Year 2 Interim Report of RAISE Scale-up Study

April 2, 2014

Jenna Zacamy
Andrew P. Jaciw
Li Lin
Denis Newman

Empirical Education Inc.

Acknowledgements

We are grateful to the participating RAISE teachers and schools for their assistance and cooperation in conducting this research. The research was sponsored by an i3 Validation Grant which provided Empirical Education Inc. with independence in reporting the results.

About Empirical Education Inc.

Empirical Education Inc. is a Silicon Valley-based research company that provides tools and services to help K-12 school systems make evidence-based decisions about the effectiveness of their programs, policies, and personnel. The company brings its expertise in research, data analysis, engineering, and project management to customers that include the U.S. Department of Education, educational publishers, foundations, leading research organizations, and state and local education agencies.

Table of Contents

Year 2 Interim Report of RAISE Scale-up Study

Reference for this report: Zacamy, Z., Jaciw, A. P., Lin, L., & Newman, D. (2014). *Year 2 Interim Report of RAISE Scale-up Study*. (Empirical Education Rep. No. Empirical_i3SU-7019-IR1-Y2-O.1). Palo Alto, CA: Empirical Education Inc.

Study Overview and Significance

This report provides an initial look at issues of implementation and sustainability of a secondary school academic literacy initiative that is being scaled up as part of five year Invest in Innovation (i3) project. The results are preliminary because they focus on the first and second year of implementation for the first cohort of schools. We provide an overview of the background and goals of the scale-up study as a whole, including the literature, logic model, research questions and methods, to provide the reader with context in which these results are situated.

RAISE Evaluation

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] SLI'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.

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 the Scale-up Study, a formative evaluation of the scale-up process. This five year study spans four states: Utah, Michigan, Indiana, and Pennsylvania (schools other than those participating in the RCT). During the grant period, four consecutive cohorts of teachers and schools will be invited to participate in the RAISE initiative.

The RCT and the Scale-up Study have distinct research questions and are designed around complementary theories of how RA 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 at organizational levels at and above the classroom: the support structures at the teacher, school, district (LEA), 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 overall goal of the Scale-up Study is to understand *how* school systems build capacity to implement and disseminate RAISE and sustain these efforts. 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. This is also one of the first empirical studies of a scale-up process across multiple states and contexts. Our goal is to begin to investigate how the

[1] The term "Reading Apprenticeship Improving Secondary Education" (RAISE) is used to describe the focus of this project.

program becomes rooted across several different contexts under authentic conditions of implementation. From this, we can develop hypotheses to guide the scale-up process and begin to build generalizations about the conditions for successful scale-up of RAISE in various settings. 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 the RAISE scale-up logic models and theory.

This report focuses on the first cohort of RAISE teachers and schools, who were introduced and trained in Reading Apprenticeship during the 2011-12 school year. Using longitudinal teacher survey data (from AY 2011-12 and 2012-13), we first examine trends over time of key indicators that participants are taking up RAISE activities and indicators of scale-up outcome variables. Then, we examine if changes in the indicators of implementation and support from the first year (AY 2011-12) to the second year (AY 2012-13) predict changes in scale-up outcomes over the same period of time.

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 the more 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. 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.

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. Given this focus, we build upon Adelman and Taylor's (1997) four phases of scale-up and 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:" depth, spread, sustainability, and shift in reform ownership. Beyond just changes in classroom structure (e.g. materials, classroom organization), depth of reform-centered knowledge also includes changes in the teachers' underlying assumptions about pedagogical principles and 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). Sustainability is the distribution, adoption, and maintenance of an innovation over a long term. Coburn 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. 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. 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

A 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 scale-up 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.[2] 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 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.

The development activities are hypothesized to lead to five intermediate outcomes: (1) increased participation in RA, (2) classroom fidelity of RA, (3) buy-in to the RA framework, (4) capacity to

[2] See Appendix A for the accompanying figures and comprehensive narrative description of each stage.

implement and disseminate RA practices, and (5) student achievement. Our first two intermediate outcomes—increased participation 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 later stages of the process.

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 Taylor's model, institutionalizing new approaches. In Stage 2, we hypothesize that as the local level begins to take ownership of the development activities, these activities are adapted to meet their needs, which further reinforces the intermediate outcomes.

Stage 4 is RAISE's ultimate goal, RA broadly institutionalized as the model of academic literacy instruction, and where activities are fully implemented at the local level with limited support from SLI. 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). The model also depicts the influences and feedback loops that are active during this stage. Our final stage corresponds to Coburn's dimension of Sustainability.

Research Questions

The overall 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

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?

[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.

Research Questions Regarding the Scale-Up Process

3. What is the relationship between the development activities, buy-in and the capacity to sustain RAISE?

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

Context Research Questions

5. What contextual factors 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?[4]

This report begins to address the *third* overall research question and examines the three sub-questions and scale-up hypotheses presented in Table 1.

TABLE 1. SUB-QUESTIONS AND HYPOTHESES

Research Question	Hypothesis
a. Is there a relationship between the number of RAISE teachers per school and levels of buy-in, commitment, and sustainability of RAISE?	*Schools with more RAISE teachers will have higher levels of buy-in, commitment, sustainability of RAISE.* During the planning stages of the grant, SLI estimated that each school would send nine teachers to the RAISE Institutes (three in each content area). They hypothesized that it would be important to establish a core RAISE team at each school, to build a critical mass of RA implementers so they could collaborate with and support each other. Recruiting multiple teachers per school (and per content area) would also allow for a larger number of students to be reached, in multiple content areas and grades, which would deepen and engrain practices in the school. A larger team would also make it less likely that teacher turnover would threaten the sustainability of RAISE.
b. Is there a relationship between the amounts of support received and team collaboration and levels of buy-in, commitment, and sustainability of RAISE?	*Teachers in schools with higher levels of collaboration and support will have higher levels of buy-in, commitment, and sustainability of RAISE.* Like most reform-based initiatives, it is hypothesized that the understanding of Reading Apprenticeship practices is strengthened through collaboration and support from other RA teachers. Reading Apprenticeship provides a framework for instruction/interaction with students to support adolescent reading comprehension, and is not an "off-the-shelf" curriculum. Even with the intensive 65-hour professional development teachers receive, the ongoing support and collaboration teachers engage in will be important in sustaining RA practices. The RAISE monthly meetings, a primary mechanism for collaboration and support during the school year, are organized and led by the teacher leaders and are 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. As the formal supports from the RAISE initiative (such as the professional development institute) are withdrawn, many teachers rely on the social networks they have developed with other teachers to deepen and sustain RAISE in their schools.

[4] For a more detailed description of the research questions and rationale, see *Year 1 Interim Report of Reading Apprenticeship/RAISE Scale-up.*

TABLE 1. SUB-QUESTIONS AND HYPOTHESES

Research Question	Hypothesis
c. Is there a relationship between how frequently teachers use RA practices and levels of buy-in, commitment, and sustainability of RAISE?	*Teachers in schools where RA practices are used more frequently will have higher levels of buy-in, commitment, and sustainability of RAISE.* While the program developers do not have prescribed guidelines for how often "RA practices" should be used in the classroom, as a framework for teaching reading, it is expected that the pedagogy is incorporated throughout reading lessons. It is expected that this process will take time, and as teachers move through the 10-day RAISE Institute, they will develop a greater understanding of the RA framework and deepen their practice. As teachers more fully integrate RA practices into their classroom, it is hypothesized that buy-in, commitment, and sustainability of the RAISE initiative will increase.

Research Methods and Data Collection

For the Scale-up Study, we use a mixed methods approach, with both quantitative analyses and a qualitative strategy of inquiry. In the first and second 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 (three times a year during each year of implementation) and school administrators (annually).[5] Through the surveys, we were able to measure general uptake 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. Appendix B provides detailed description of the data collection activities during the 2012-13 school year.

As shown in Table 2, we will have the opportunity to study four consecutive cohorts of RAISE teachers and schools.

TABLE 2. YEARS OF PARTICIPATION FOR RAISE COHORTS

Cohort	2011/12	2012/13	2013/14	2014/15[a]
1	Year 1	Year 2	Year 3	Year 4
2		Year 1	Year 2	Year 3
3			Year 1	Year 2
4				Year 1

[a] There will be limited data collection in the last year of the grant.

[5] We have also conducted case studies of four schools in one state 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. Data collection included surveys, interviews, focus groups, and site visits with various stakeholders. Results from the case studies are not reported in this paper; see *Case Studies of the Scaling and Sustaining of Reading Apprenticeship in Four Michigan Secondary Schools* for the year 1 case study report.

As the scale-up process proceeds across contexts, states, and years, we will have the opportunity to quantify changes over time within a given cohort, as well as compare cohorts in their first, second, and third years of the initiative. 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, plateau over time, 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.[6]

To address the focus of this report, we first identified key indicators of the participants' uptake of RAISE activities and indicators of scale-up outcomes, and mapped these to the logic model. Most of the indicators were measured through two years of Cohort 1 teacher survey data, for a total of up to six survey occasions (Table 3). The first survey of each year (Survey 1 and 4) were deployed at the end of the first semester; the second survey (Survey 2 and 5) were deployed in March; the third survey (Survey 3 and 6) were deployed in mid-May. The number of RAISE teachers at each school was tracked in a participant database throughout the year. The hypotheses described in Table 1 reflect the relationships between the indicators of update of RAISE activities and the scale-up outcomes that are listed in Table 3.

TABLE 3. INDICATORS OF UPTAKE OF RAISE AND SCALE-UP OUTCOMES

Indicators of the uptake of RAISE and indicators of scale-up outcomes	Logic model component	Year 1 data source	Year 2 data source
Indicators of the uptake of RAISE			
Recruitment and building RAISE teams (# of teachers per school)	Recruitment and retention	Participant database	Participant database
Receipt of support for Reading Apprenticeship implementation	Instructional support resource	Survey 1-3	Survey 4-6
Attendance at monthly team meetings	Instructional support resource	Survey 1-3	Survey 4-6
Average Use of Reading Apprenticeship pedagogical practices	Professional development[a]	Survey 3	Survey 6
Indicators of scale-up outcome			
Level of *buy-in* of the Reading Apprenticeship Framework	Buy-in	Survey 1 & 3	Survey 4 & 6
Level of *commitment* to Reading Apprenticeship	Buy-in	Survey 1 & 3	Survey 4 & 6
***Sustaining* Reading Apprenticeship practices**	Sustainability	Survey 3	Survey 6

Note. Year 1= 2011-12 school year; Year 2 = 2012-13 school year

[a] Average use of RA pedagogical practices is an indicator that teachers are using the practices and strategies they learned during the Professional Development Institute.

[6] For a more detailed description of the research methods for this project, see *Year 1 Interim Report of Reading Apprenticeship/RAISE Scale-up*.

Next, we conducted four types of analyses. All of the analyses were carried out at the school level, using school averages of the indicators of the uptake of RAISE activities and of the outcome variables:

(1) We assessed trends over time in indicators of the uptake of RAISE: We estimated the change in school averages of the indicators of the uptake of RAISE between Year 1 and Year 2.

(2) We assessed trends over time in the indicators of scale-up outcomes: We estimated the change in school averages of the indicators of scale-up outcomes between Year 1 and Year 2.

(3) We measured the association between averages of the indicators of the uptake of RAISE in Year 1 and changes between the indicators of scale-up outcomes from Year 1 to Year 2: This allowed us to assess whether Year 1 levels of uptake predict changes in school-level outcomes between Year 1 and Year 2. A practical use of the results would be to use the Year 1 measures of uptake as early 'predictors' of the longer term trends in scale-up outcomes. For example, if we found a positive relationship between schools with higher attendance levels at the monthly meetings in their first year of implementation and an increase in levels of buy-in and commitment to making RA work (from the first to second year), we could recommend that SLI continue to provide more resources for teachers leaders to support those meetings.

(4) We measured the association between changes from Year 1 and Year 2 in the indicators of the uptake of RAISE and changes from Year 1 to Year 2 in the indicators of the scale-up outcomes. The analyses allow us to draw some initial hypotheses about the how changes in indicators are related to changes in outcomes. This allows us to test the theory that increases or intensity of the uptake of RAISE activities positively reinforce or increase levels of buy-in, commitment and sustainability. Because we are examining changes early in the process (i.e. the first and second year), we will continue to examine these changes and relationships over time. Additionally, if we do not find relationships between these measures at this stage, we can focus on other factors (of implementation or contextual) that potentially influence these changes.

