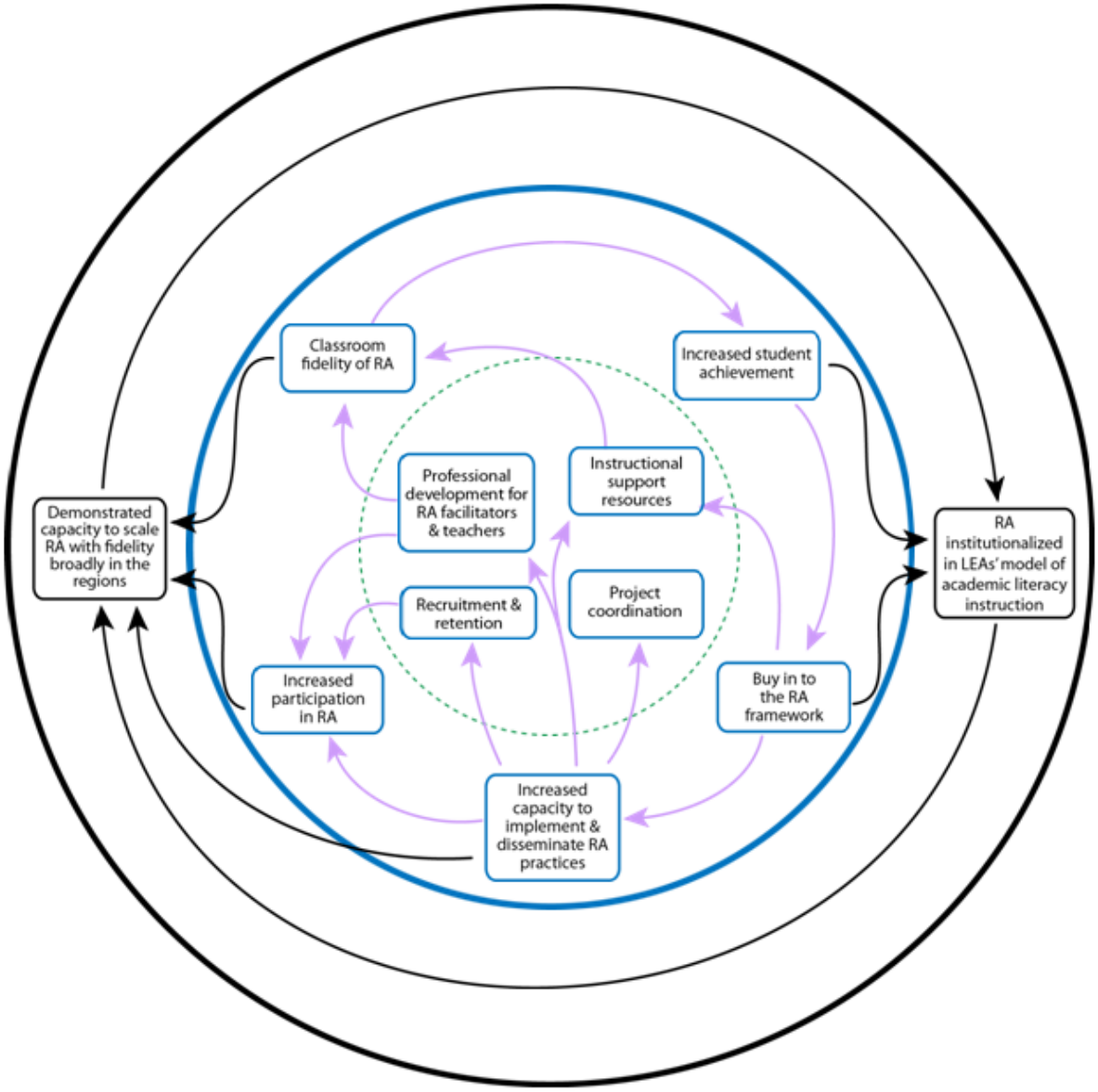

FIGURE A4. STAGE 4: RA BROADLY INSTITUTIONALIZED

STAGE 4: RA BROADLY INSTITUTIONALIZED

This last stage retains the arrows and boxes depicted in stage 3, and the cycle of improvement is ongoing; however, in this last stage (Figure 4), all activities are implemented at the local level and are built to sustain RA as well as to help other LEAs develop similar capacity. This stage corresponds to Coburn's Sustainability dimension, which is described as the distribution, adoption, and maintenance of an innovation long-term.