Due to the correlational nature of all of the analyses, we cannot infer causality from the results.

Results

The results in this section are from the first cohort of RAISE teachers and schools from their first and second year of implementation (AY 2011-12 and AY 2012-13). We report trends in changes of RAISE implementation and scale-up outcomes across the two years, as well as the relationships between these changes in implementation are related to changes in the outcomes.

We provide additional information from the 2012-13 year of the study in the appendices. These include an updated timeline and description of key events and an accounting of the spread of RAISE to Cohort 2 (Appendix C). We also present descriptive statistics of survey data form Cohort 2 teachers and school administrators (Appendix D).

Changes over time in Indicators of the Uptake of RAISE and Scale-up Outcomes

In the following sections, we provide a series of graphs that illustrate school level average responses to each of the survey questions, across Year 1 and Year 2. Each graph shows the survey occasions/time points on the x-axis and the school average response on the y-axis. The blue dots represent school averages at each response level, and the size of the dots are proportionate to the number of schools at each point (i.e. the bigger the dot, the more schools are represented). We have also indicated the overall sample mean and median with a purple and green circle, respectively.

Changes in Indicators of Uptake of RAISE

Number of RAISE Teachers per School

Cohort 1 schools had an average of six RAISE teachers by the end of the first year. By the end of the second year, the average dropped to five teachers per school, with six schools no longer having any RAISE teachers (Figure 1).[7] This decrease may be due to teacher turnover (i.e. they are no longer at the school) or teachers no longer wanting to participate in RAISE. The reduction in the mean number of RAISE teachers per school is statistically significant ($p < .001$).

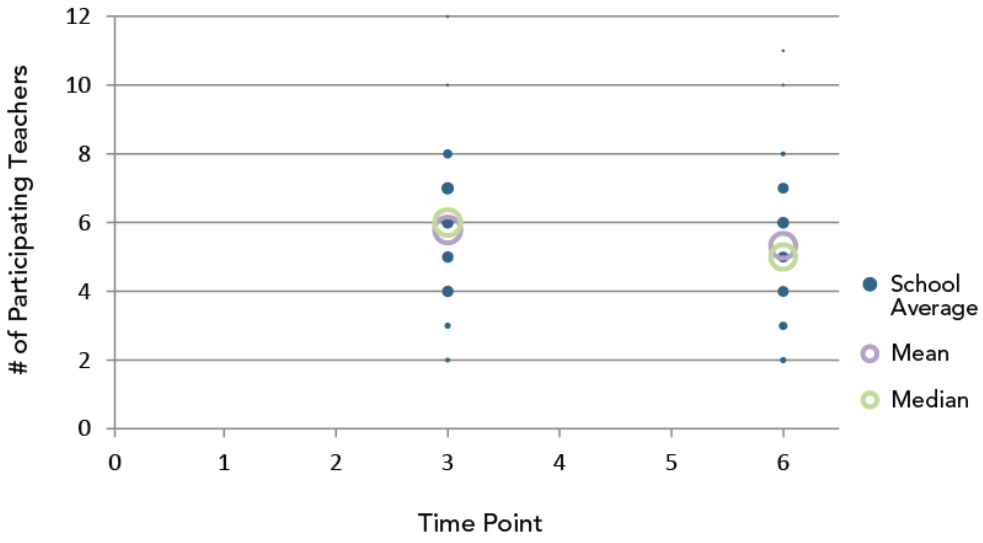

FIGURE 1. NUMBER OF RAISE TEACHERS PER SCHOOL

n = 61 schools in Year 1; *n* = 55 schools in Year 2

[7] The average number of teachers per school in Year 2 does not include additional RAISE teachers that joined as part of Cohort 2.

Receipt of Support for Instruction

In each survey, we asked teachers to report if they had received support for implementing Reading Apprenticeship in their classroom during the prior four weeks of instruction (teachers were asked to exclude support from the monthly meetings in their response). We found that, across each year, the percent of teachers who reported receiving support decreased (Figure 2). Both the decrease we observe in Year 1 (i.e. from survey 1 to survey 3) and the decrease we observe in Year 2 (from survey 4 to survey 6) are statistically significant ($p < .001$). Looking at the mean and median reported levels, however, we see an increase from the end of the first year to the beginning of second year, rather than a steady decrease across the two years. This indicates that the decrease may be more of an issue of the timing of when support is received during the school year (i.e. that teachers do not need as much support at the end of the school year, or it becomes less available because of competing priorities), rather than a drop-off in engagement with the program or the need for support.

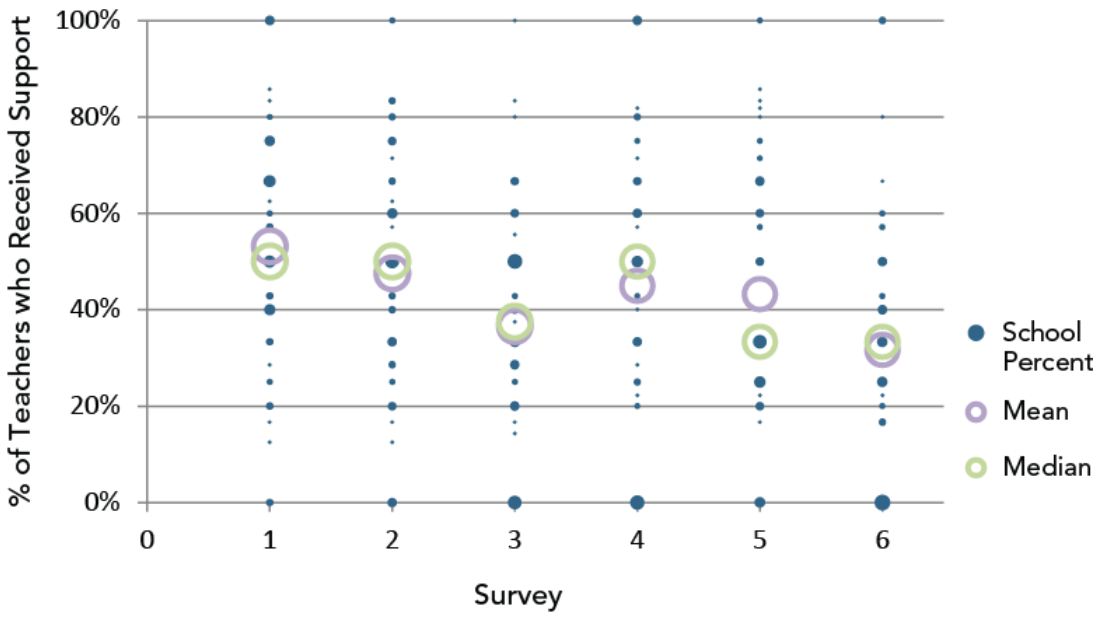

FIGURE 2. SUPPORT RECEIVED FOR RA INSTRUCTION

n = 61 schools in Year 1; *n* = 55 schools in Year 2

Attendance at Monthly Meetings

Also on each survey, teachers reported if they had attended a monthly meeting between the prior and current surveys (or between the beginning of the school year and the current survey for survey 1 and 4). As shown in Figure 3, we found a significant decrease in the attendance at monthly meetings within each year and across the two years. While in Year 1, nearly all teachers (96%) reported that they attended a monthly meeting in the first survey, by the end of the second year, the average dropped to 35%, and many schools (52%) had no teachers reporting that they attended a monthly meeting (Figure 3). This reduction in the average attendance at monthly meetings is statistically significant ($p < .001$). While the end of the school year is a busy time of year and we may expect that fewer teachers can attend a meeting at the end of the year, we did not see a "resurgence" of meeting attendance at the beginning of Year 2. This finding suggests a possible decrease in participation or uptake of the program. It is also possible, however, that teachers were finding other, more efficient ways of collaborating and supporting their RA implementation.

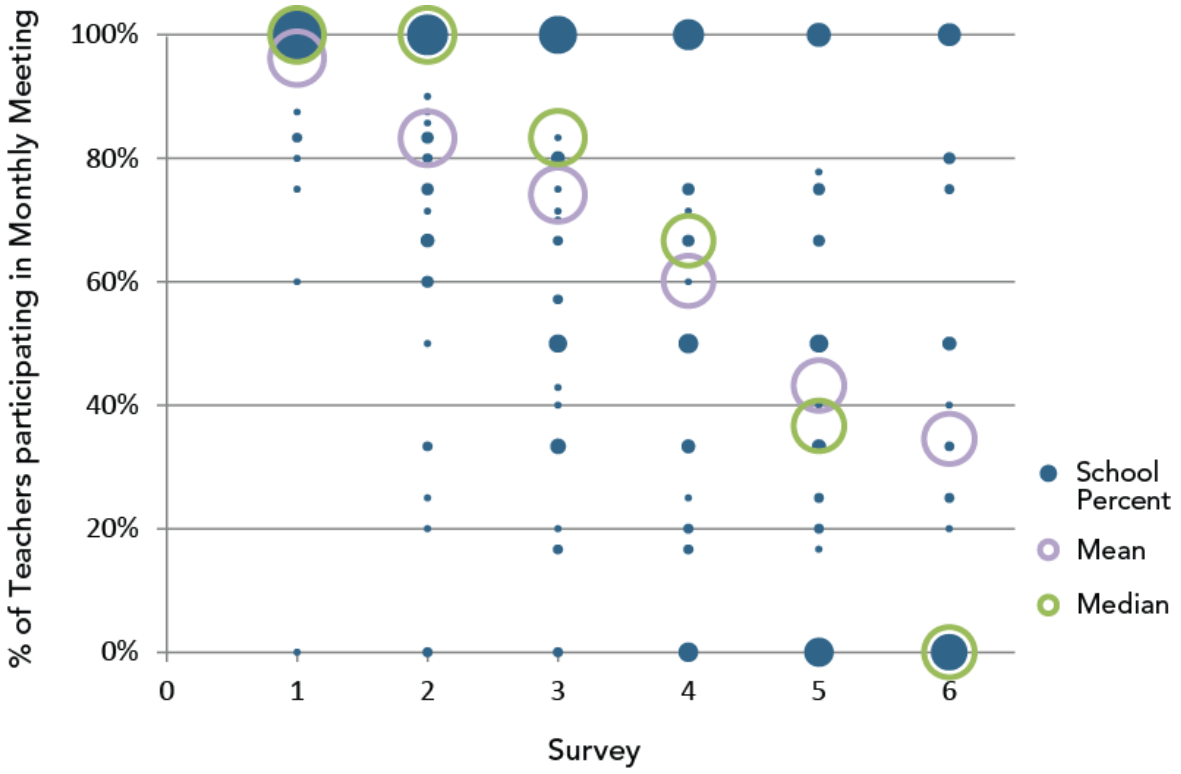

FIGURE 3. ATTENDANCE AT MONTHLY MEETINGS

n = 61 schools in Year 1 (Survey 1-3); *n* = 53 schools in Year 2 (Survey 4); *n* = 54 schools in Year 2 (Survey 5 & 6)

Use of Reading Apprenticeship Practices

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. At the end of each year, we asked teachers how often they used the RA pedagogical practices in their classroom, on average, during the school year. Teachers responded on the following scale.

- Never (0)
- A few times per grading period (1)
- A few times per month (2)
- A few times per week (3)
- A few times during each lesson (4)
- Throughout each lesson (5)

At the end of the first year, a majority of teachers reported that they were implementing RA practices on at least a weekly basis. While it might be reasonable to expect that the use of the RA practices would increase in the second year of implementation as teachers are becoming more familiar with the framework, we found that the average reported use decreased slightly for Cohort 1 in their second year (Figure 4). The reduction in average usage, however, is not statistically significant (p = .44).

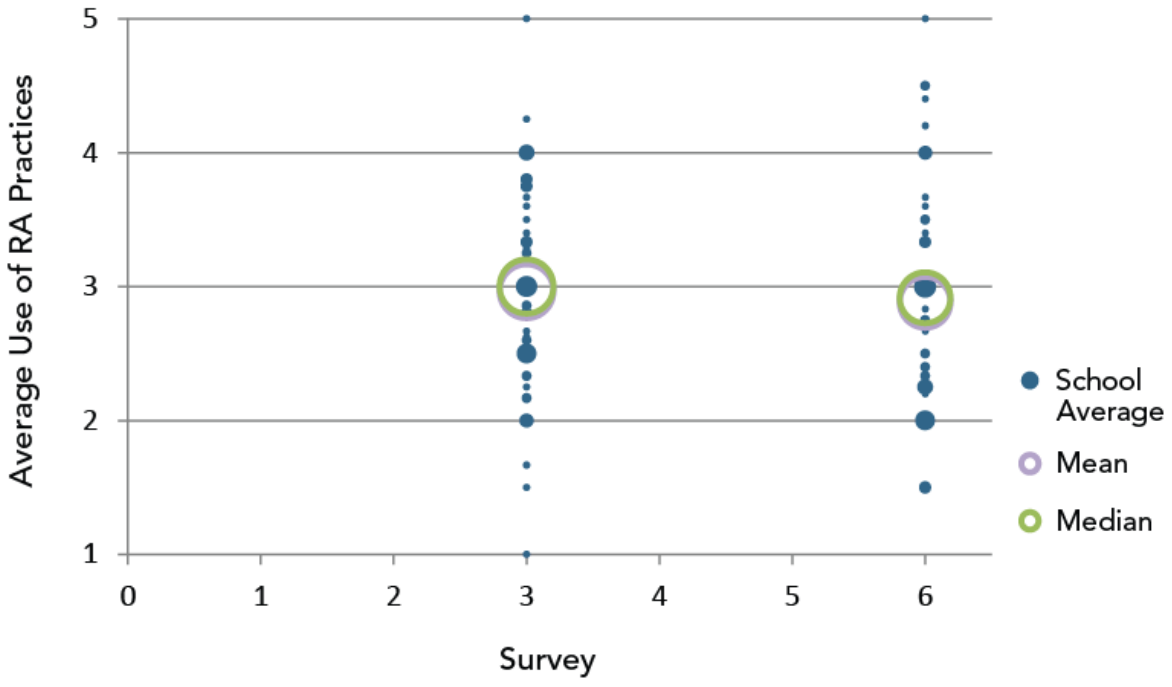

FIGURE 4. AVERAGE USE OF RA PRACTICES

n = 61 schools in Year 1; n = 54 schools in Year 2

Changes in Indicators of Scale-up Outcomes

Buy-in to Reading Apprenticeship Framework

As explained in our scale-up logic model, we defined buy-in as the belief that RA is an appropriate strategy for literacy instruction, and a means of improving student achievement.

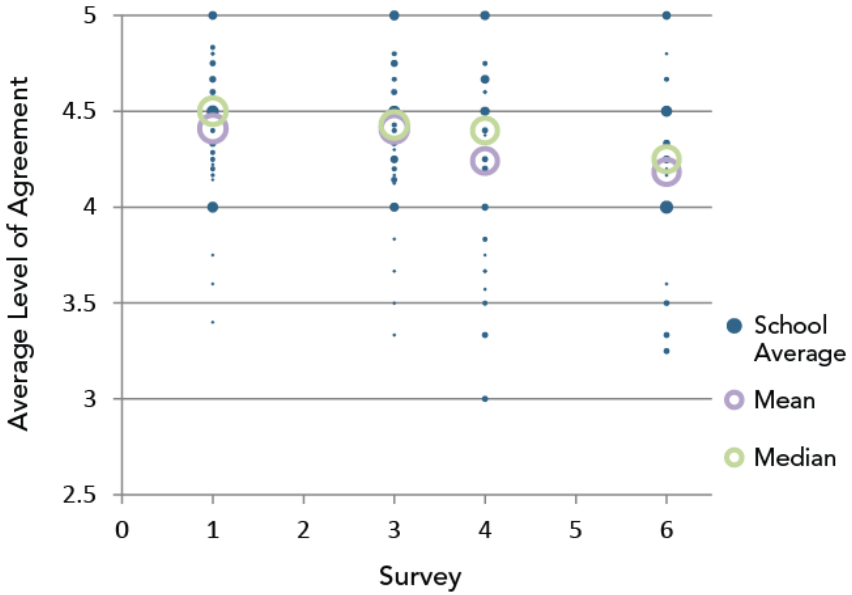

FIGURE 5. BUY-IN OF RA AS APPROPRIATE LITERACY INSTRUCTIONAL STRATEGY FOR CLASSROOM

n = 61 schools in Year 1 (Survey 1 & 3); *n* = 53 schools in Year 2 (Survey 4); *n* = 54 schools in Year 2 (Survey 6)

Therefore, we asked teachers at the beginning and end of each school year to rate their levels of agreement with those statements (5 = Strongly agree; 0 = Strongly disagree). Cohort 1 teachers reported high levels of buy-in, as reflected in a large majority of the teachers agreeing or strongly agreeing with those statements. While teachers' buy-in levels remain high, we did find an overall decrease over time in the school mean levels of agreement with RA being an appropriate strategy ($p < .01$) and as a means of improving student achievement ($p < .05$) (Figures 5 and 6).

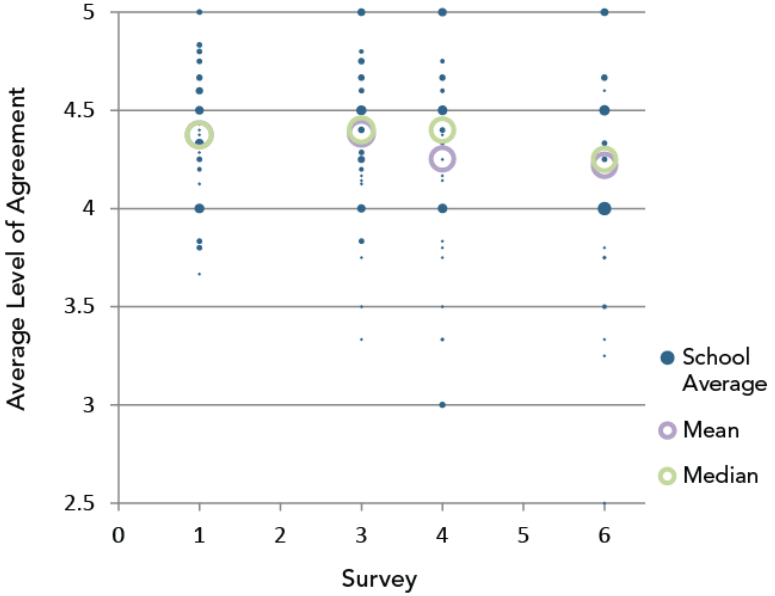

FIGURE 6. BUY-IN OF RA AS MEANS TO IMPROVE STUDENT ACHIEVEMENT

n = 61 schools in Year 1 (Survey 1 & 3); *n* = 53 schools in Year 2 (Survey 4); *n* = 54 schools in Year 2 (Survey 6)

Commitment to Reading Apprenticeship

At the beginning and end of each year, we also asked teachers to report their level of commitment to making Reading Apprenticeship work in their classroom and in their school (5 = Fully; 4 = Fairly; 3 = Willing to give it a chance; 2 = Not a priority; 1 = Not willing to do it).

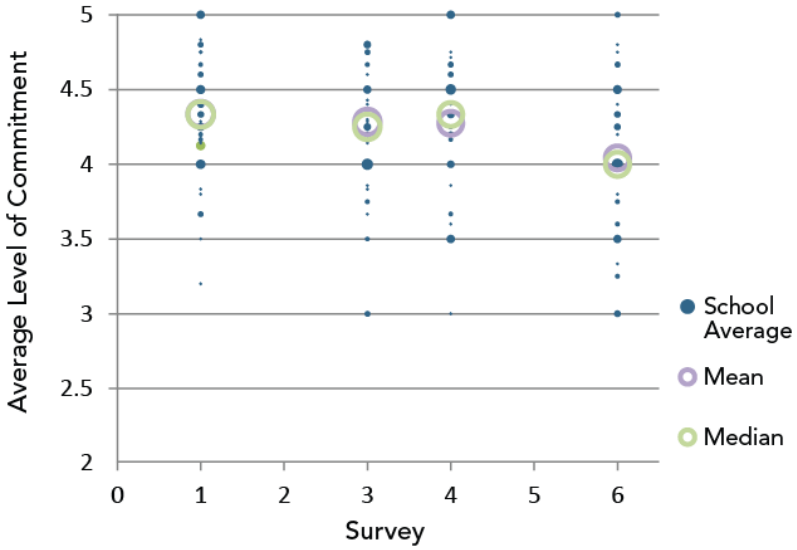

FIGURE 7. COMMITMENT TO READING APPRENTICESHIP IN CLASSROOM

n = 61 schools in Year 1 (Survey 1 & 3); *n* = 53 schools in Year 2 (Survey 4); *n* = 54 schools in Year 2 (Survey 6)

As we found with levels of buy-in, Cohort 1 schools reported high levels of commitment, with a majority being fully or fairly committed to making RA work (Figures 7 and 8). In Year 1 the decrease in average reported commitment in classrooms and schools was not statistically significant. In Year 2, the picture changed, with a decrease in both average reported commitment in classrooms ($p < .01$) and in schools ($p < .01$). This drop-off in reported commitment in Year 2 was greater with respect to schools than classes ($p < .001$). We also found that on average teachers reported being more committed to making RA work in their classes than in their schools ($p < .001$).

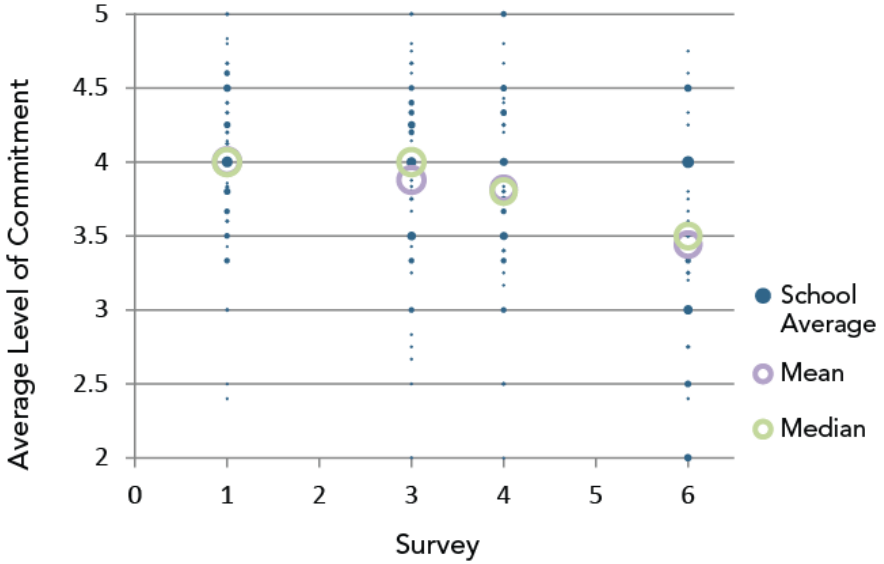

FIGURE 8. COMMITMENT TO READING APPRENTICESHIP AT SCHOOL

n = 61 schools in Year 1 (Survey 1 & 3); *n* = 53 schools in Year 2 (Survey 4); *n* = 54 schools in Year 2 (Survey 6)

Continued Use of RA Practices

One measure of sustainability is teachers' report of whether they plan to continue using Reading Apprenticeship pedagogical practices in the following school year. At the end of Year 1, on average 91% of teachers in each school said they would continue to use RA. By the end of Year 2, on average 85% of the teachers in each school said they would continue using RA practices in their third year of implementation. This reduction is not statistically significant. The median percent of teachers in each school responding that they plan to continue using Reading Apprenticeship stayed constant between the two surveys.