By Stage 4, RA has become a norm and standard in the originally recruited LEAs; there is solid commitment and support at all levels built into the system. In addition, all of the intermediate outcomes are realized, which is hypothesized to lead to two end outcomes: 1)

RA becomes institutionalized as the LEAs' model of academic literacy and 2) LEAs demonstrate capacity to scale RA with fidelity broadly in the regions (SLI, 2010). Specifically, there are three black arrows leading from Classroom fidelity of RA, Increased capacity to implement and disseminate RA, and Increased participation in RA to Demonstrated capacity to scale RA with fidelity broadly in the regions. We expect that in this final stage an increase in local units implementing RA with fidelity will contribute to an increase in participation broadly in the region. Additionally, there are two black arrows depicted in the logic model leading from Increased student achievement and Buy-in to RA becomes institutionalized in the LEAs' model of academic literacy. As depicted in the logic model, increase in student achievement and continued support and commitment (buy-in) for RA will lead to policy shifts at the school, LEA, and state level where RA is "institutionalized" as the local model of academic literacy instruction. Our model also consists of black arrows leading from RA becomes institutionalized in the LEAs' model of academic literacy to Demonstrated capacity to scale RA with fidelity broadly in the regions and vice versa. Policy shifts that support RA institutionalization will result in an increase in units that implement RA. The increase in units will further reinforce institutionalization and policy at the school, district and state levels.

LOGIC MODEL UPDATES

In the early development of the scale-up logic model, we focused on the literature that described the "shift in reform ownership" as the primary dimension for scale-up. One of the key areas of investigation in our study was how the developers create conditions and build capacity to shift the ownership to the local level. However, there is another component of the process that we have realized must be accounted for in the logic model driving this study: balancing the centralized, on-going research and development functionality of the developers with the uptake of reform ownership at the local level.

Since the inception of Reading Apprenticeship, SLI has followed a "design research" model in which they have maintained a dialogic exchange with the field. At each stage of implementation, SLI has included a research component, and revised and improved RA based on that research. While the core theory and pedagogy behind RA has remained constant, the R&D team has continued to develop new resources and supports to deepen the RA professional development experience and practice in the field. In this scale-up process, the local level is expected to adapt these resources to their contextual needs, and SLI will continue to improve and revise these components as they learn from the field.

As the process of generative scale-up will continue through the RAISE project, it has, therefore, now been built into our logic model. In the original version of the logic model, as ownership strengthened at the local level, we hypothesized that the presence of the developers would diminish, until it completely disappeared. We have revised the logic model so that the developers' presence fades, but remains as they interact, build relationships, and improve the program based on what they learn from the field.

Appendix B: Case Study Participant Selection, Data Analysis, Limitations

PARTICIPANT SELECTION

Decision to Sample in One State

Originally, we considered conducting case studies with one school in each of the four scale-up states, in order to have a picture of scale-up in each state context. However, in doing so we would be less able to protect participant anonymity. Since the site coordinators (and SLI staff) are working closely with both the researchers and the schools, they would be easily able to figure out which school in their state was the case study school and to attribute the data to the individuals at that school. In this scenario, participants would then be much more likely to censor themselves, which would potentially result in less valid data. With multiple schools in one state, it is less likely that participant confidentiality will be compromised.

The primary tradeoff of selecting one state is that we will lose insight into the heterogeneity of the state context. We understand that state context may affect the outcomes we are studying (e.g. one state's view toward the implementation of the Common Core Standards may differ from another, which may affect adoption policy). By selecting more schools in one state we can go more in-depth within one state's context. That is, with this decision we are gaining depth of information, but losing breadth of contexts across multiple states. Furthermore, in order to focus on differences in the school team process (i.e. capacity to implement, and connections to professional networks), it will be beneficial to work in one state so that we do not mistake these differences for differences in state-level contexts.

State Selection

To choose the state in which to conduct the case studies, we considered the characteristics of the four scale-up states (Utah, Indiana, Michigan, Pennsylvania) in terms of the number of participating schools, the number of schools with prior experience with RA, and the capacity of the site coordinator in terms of time allocated to RAISE. We concluded that the state in our sample with most support for scale-up is Michigan, and will conduct the case studies in Michigan schools. Michigan has the highest number of participating schools in Cohort 1 (there are 33 schools in Michigan, compared to 14 schools in Utah, 11 schools in Pennsylvania, and seven schools in Indiana), and is expected to have an additional 30 schools (and 270 teachers) in Cohort 2. This results in a larger sample to choose from and confidentiality will be easier to protect (i.e. it will be more difficult for non-researchers to identify the participating schools out of the larger population). In Cohort 1, Michigan has 24 schools with teachers with prior RA experience[21], and the Michigan site coordinator allocates 80% of his time to RAISE.

District and School Selection

We will examine survey data and information from the state site coordinator to determine which schools have prior experience with RA and which schools are new to RA through

[21] According to our survey data, 24 Cohort 1 schools in Michigan have teachers with prior RA training, and there are seven schools that are new to RA. We will confirm these numbers with the site coordinator since it is possible we are missing information from teachers who have not completed the survey.

RAISE. By selecting two schools within each of those categories, we expect a range of experiences with teacher and school team capacity to implement RA and connections to professional communities.

In order to focus the case studies on how these school team processes affect scale-up, we will attempt to avoid selecting districts/schools that have obvious barriers to successful scale-up that are furthest from the control or influence of the school team and individual teachers. Drawing upon the factors affecting successful scale-up identified by Sternberg et al. (2011), we have identified the following two critical factors as the ones that are most removed from the influence of the school team processes.

1. *Schools with available resources and infrastructure to implement and sustain RA beyond the length of the i3 grant.* Available resources to implement RA include: computers and adequate internet connectivity to access the web-based *Thinking Aloud* site; classroom materials such as post-its, highlighters, poster paper used to implement the RA instructional strategies; and an adequate supply of books or literature. While the 10-day RAISE training will be funded through the i3 grant for the four cohorts of teachers (2011-12, 2012-13, 2013-14, 2014-15), schools will require funding for training in subsequent years. Therefore, we will also consider the available resources to continue training new and veteran RA teachers beyond the four-years of the grant.

   Additionally, SLI reasons that nine teachers per school (three in each content area) are needed to ensure a critical mass of RA teachers for collaboration and support, to build capacity and sustainability, and to reach a larger number of students. Therefore, we will consider the number of teachers at the school that have attended the training, both overall and by subject area, and the number that will potentially attend in future cohorts.

2. *Schools and districts with stable working environments and an academic literacy policy that aligns with RAISE*. Attributes of a stable working environment include limited turnover of personnel, and a demonstrated capacity for building social resources in terms of networking, collaboration, and administrative supports (e.g. attending conferences or meeting to disseminate ideas, support structure for deepening practices, sharing ideas, and reaching out to other schools and districts about RA work). The district policy context must also be modifiable and ready to adopt a new innovation long-term. In terms of the RAISE work, this would include schools/districts that have expressed, through informal or formal communication with the site coordinator or researchers, that RA is an appropriate framework for their teachers and students. Additionally, they have expressed or demonstrated that RA will be embedded (rather than replaced) with other initiatives and/or school improvement plans.[22]

[22] Sternberg et al. (2011) also identified strong commitment from school and district leaders, and the level of organization of the teachers as important factors for successful scale-up. While we agree that these are important

In order to select schools that meet these characteristics, we will profile schools based on available data related to resource characteristics (e.g. total district expenditures, per pupil expenditures, % of students participating in the Free and Reduced Prince Lunch program, schools size, locale code). We may also take into account information from the state site coordinator to further narrow or confirm our selection. Furthermore, we will cross-check our selection with survey data to make sure that the sample of schools have been implementing RA, and have not identified major district policies that may negatively affect implementation and sustainability efforts. With a narrowed sample of schools, we will conduct informational interviews with their district administrators about the district policy context. In particular, we will ask the following questions.