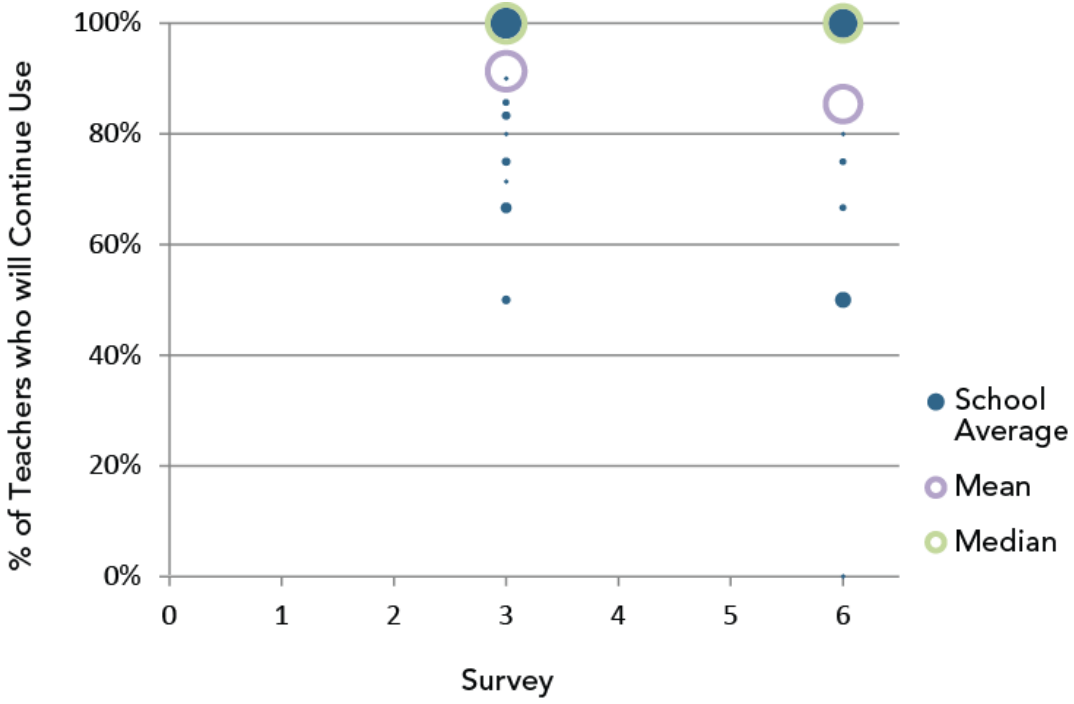

FIGURE 9. CONTINUE USE OF READING APPRENTICESHIP

n = 61 schools in Year 1; *n* = 54 schools in Year 2

RELATIONSHIP BETWEEN INDICATORS OF THE UPTAKE OF RAISE AND INDICATORS OF SCALE-UP OUTCOMES

In addition to assessing the change in indicators of the uptake of RAISE activities and scale-up outcomes over the two years, we examined if the average reported levels of the uptake measures in Year 1 were associated with changes in scale-up outcomes between Year 1 and Year 2. We did not find any statistically significant correlations (Table 4).

TABLE 4. RELATIONSHIP BETWEEN INDICATORS OF THE UPTAKE OF RAISE IN YEAR 1 AND CHANGES BETWEEN SCALE-UP OUTCOMES FROM YEAR 1 TO YEAR 2

	Number of RAISE teachers per school	Receiving support for instruction	Attendance at monthly meetings	Average use of RA
Buy-in as appropriate literacy strategy	-0.12	-0.16	-0.19	-0.10
Buy-in as means to improve student achievement	-0.10	-0.03	-0.17	-0.17
Commitment in classroom	0.06	0.06	-0.06	0.09
Commitment in school	0.09	0.23	-0.10	0.14
Continued use of RA	-0.01	-0.04	0.13	0.08

Note. The number of RAISE trained teachers is taken from the end of the school year.

* $p < .05$

** $p < .01$

*** $p < .001$

We also examined if there was a relationship between the change in the indicators of the uptake of RAISE from Year 1 to Year 2 and the change in the indicators of scale-up outcomes over the same time period.[8] We cannot infer causality from these results; however, they allow us to consider how certain activities potentially influence outcomes. We found that the following relationships were statistically significant (Table 5).

- Change in attendance at monthly meetings is positively associated with change in self-reported levels of commitment to making RA work in the classroom and within the school
- Change in the average use of RA is positively associated with three outcomes: Change in agreement that RA will lead to an increase in student achievement, change in the level of commitment, and change in expected continued use of RA in the next school year

[8] Because we did not measure several of the indicators of the uptake of RAISE across all six survey occasions, we assess the change in the indicators between the first and last surveys in which we asked the question; the change in the outcome score is limited to the same interval.

TABLE 5. RELATIONSHIP BETWEEN CHANGES IN INDICATORS OF THE UPTAKE OF RAISE AND SCALE-UP OUTCOMES

	Receiving support for instruction	Attendance at monthly meetings	Average use of RA
Buy-in as appropriate literacy strategy	- 0.02	- 0.03	0.24
Buy-in as means to improve student achievement	- 0.17	0.05	0.44***
Commitment in classroom	0.15	0.33*	0.45***
Commitment in school	0.19	0.47***	0.30*
Continued use of RA	0.19	0.15	0.43**

Note.

* $p < .05$

** $p < .01$

*** $p < .001$

This table does not include the "Number of RAISE teachers per school" which is shown in Table 4 because the reduction in number of teachers is not expected to be associated with scale-up outcomes.

Discussion

This report offers an initial look at the results from the formative evaluation of the scale up of SLI'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 over time. In previous analyses that focused on only the first year of implementation, we found that the first cohort of RAISE teachers reported high levels of effectiveness of the RAISE Institute, high levels of buy-in and commitment to RA in the classroom and schools, and that over 90% of the teachers said they would continue using RA in the second year. While initial findings indicate general success in the first year, we have continued our investigation by examining trends and relationships related to the uptake of the initiative and sustainability in the second year. In general, we found that the uptake of RAISE activities and commitment levels were not as strong in the second year.

Drawing upon existing literature on scaling-up instructional reforms, in the early stages of the RAISE scale-up logic model we have hypothesized that as teachers deepen RA practice and strengthen support ties over time, buy-in and capacity to implement and disseminate RA will also increase. "Ownership" of the initiative will also begin to be transferred to the local level, which will support sustainability as formal supports from the developers are withdrawn. Therefore, we examined if key indicators of participants' uptake of RAISE activities and indicators of scale-up outcomes change over time (between the first and second year) and if changes in the uptake were related to changes in the outcomes. From our analysis of teacher survey data from the first cohort of RAISE schools, we found that indicators of the uptake of RAISE and scale-up outcomes decreased between the first and second year. These results, however, should be viewed in relation to the already high levels reported in the first year. One of the most obvious decreases in the second year was teachers' attendance at the monthly team meetings. Furthermore, we did find a statistically significant positive relationship between the change in commitment to RA and attendance at the monthly meetings, as well as between change in buy-in and commitment and average use of RA practices. These findings suggest that SLI should consider how to encourage continued participation in the out years or offer alternative ways to support social networks or professional communities of RA teachers. Given the number of schools, districts, and states involved in the scale-up, building an online community or offering recurrent "refresher courses" may be a more efficient and cost-effective way of supporting new learning, multi-site collaboration, and a deepening of practice.

Building on These Results

During the five year grant, RA will be scaled-up with multiple cohorts, across years, states, and subject areas, in complex educational contexts. To date, SLI has trained over 1,300 teachers from 179 schools, across the four scale-up states. Our current findings of a general decrease in key indicators of participants' uptake of RAISE activities and scale-up outcomes between the first and second year of the first cohort, further lead us to investigate what contextual conditions may affect the scale-up process, and we will continue to explore if the process or the outcomes differ based on these factors. Examining these trends for Cohort 1 into the third year of implementation will be important. If the changes "level off", it may suggest that the process has reached a natural level of enthusiasm. If we continue to find a decrease, we will further explore what factors are associated with the decrease. We will also have the opportunity to measure these trends across two years of implementation for Cohort 2. Comparing these results will allow for a richer, more complete picture of the scale-up process. Because the theory of scale-up is in its early stages, we will continue to track the work of other researchers, provide formative feedback to SLI, and work to generate systematic hypotheses to guide our future analysis and reporting.

References

Adelman, H. S., & Taylor, L. (1997). Toward a scale-up model for replicating new approaches to schooling. *Journal of Educational and Psychological Consultation*, *8*(2), 197-230.

Coburn, C. (2003). Rethinking scale: Moving beyond the numbers to deep and lasting change. *Educational Researcher*, *32*(6), 3-12

Corrin, W., Somers, M.-A., Kemple, J., Nelson, E., and Sepanik, S. (2008). *The Enhanced Reading Opportunities Study: Findings from the Second Year of Implementation* (NCEE 2009-4036). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Greenleaf, C., Hanson, T., Herman, J. Litman, C., Madden, S., Rosen, R., Kim-Boscardin, C., Schneider, S. & Silver, D., (2009). *Integrating Literacy and Science Instruction In High School Biology: Impact On Teacher Practice, Student Engagement, and Student Achievement*. Final Report to the National Science Foundation Grant #0440379.

Greenleaf, C., Schneider, S., & Herman, J. (2005). *An Efficacy Study of Reading Apprenticeship Professional Development for High School History and Science Teaching and Learning."* Teacher Quality Research Reading/Writing Grants, U. S. Department of Education Institute of Education Sciences, Grant # R305M050031, Greenleaf PI.

Hegseth, W., Zacamy, J., & Newman, D. (2014). *Case Studies of the Scaling and Sustaining of Reading Apprenticeship in Four Michigan Secondary Schools*. (Empirical Education Rep. No. Empirical_ i3SU-7019-CS1-Y1-O.1). Palo Alto, CA: Empirical Education Inc.

McDonald, S., Keesler, V., Kauffman, N., & Schneider, B. (2006). Scaling up exemplary interventions. *Educational Researcher*, *35*(3), 15–24.

Sternberg, R. J., Birney, D., Jarvin, L., Kirlik, A., Stemler, S., & Grigorenko, E. L. (2011). Scaling up educational interventions. In R. J. Sternberg & M. Constas (Eds.), *Translating educational theory and research into practice*. Mahwah, NJ: Erbaum.

Schneider, B., & McDonald, S. (2007a). Introduction. In Scale-up in Education, Volume 1, Ideas in Principle, Schneider, B. and S. McDonald, Eds., pp 1-15.

Strategic Literacy Initiative (SLI). (2010). *Scaling up content-area academic literacy in high school english language arts, science and history classes for high needs students* (pp. 1-37, Rep.). San Francisco, CA: WestEd.

Zacamy, Z., Gray, S., Jaciw, A., & Newman, D. (2013). *Year 1 Interim Report of Reading Apprenticeship/RAISE Scale-up*. (Empirical Education Rep. No. Empirical_i3SU-7019-IR1-Y1-O.1). Palo Alto, CA: Empirical Education Inc.

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.

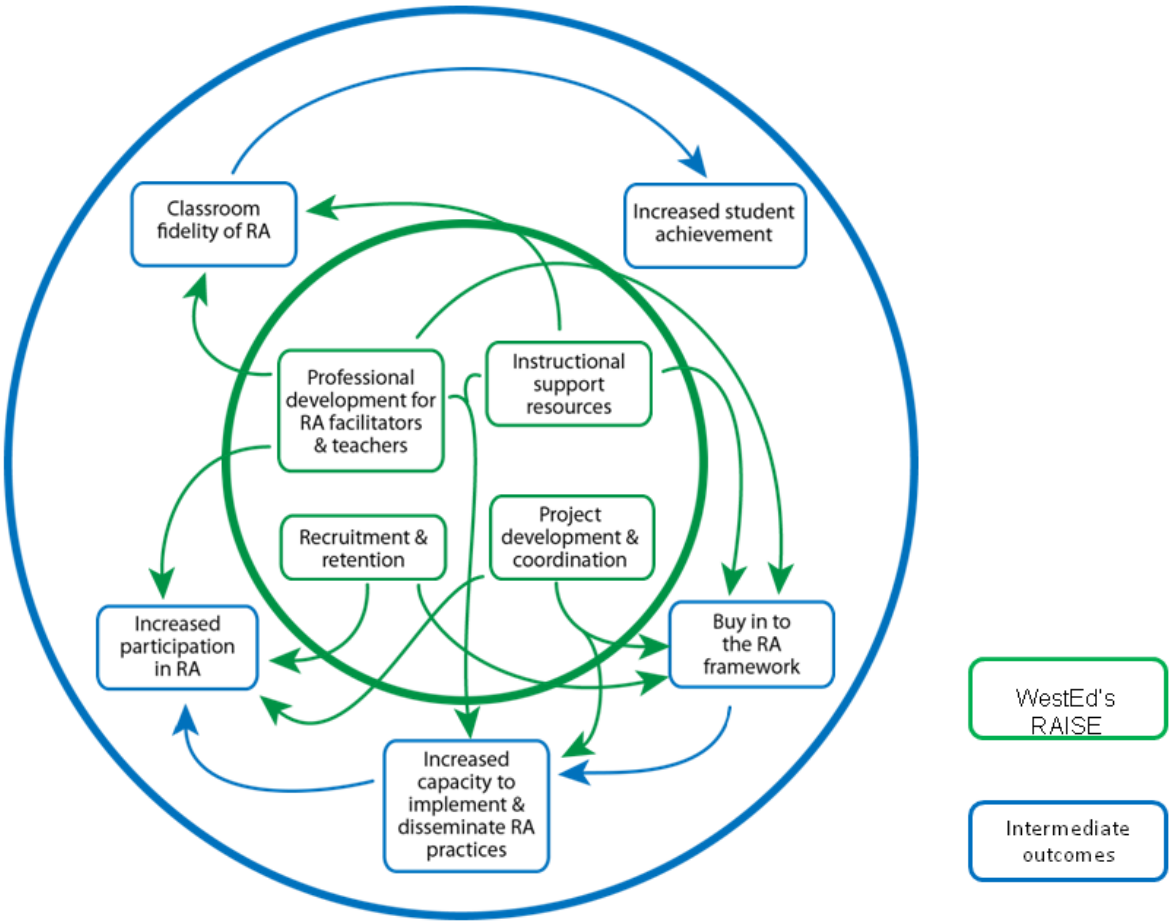

FIGURE A1. STAGE 1: DEVELOPMENT ACTIVITIES

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.[9] 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.