- What other initiatives are being implemented in the district around secondary literacy instruction?
- How does RAISE align with those initiatives and/or general literacy framework, if at all?
- What is the relative priority of RAISE within the district?
- The RAISE initiative is currently being funded through the i3 grant. Without federal funding, do you think that RAISE would continue in your district?
- What percentage of head principals at your secondary schools returned to their position this school year?
- How does this year's retention rate compare to what has been typical over the last five years? (Significantly higher; Somewhat higher; About the same; Somewhat lower; Significantly lower)

As we narrow the sample based on these criteria, we will contact the selected experienced RA school and the new RA school to invite them to participate in the case studies. If the initially selected schools do not have a core school team (i.e. school principal, RAISE teacher leader, and RAISE trained teachers) consenting to participate, other factors, such as proximity to the consented schools, may also be taken into account when selecting their replacements. If none of the schools have a core team consenting to participate, our decision will be based on whether they have consenting staff in the following order of priority:

1. Principal
2. Teacher Leader
3. Number of RAISE trained teachers.

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factors, and will be studied in our case studies, they are more closely influenced by teachers than the others and will not be used as the primary factors to select case study schools.

DATA ANALYSIS

We will use qualitative procedures to analyze the interview, focus group, and survey data.[23] Interviews and focus groups will be recorded and transcribed, and loaded into a qualitative software program, where analysts will then code the data. At the first level of analysis, we will develop multilevel coding schemes in order to identify themes and sub-themes within the interview, focus group, and survey data collected. We will also use additional analytic coding schemes to understand how these ideas change over time. The coding schema will include both internal codes, which are derived from the data, and external codes, which are pulled from previous theory/literature (Emerson, Fretz, & Shaw, 1995). At the second level of analysis, we will conduct cross-case analyses to determine themes that emerge within and across schools. We will collect the data from site visits as field notes, and summarize the data into descriptions of each school site.

LIMITATIONS

The purpose of employing case studies is to attempt to capture an in-depth, in-context understanding of what is happening in a particular school given the complexity of the scale-up process. While we are not expecting generalizable results, the benefit of conducting case studies is to study the phenomena of scale-up in a bounded system (i.e. the school and state) from the perspective of the teachers, school administrators, and instructional coaches. However, with the decision to select four schools in one state with favorable conditions to support shift in ownership, and because we are selecting schools with available resources and a stable and supportive district policy context, there are limitations to the findings. By limiting the sample to one state we will not have in-depth knowledge of scale-up in a school in each of the other three states, which have varying conditions of support. Additionally, the case studies will not capture the full range of experiences of all RAISE schools with varying district conditions. , However, purposive sampling of two experienced RA schools and two new RA schools should reveal heterogeneity in school experiences. Moreover, in addition to these case studies, this study is designed to collect survey data of all schools which will provide information about schools that are experiencing greater challenges (i.e. schools that do not fit the initial sampling criteria).

[23] Interviews and focus groups will be recorded and transcribed.

Appendix C. Cohort 1 Participation: Reach of RAISE by State

TABLE C1. COHORT 1: TEACHER PARTICIPATION IN 10-DAY RAISE INSTITUTES, BY STATE

Subject	No. of schools attended	No. of teachers attended all days	No. of teachers attended some days
Indiana Participation			
RAISE Summer 5-Day Institute			
Biology	7	14	0
ELA	7	18	3
History	6	12	2
Total	7	44	5
RAISE Winter 2-Day Institute			
Biology	6	10	0
ELA	6	16	0
History	5	9	0
Total	6	35	0
RAISE Summer 3-Day Institute			
Biology	5	7	0
ELA	6	12	2
History	5	9	1
Total	6	28	3

Michigan Participation			
RAISE Summer 5-Day Institute			
Biology	32	65	6
ELA	29	79	3
History	32	53	2
Total	33	197	11
RAISE Winter 2-Day Institute			
Biology	29	55	3
ELA	29	72	3
History	30	48	1
Total	31	175	7
RAISE Summer 3-Day Institute			
Biology	28	46	2
ELA	29	72	1
History	27	45	3
Total	31	163	6
Pennsylvania Participation			
RAISE Summer 5-Day Institute			
Biology	10	17	4
ELA	11	21	3
History	10	19	2
Total	11	57	9

RAISE Winter 2-Day Institute			
Biology	10	20	0
ELA	11	23	0
History	10	19	0
Total	11	62	0
RAISE Summer 3-Day Institute			
Biology	10	17	2
ELA	11	20	0
History	10	17	1
Total	11	54	3
Utah Participation			
RAISE Summer 5-Day Institute			
Biology	10	19	0
ELA	14	29	0
History	13	18	2
Total	14	66	2
RAISE Winter 2-Day Institute			
Biology	9	16	0
ELA	14	31	0
History	10	14	0
Total	14	61	0

RAISE Summer 3-Day Institute			
Biology	7	11	1
ELA	14	26	2
History	9	9	2
Total	14	46	5

Note. Attended "some days" means that the participant attended at least one and fewer than five days of the Summer 5-Day; at least one and fewer than two days of the Winter 2-Day; at least one day but fewer than three days of the Summer 3-Day.

Source. RAISE Institute attendance records

TABLE C2. COHORT 1: ADMINISTRATOR, INSTRUCTIONAL COACH, OTHER PERSONNEL PARTICIPATION IN 10-DAY RAISE INSTITUTES, BY STATE

	No. of school administrators attended all days	No. of school administrators attended some days	No. of instructional coaches attended all days	No. of instructional coaches attended some days	No. of other personnel attended all days	No. of other personnel attended some days
Indiana Participation						
RAISE Summer 5-Day Institute						
Total	4	2	7	1	3	1
RAISE Winter 2-Day Institute						
Total	2	1	3	1	2	1
RAISE Summer 3-Day Institute						
Total	0	2	3	0	1	0
Michigan Participation						
RAISE Summer 5-Day Institute						
Total	1	0	3	0	4	1

RAISE Winter 2-Day Institute						
Total	0	0	1	0	3	2
RAISE Summer 3-Day Institute						
Total	1	0	1	0	3	0
Pennsylvania Participation						
RAISE Summer 5-Day Institute						
Total	0	2	1	0	7	6
RAISE Winter 2-Day Institute						
Total	2	1	1	0	9	2
RAISE Summer 3-Day Institute						
Total	0	3	1	0	2	2
Utah Participation						
RAISE Summer 5-Day Institute						
	3	4	1	2	0	2
RAISE Winter 2-Day Institute						
	3	1	2	0	0	1
RAISE Summer 3-Day Institute						
	3	0	0	1	0	0

Note. Attended "some days" means that the participant attended at least one and fewer than five days of the Summer 5-Day; at least one and fewer than two days of the Winter 2-Day; at least one day but fewer than three days of the Summer 3-Day. The counts for "school administrators" include principals, assistant principals, and other schools administrators as long as they are assigned to a specific school (i.e. not district administrators). The counts for "other personnel" include district personnel, state department of education personnel, secondary science specialist, curriculum supervisor, reading specialist, educational specialist. We do not present these counts by the subject area training they attended because we do not have consistent information for each participant in these categories. Several administrators, and other personnel attended multiple subjects and/or we did not receive information for which subject they attended.

Source. RAISE Institute attendance records

TABLE C3. COHORT 1: ADDITIONAL INFORMATION REGARDING TEACHER PARTICIPATION IN 10-DAY RAISE INSTITUTES, BY STATE

Subject	No. of teachers who attended all ten days	No. of teachers who attended more than one half-day but fewer than ten days
Indiana Participation		
Biology	7	7
ELA	11	10
History	7	7
Total	25	24
Michigan Participation		
Biology	45	26
ELA	66	16
History	42	13
Total	153	55
Pennsylvania Participation		
Biology	12	10
ELA	17	8
History	17	4
Total	46	22
Utah Participation		
Biology	11	8
ELA	26	6
History	7	13
Total	44	27

Source. RAISE Institute attendance records

Appendix D: Effectiveness of RAISE Institute by State (Teacher Survey Data)