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

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

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,[10] (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 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.

[10] Starting in the 2012-13 school year, these webinars were replaced with three day-long, in-person meetings with all teacher leaders in the state. The goals of the webinars and in-person meetings are the same.

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.

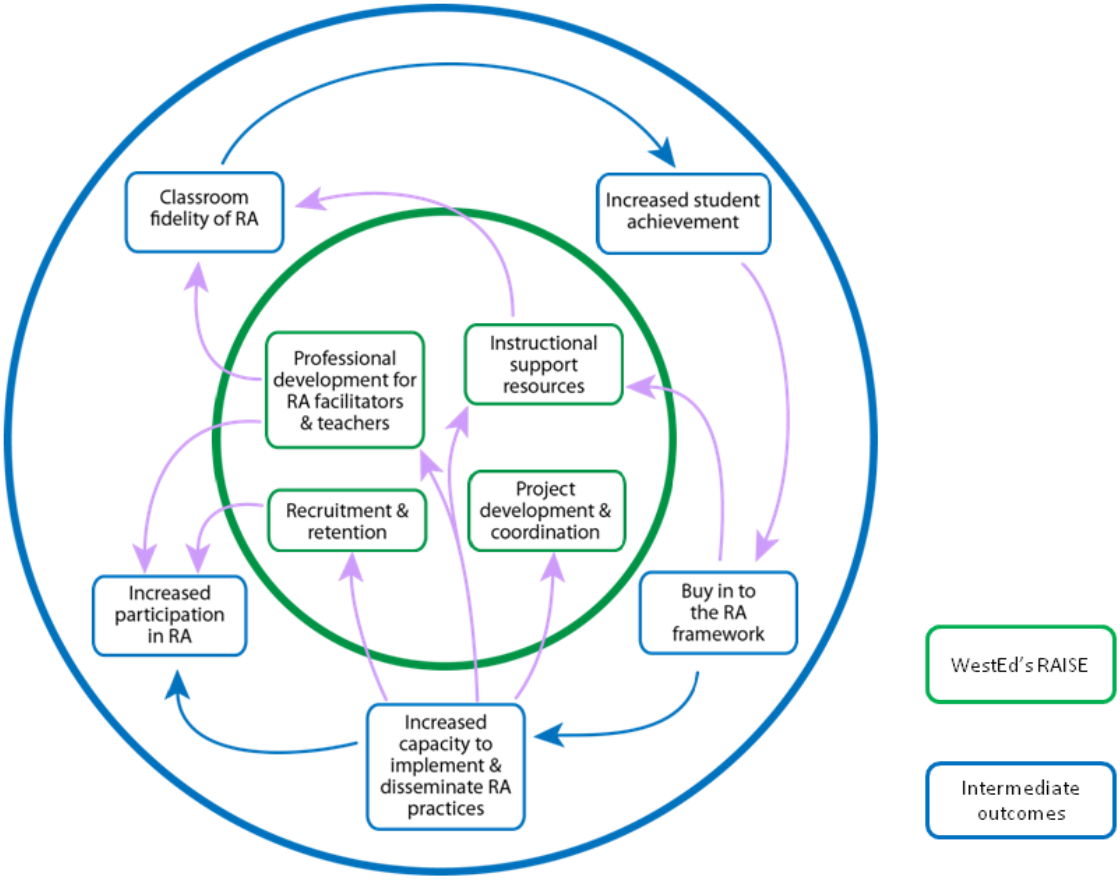

FIGURE A2. STAGE 2: INCREASED OWNERSHIP

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.

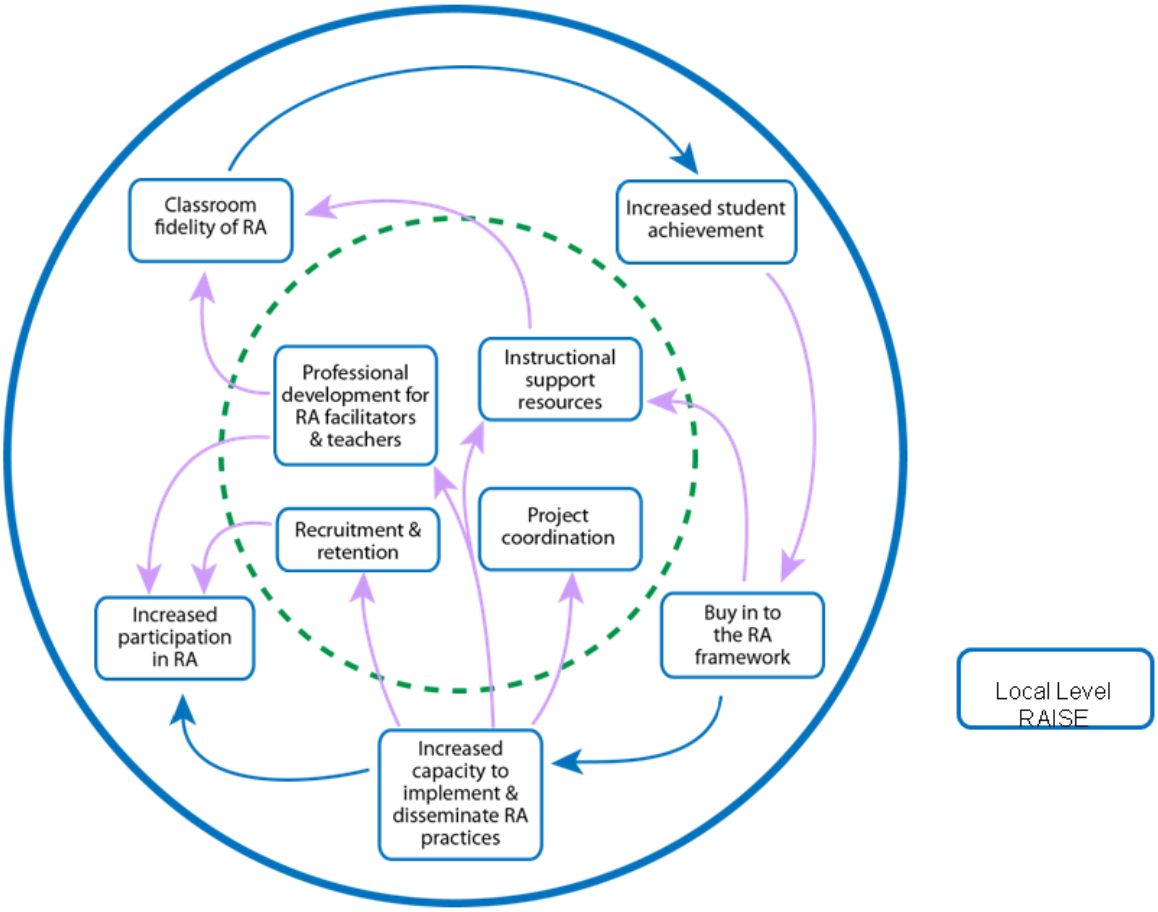

FIGURE A3. STAGE 3: SUSTAINED OWNERSHIP

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.

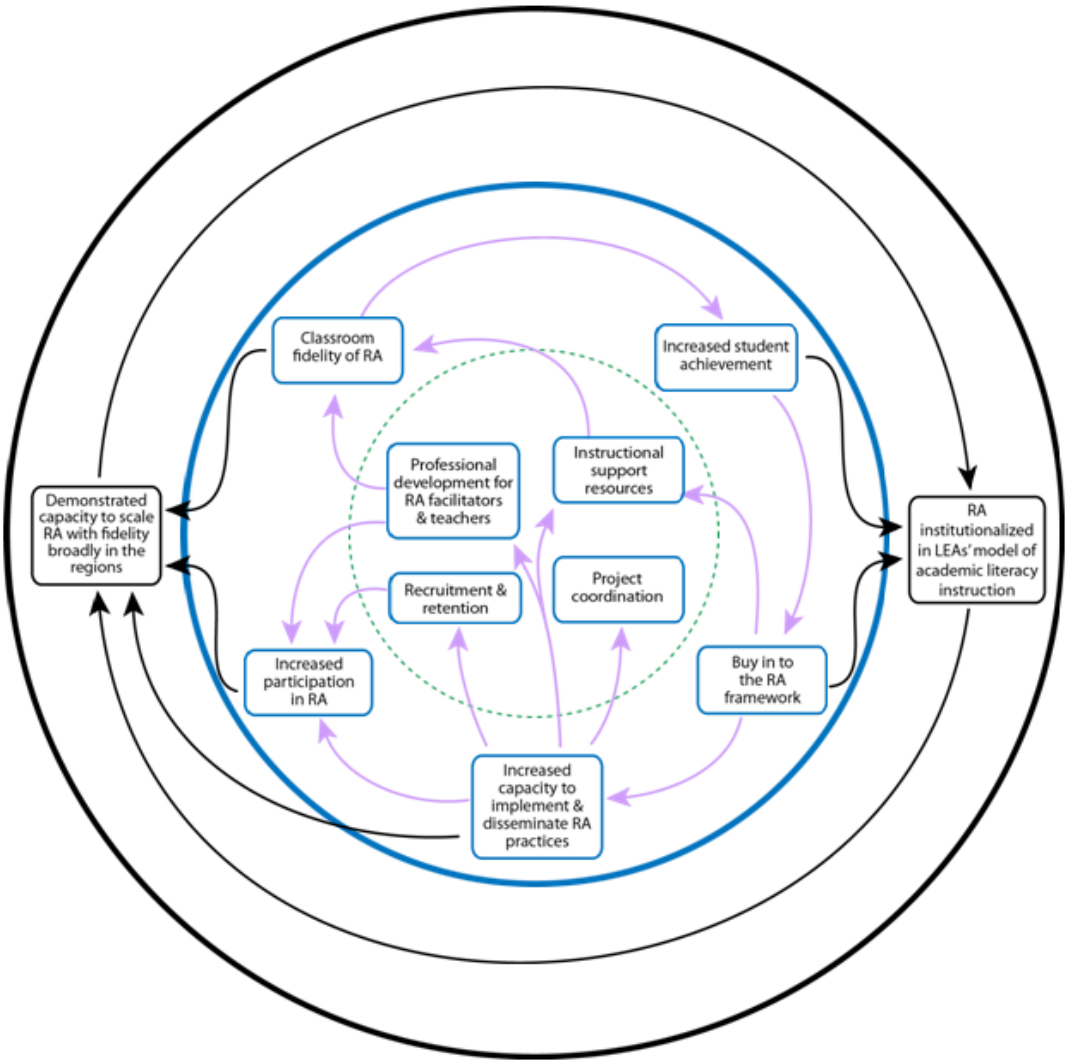

FIGURE A4. STAGE 4: RA BROADLY INSTITUTIONALIZED

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: Year 2 Data Collection Activities

During Year 2, researchers collected 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.

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 2, we observed/collected the following.

- Summer 5-Day and Winter 2-Day RAISE Institute in Michigan (for Cohort 2) and Summer 5-Day RAISE Institute in Indiana (for Cohort 3)
- 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 2, the administrator survey was deployed in May to administrators who had teachers in either Cohort 1 or 2 at their school. As it did in Year 1, the administrator survey 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. We also asked about their knowledge, access, and likelihood of using several different supports to sustain RAISE in their school.
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 and administrator retention rates and available resources/data to inform decisions, and we asked how administrators generally feel about teachers implementing new instructional strategies.

Teacher Surveys

All consented RAISE teachers currently in their schools will receive three surveys per year in each study year. A majority of the surveys will include multiple choice or ordinal/interval scale questions lending to more efficient coding and analysis.
In Year 2, the three surveys were deployed to all participating RAISE teachers (in both Cohort 1 and 2) December, 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 2, 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 meetings
- 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 (Cohort 2). Additionally, we asked how often they used and how confident they are using RA pedagogical practices in their classroom, and if they had enough time to plan RA lessons. Finally, we asked a series of questions about the frequency and reasons for engaging in both formally and informally established collaboration with other teachers about RAISE implementation.

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. We also asked teachers the extent to which they believed students improved in several academic and behavioral outcomes.

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, how well RAISE aligned with the instructional goals, rigor, and needs of the students in their class/school, and teachers' 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. Because Cohort 1 teachers were in their second year of implementation, and had completed their 10-Day RAISE Institute, we asked them which supports they used for implementing RA following the professional development.

Appendix C: Timeline of Event and Spread of RAISE in Year 2

Timeline of Key RAISE Events in Years 1 and 2

In Table , we present a brief description of the key events from the project's initiation in October 2010 through Summer 2013. These events are 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 C1. 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.
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.

TABLE C1. TIMELINE OF KEY RAISE PROJECT ACTIVITIES

Date	Event	Corresponding development activity	Brief description
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
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.

TABLE C1. TIMELINE OF KEY RAISE PROJECT ACTIVITIES

Date	Event	Corresponding development activity	Brief description
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 teachers	Teachers attend RAISE 3-Day Summer Springboard Institute in content specific groups in each state. June 12-14, 2012: Utah June 18-12, 2012: Michigan July 11-13, 2012: Indiana August 7-9, 2012: Pennsylvania
Summer 2012	RAISE Facilitator-in-Training (FIT) online professional development	Professional development for Reading Apprenticeship facilitators	Facilitators and CITs participate in an online course that includes individual and team collaboration and preparation for facilitating the RAISE Institutes
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).
Fall 2012	Administrators Online Course	Instructional support resources	RAISE school administrators are invited to participate in 30 hour (spanning 6 month) online course to deepen their ability to support their RAISE team.

TABLE C1. TIMELINE OF KEY RAISE PROJECT ACTIVITIES

Date	Event	Corresponding development activity	Brief description
Fall/ Winter/ Spring 2012-2013	Teacher Leader Meetings	Instructional support resources	Site coordinators facilitate first (of three during the school year) face-to-face meetings with teacher leaders to develop their skills and deepen their leadership and RA practices. November, February, April: Indiana October, February, April: Michigan October, February, April: Pennsylvania December, January, March: Utah
October 2012	RAISE Cross-site Planning Meeting (Retreat)	Project development and coordination Recruitment and retention	SLI hosts site coordinators at meeting in Cape Cod, MA, to discuss project planning and, in particular, to discuss how to plan for and support sustainability in each site.
Winter 2012-13	RAISE 2-Day Winter Turnaround Institute (Cohort 2)	Professional development for Reading Apprenticeship facilitators and teachers	Teachers attend RAISE 2-Day Winter Turnaround Institute in content specific groups in each state. December 3-4, 2012: Utah January 24-25, 2013: Southeast Michigan January 28-29, 2013: Northern Michigan January 28-29, 2013: Indiana February 11-12, 2013: Pennsylvania
January-February 2013	Recruitment and applications (Cohort 3)	Recruitment and retention	The state site coordinators disseminate recruitment flyers and hold information sessions with interested districts, school administrators and teachers. Schools complete an application, which is reviewed by the site coordinators and WestEd. Due to funding concerns, the number of teachers accepted and the amount of the PD stipends offered are modified for Cohort 3.
April 2013	RAISE Cross-site Planning Meeting (Retreat)	Project development and coordination Recruitment and retention	SLI hosts site coordinators at meeting in Sonoma, CA, to discuss project planning and, in particular, to discuss how to plan for and support sustainability in each site.
Summer 2013	RAISE 3-Day Summer Springboard Institute (Cohort 2)	Professional development for Reading Apprenticeship teachers	Teachers attend RAISE 3-Day Summer Springboard Institute in content specific groups in each state. June 13-15, 2013: Utah June 17-19, 2013: Southeast Michigan June 24-26, 2013: Northern Michigan July 22-24, 2013: Indiana August 7-9, 2013: Pennsylvania

TABLE C1. TIMELINE OF KEY RAISE PROJECT ACTIVITIES

Date	Event	Corresponding development activity	Brief description
Summer 2013	RAISE 5-Day Summer Institute (Cohort 3)	Professional development for Reading Apprenticeship facilitators and teachers	Cohort 3 teachers attend RAISE 5-Day Summer Institute in content specific groups in each state. July 15-19, 2013: Utah July 15-19, 2013: Indiana July 29- Aug 2, 2013: Pennsylvania August 12-16, 2013: Southeast Michigan August 19-23, 2013: Northern Michigan

SPREAD OF RAISE: YEAR 2 PARTICIPATION

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 2. Additionally, we have updated the maps of each state showing participation of Cohort 1 and 2 RAISE schools and districts.

Year 2: Participation in RAISE Institute by Subject Area

In the tables that follow, we provide an overview of the attendance records from the Cohort 2 10-Day RAISE Institute (Summer 5-Day Institute, Winter 2-Day Institute, and Summer 3-Day Institute). Table C2 shows the total number of schools and teachers, by subject area, that attended the trainings, across all states.

Across the four states, 560 teachers from 131 schools attended the RAISE Summer 5-Day Institute, 499 teachers from 123 schools attended the RAISE Winter 2-Day Institute, and 463 teachers from 123 schools attended the RAISE Summer 3-Day Institute as part of Cohort 2. As with Cohort 1, at each of the institutes there were more English language arts (ELA) teachers trained than biology or history teachers. Of the 131 schools that attended the Summer 5-Day Institute, 107 were new to RAISE and 25 also have Cohort 1 teachers.

TABLE C2. COHORT 2: TEACHER PARTICIPATION IN 10-DAY RAISE INSTITUTES, BY SUBJECT

Subject	No. of schools attended	No. of teachers attended all days	No. of teachers attended some days
RAISE Summer 5-Day Institute			
Biology	112	156	7
ELA	117	207	13
History	108	170	7
Total	131	533	27
RAISE Winter 2-Day Institute			
Biology	140	145	1
ELA	107	190	4
History	101	154	5
Total	123	489	10
RAISE Summer 3-Day Institute			
Biology	108	118	14
ELA	106	176	13
History	93	133	9
Total	123	427	36

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 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 C3 shows—across the four states—the number of school administrators and

other school and district personnel whom attended the Summer 5-Day Institute, Winter 2-Day Institute, and Summer 3-Day Institute.

TABLE C3. COHORT 2: ADMINISTRATOR 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 other personnel attended all days	No. of other personnel attended some days
RAISE Summer 5-Day Institute				
Total	12	32	30	3
RAISE Winter 2-Day Institute				
Total	14	7	33	1
RAISE Summer 3-Day Institute				
Total	8	8	24	4

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 instructional coaches, district personnel, curriculum directors, reading specialists, and educational specialists. 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).

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 C4 shows that, in total, 392 out of 560 teachers attended all ten days.

TABLE C4. COHORT 2: 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	112	51
ELA	158	62
History	122	55
Total	392	168

Source. RAISE Institute attendance records

Year 2: Comparison of "Numbers Served" Estimates and Actual Participation in RAISE

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 C5 shows the number of schools and teachers projected to be reached by the scale-up efforts in Year 2 compared to the actual number of participating schools and teachers trained. Overall, nearly twice the number of schools were represented at the training than projected, but fewer teachers were trained. While 25 of the schools represented at the Cohort 2 training were also part of Cohort 1, supporting this number of schools effectively and efficiently in their RAISE implementation and sustainability efforts may be a challenge for the SLI and the state site coordinators (e.g. traveling to the schools for observation or monthly meetings or meeting with administrators to discuss local priorities and competing demands). Additionally, the original estimates were based on an average of nine teachers per school, but focusing just on the Cohort 2 schools (not those with both Cohort 1 and 2 schools), an average of four teachers per school were RAISE trained. The overall number of schools, both new and returning, as well as the number of teachers per schools that are RAISE trained, highlight the tradeoffs and challenges of internal and external spread.

TABLE C5. COMPARISON OF PROJECTED NUMBERS TO ACTUAL PARTICIPATION

	Year 2 SLI Projection		Year 2 Actual Participation	
State	Estimated number of schools	Estimated number of teachers	Number of schools trained	Number of teachers trained
Indiana	8	72	12	76
Michigan	30	270	75	251
Pennsylvania	30	270	29	167
Utah	6	54	16	66
Total	74	666	132	560

Year 2: State Maps Identifying Participating Districts and Schools

In Year 1, we created maps of each state identifying the districts/intermediate units and schools that are participating in RAISE, and have update those maps to show Cohort 2 districts and schools (Figures C1-C4). 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.