TABLE D1. EFFECTIVENESS OF RAISE SUMMER 5-DAY INSTITUTE, BY STATE

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The RAISE Summer 5-day Institute helped me collaborate with my colleagues to better respond to the needs of my students.					
Indiana (n=33)	11 (33%)	17 (52%)	4 (12%)	1 (3%)	0 (0%)
Michigan (n=161)	58 (36%)	87 (54%)	11 (7%)	5 (3%)	0 (0%)
Pennsylvania (n=55)	8 (15%)	29 (57%)	10 (18%)	5 (9%)	3 (6%)
Utah (n=44)	8 (18%)	23 (52%)	6 (14%)	6 (14%)	1 (2%)
Total (n=293)	**85 (29%)**	**156 (53%)**	**31 (11%)**	**17 (6%)**	**4 (1%)**
The RAISE Summer 5-day Institute provided me with adequate resources and materials to implement what I learned in professional development activities.					
Indiana (n=33)	11 (33%)	19 (58%)	2 (6%)	1 (3%)	0 (0.0%)
Michigan (n=161)	67 (41%)	76 (47%)	15 (9%)	4 (3%)	0 (0.0%)
Pennsylvania (n=55)	14 (26%)	27 (50%)	6 (11%)	5 (9%)	2 (4%)
Utah (n=44)	7 (16%)	30 (68%)	4 (9%)	2 (5%)	1 (2%)

TABLE D1. EFFECTIVENESS OF RAISE SUMMER 5-DAY INSTITUTE, BY STATE

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Total (n=293)	**99 (34%)**	**152 (52%)**	**27 (9%)**	**12 (4%)**	**3 (1%)**
The RAISE Summer 5-day Institute led to changes in my classroom teaching practices					
Indiana (n=33)	11 (33%)	19 (58%)	2 (6%)	1 (3%)	0 (0%)
Michigan (n=161)	76 (47%)	78 (48%)	8 (5%)	0 (0%)	0 (0%)
Pennsylvania (n=55)	12 (22%)	31 (57%)	9 (17%)	2 (4%)	0 (0%)
Utah (n=44)	14 (32%)	24 (55%)	5 (11%)	1 (2%)	0 (0%)
Total (n=293)	**113 (39%)**	**152 (52%)**	**24 (8%)**	**4 (1%)**	**0 (0%)**

Note. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Survey 1

TABLE D2. EFFECTIVENESS OF RAISE WINTER 2-DAY INSTITUTE, BY STATE

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The RAISE winter 2-day institute helped me collaborate with my colleagues to better respond to the needs of my students.					
Indiana (n=32)	14 (44%)	14 (44%)	3 (9%)	1 (3%)	0 (0%)
Michigan (n=157)	50 (32%)	78 (50%)	22 (14%)	5 (3%)	2 (1%)
Pennsylvania (n=52)	10 (19%)	31 (60%)	8 (15%)	1 (2%)	2 (4%)
Utah (n=43)	12 (28%)	20 (47%)	5 (12%)	6 (14%)	0 (0%)
Total (n=284)	**86 (30%)**	**143 (50%)**	**38 (13%)**	**13 (5%)**	**4 (1%)**
The RAISE winter 2-day institute provided me with adequate resources and materials to implement what I learned in professional development activities.					
Indiana (n=32)	13 (41%)	15 (47%)	4 (13%)	0 (0%)	0 (0%)
Michigan (n=157)	59 (38%)	70 (45%)	19 (12%)	9 (6%)	0 (0%)
Pennsylvania (n=52)	11 (21%)	28 (54%)	9 (17%)	2 (4%)	2 (4%)
Utah (n=43)	9 (21%)	25 (58%)	5 (12%)	4 (9%)	0 (0%)
Total (n=284)	**92 (32%)**	**138 (49%)**	**37 (13%)**	**15 (5%)**	**2 (1%)**

TABLE D2. EFFECTIVENESS OF RAISE WINTER 2-DAY INSTITUTE, BY STATE

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The RAISE winter 2-day institute led to changes in my classroom teaching practices					
Indiana (n=32)	11 (34%)	15 (47%)	6 (19%)	0 (0%)	0 (0%)
Michigan (n=157)	56 (36%)	76 (48%)	22 (14%)	3 (2%)	0 (0%)
Pennsylvania (n=52)	11 (21%)	29 (56%)	10 (19%)	1 (2%)	1 (2%)
Utah (n=43)	13 (30%)	19 (44%)	10 (23%)	1 (2%)	0 (0%)
Total (n=284)	**91 (32%)**	**139 (49%)**	**48 (17%)**	**5 (2%)**	**1 (<1%)**

Note. Due to the rounding of decimals, percentages may not add up to 100%.

Source. Teacher Survey 1