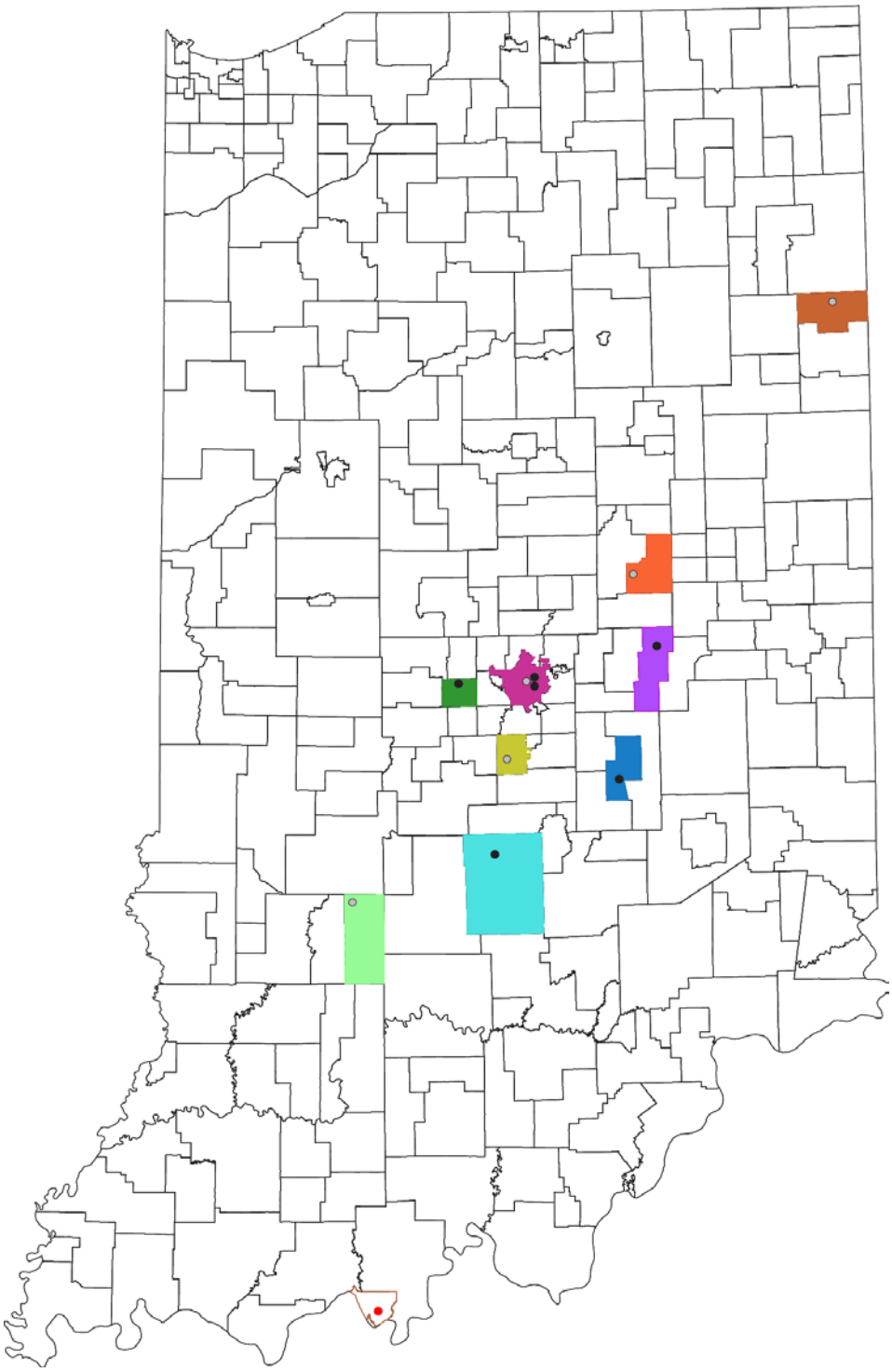

FIGURE C1. INDIANA

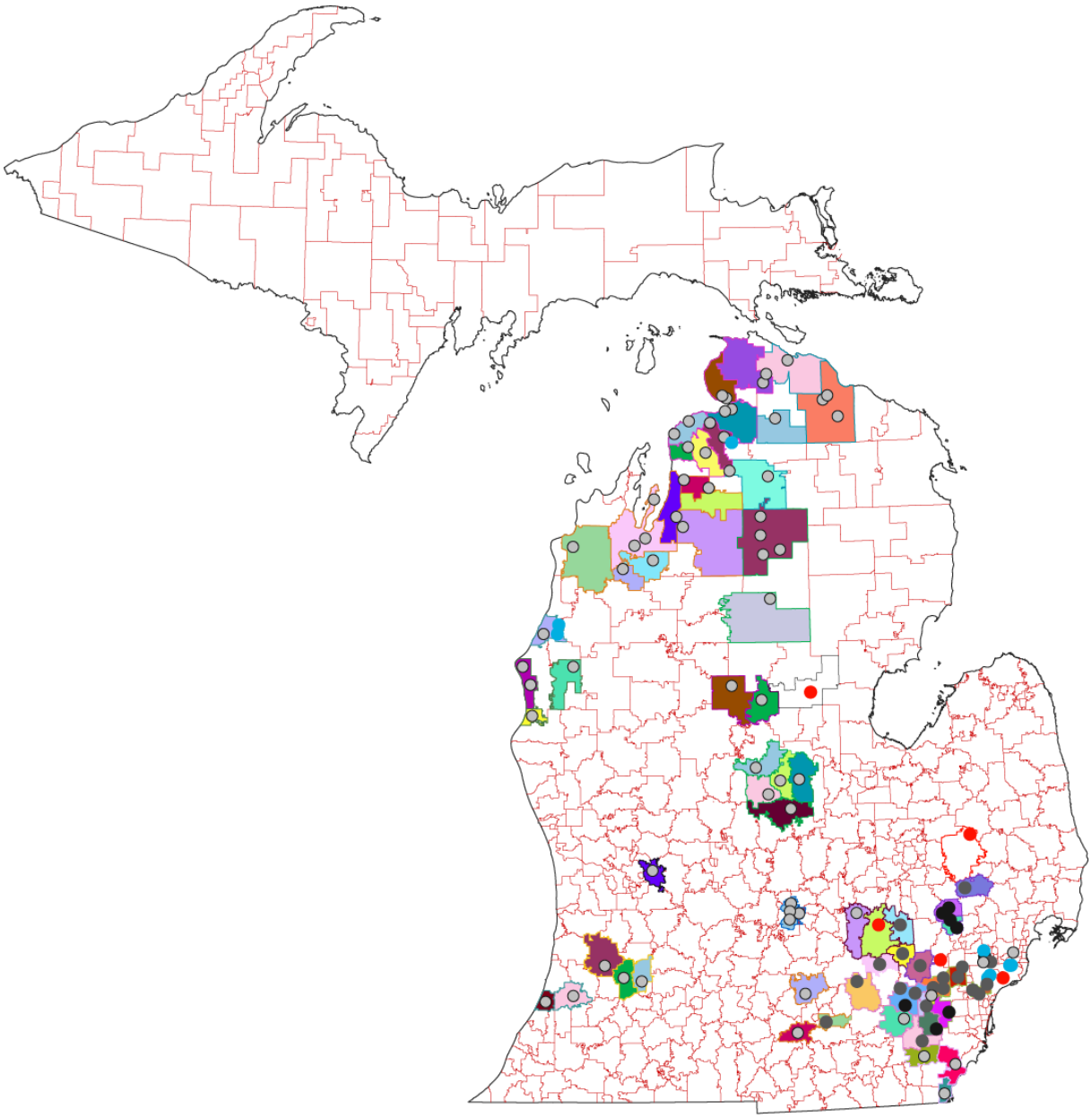

FIGURE C2. MICHIGAN

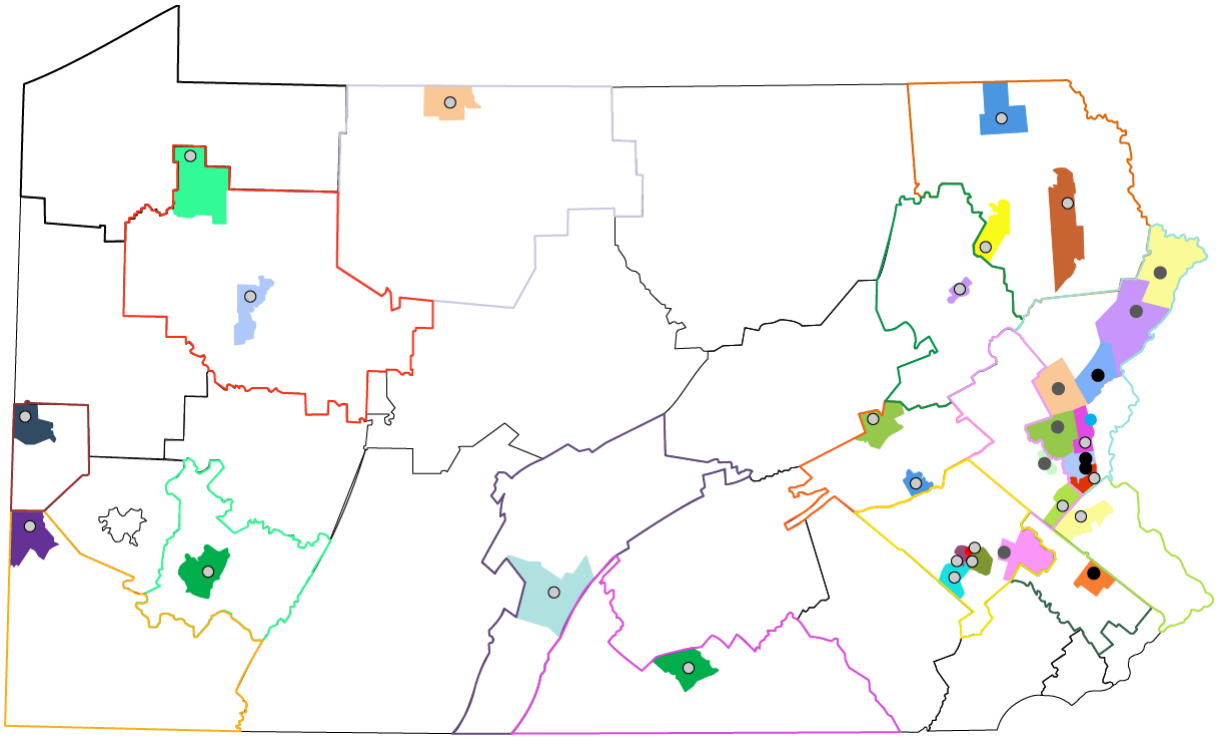

FIGURE C3. PENNSYLVANIA

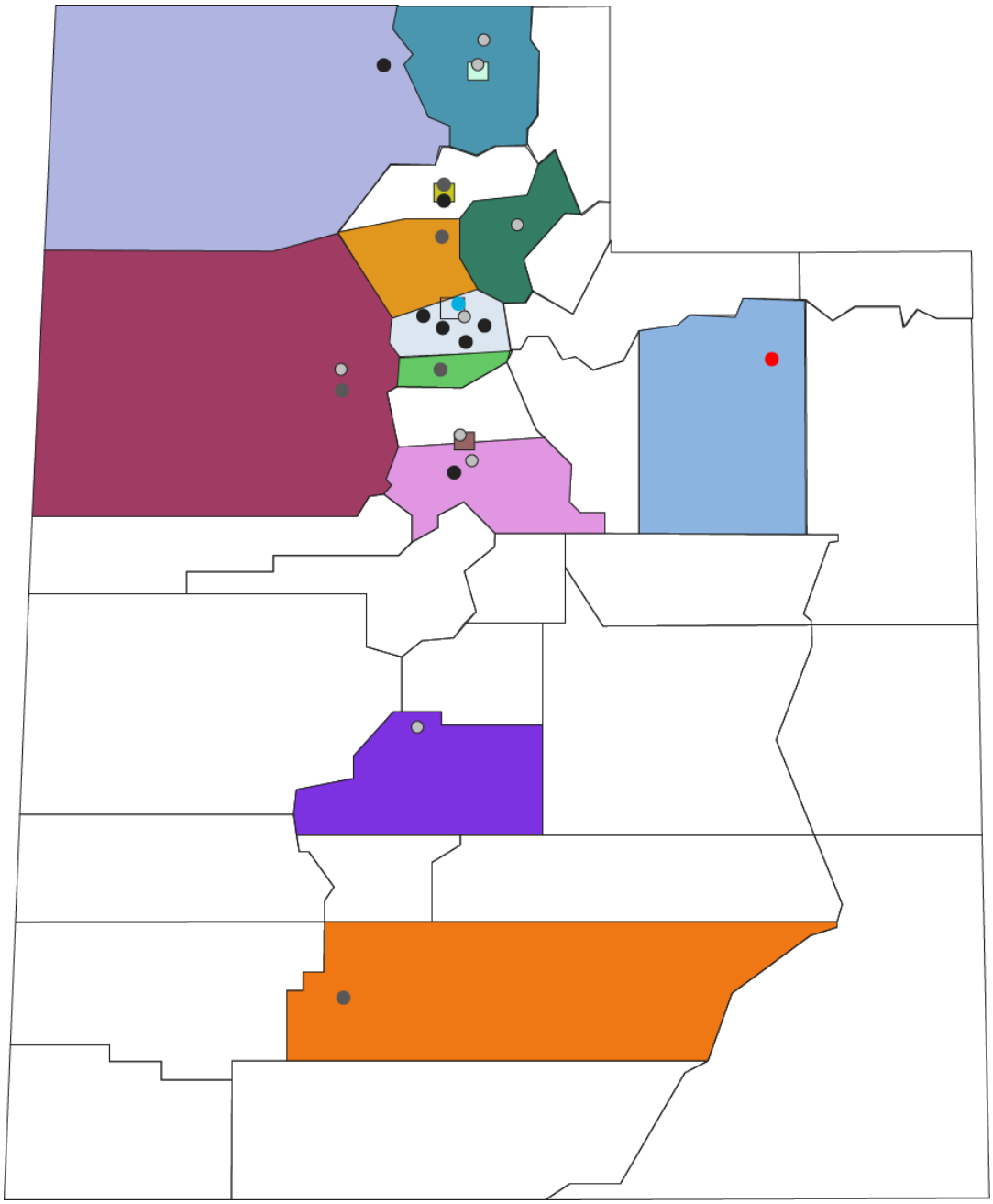

FIGURE C4. UTAH

Appendix D: Additional Year 2 Survey Results

In this section, we first focus on results from the 2012-13 school year Cohort 2 teacher survey data, using teacher-level descriptive statistics. Where appropriate, we make descriptive comparisons between Cohort 1 and 2 results in teachers' first year of implementation. Then, we present results from the 2012-13 school year administrator survey, which provide important context and perspective from school leaders about the sustainability of RAISE by the end of the second year of the initiative.[11] We describe the findings of general participation and uptake of RAISE project activities; the extent to which teachers and school administrators have begun to report commitment, buy-in, and capacity to implement RAISE in their schools; and potential supports and barriers to sustainability.

COHORT 2 TEACHER SURVEY RESULTS

Participation and Uptake of Development Activities

Effectiveness of Summer Institute

Across the four states, Cohort 2 teachers reported high levels of effectiveness of the RAISE Institute. As seen in Figure D1, 83% (n = 314) of Cohort 2 teachers agreed or strongly agreed that the Summer 5-Day Institute helped them collaborate with their colleagues; 84% (n = 318) agreed or strongly agreed that they were provided with adequate resources and materials; and **84% (n = 316) agreed or strongly agreed that participation in the RAISE Institute led to changes in their teaching practices.** These high levels of reported effectiveness are consistent with Cohort 1 teacher' reports.

[11] Caution for interpreting these results: These results represent teacher and administrator self-reports from the second year of RAISE implementation. The data are from 49% of the Cohort 1 and/or 2 school administrators and 62-68% of the Cohort 2 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.

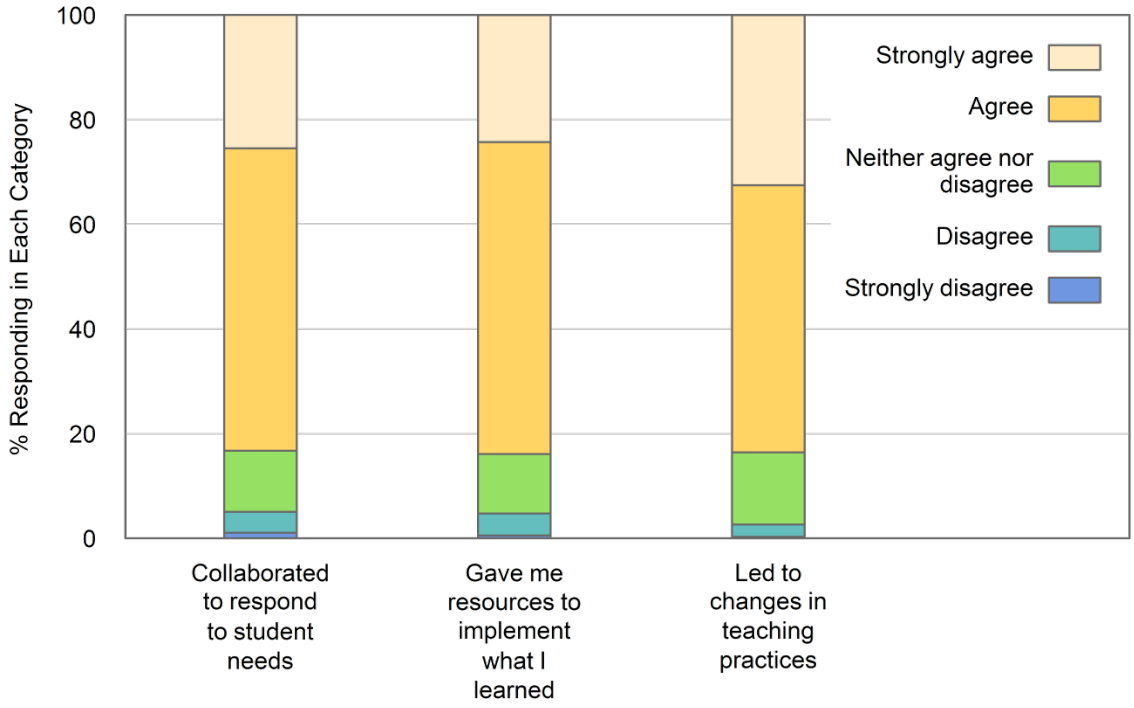

FIGURE D1. EFFECTIVENESS OF RAISE INSTITUTE

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

n = 377-379, depending on question

Source. Teacher Survey 3 from 2012-13 school year

Attendance at Monthly School Meetings

Monthly meetings are organized and led by teacher leaders. They provide teachers the opportunity to collaborate, share successful lessons, and review student work. During the first year of implementation for Cohort 2, attendance at the monthly meetings was strong at the beginning of the year, with 92% (*n* = 342) attending at least one meeting in the first semester. However, as we found with Cohort 1 during their first year of implementation, attendance decreased toward the end of the year, with 81% of Cohort 2 teachers (*n* = 280) attending a meeting in April or May. While the end of the year is a busy time period, the monthly meetings are the primary mechanism for formal teacher collaboration during the school year. Teacher leaders, facilitators, and site coordinators should reinforce the importance of continuing to attend the monthly meetings to allow for new learning and a deepening of practice.

Use of Reading Apprenticeship Practices

While the Reading Apprenticeship (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. At the end of their first year of implementation, we asked teachers how often they used the RA pedagogical practices in their classroom, on average, during the school year. As shown in Figure D2, 72% (*n* = 249) of Cohort 2 teachers said they used RA practices at least weekly in their first year of implementation.

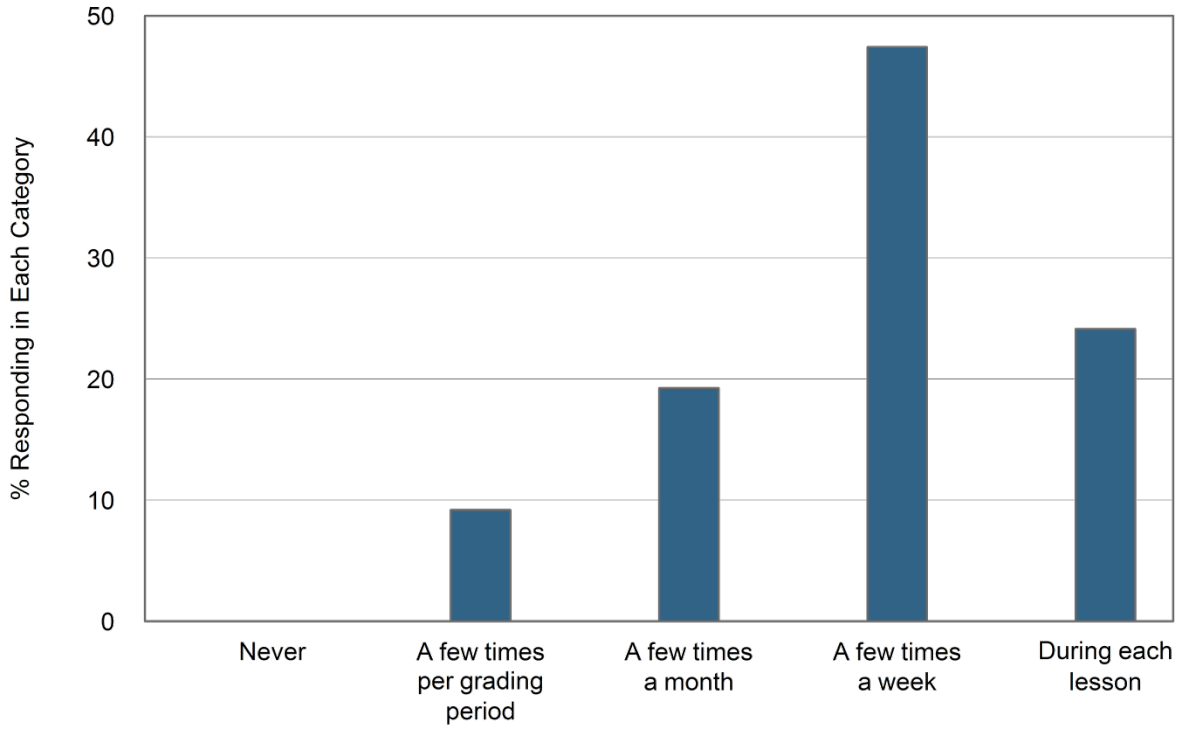

FIGURE D2. AVERAGE USE OF RA PEDAGOGICAL PRACTICES

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

n = 348

Source. Teacher Survey 3 from 2012-13 school year

We also asked teachers how often during the year their students learned about or participated in the following strategies to help them understand text.

- Assessing how well students' reading approach supported their comprehension of the text (Strategy 1)
- Previewing long or challenging texts to identify strategies for dealing with them (Strategy 2)
- Choosing a reading approach that fits the reading purpose (Strategy 3)
- Discussing or writing about their thinking while reading a text (Strategy 4)

As shown in Figure D3, across strategies, teachers reported that students discussed or wrote about their thinking while reading a text most frequently, with 60% reporting that students used this strategy at least weekly. The least frequently used strategy was students' assessment of how well their reading approach supported their comprehension of the text: only 31% of the teachers reported that students did this at least weekly.

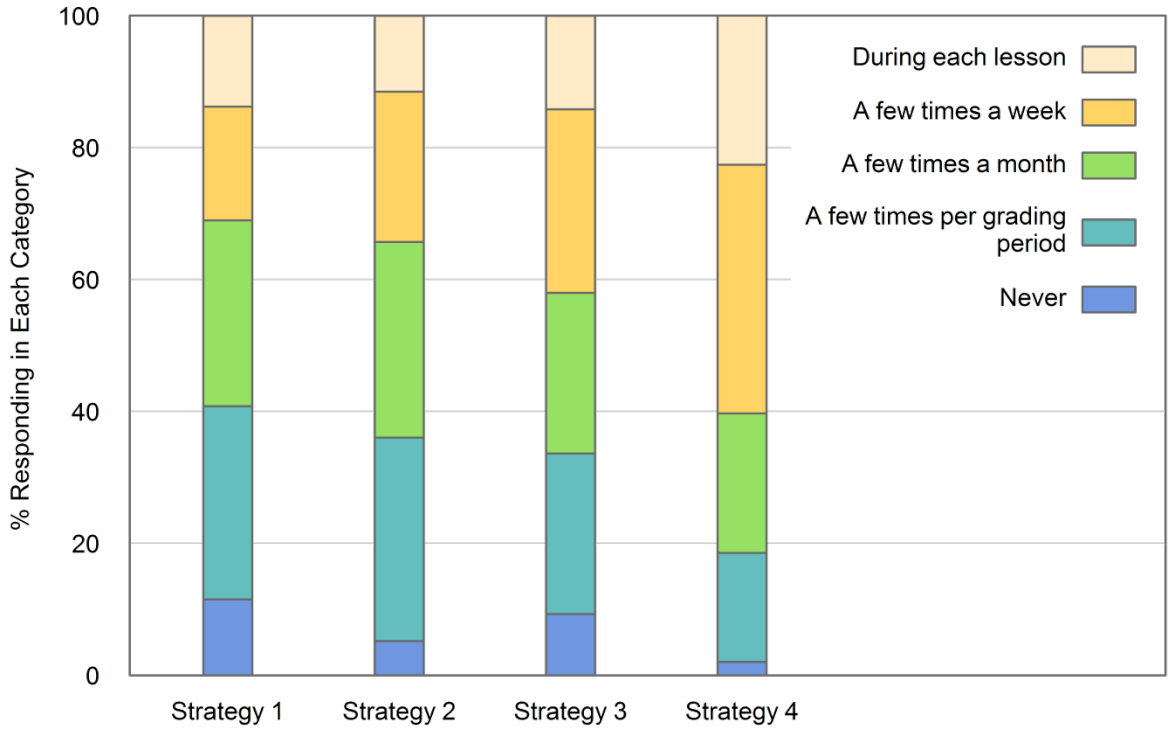

FIGURE D3. AVERAGE STUDENT USE OF STRATEGIES TO UNDERSTAND TEXT

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

n = 345- 348, depending on question

Source. Teacher Survey 3 from 2012-13 school year

Building Capacity, Commitment and Buy-in

Several RAISE-related activities/resources are designed to help teachers build capacity to implement RA practices, including collaboration with teachers, attendance at the RAISE Professional Development, monthly team meetings, support from teacher leaders, support from administrators, and the *Thinking Aloud* website. As we found with Cohort 1 teachers in the first year of implementation, Cohort 2 teachers identified collaboration with other RAISE teachers and attendance at the Professional Development as the most effective activities for building capacity to implement RA in the classroom (Figure D4). It is also important to point out that less than 10% of the teachers identified the monthly team meetings as the most effective activity, indicating that the collaboration may be occurring more informally or at other meetings/times. Formal RAISE professional development opportunities end after the first year of implementation. In subsequent years, it is up to school leaders to provide logistical supports for RAISE teacher collaboration, such as having similar prep periods, common lunch times, and designating in-service days/times for RA collaboration. Teachers must also be committed to continuing to spend their time collaborating about RAISE, and develop social networks to deepen their knowledge and capacity to implement RA practices.

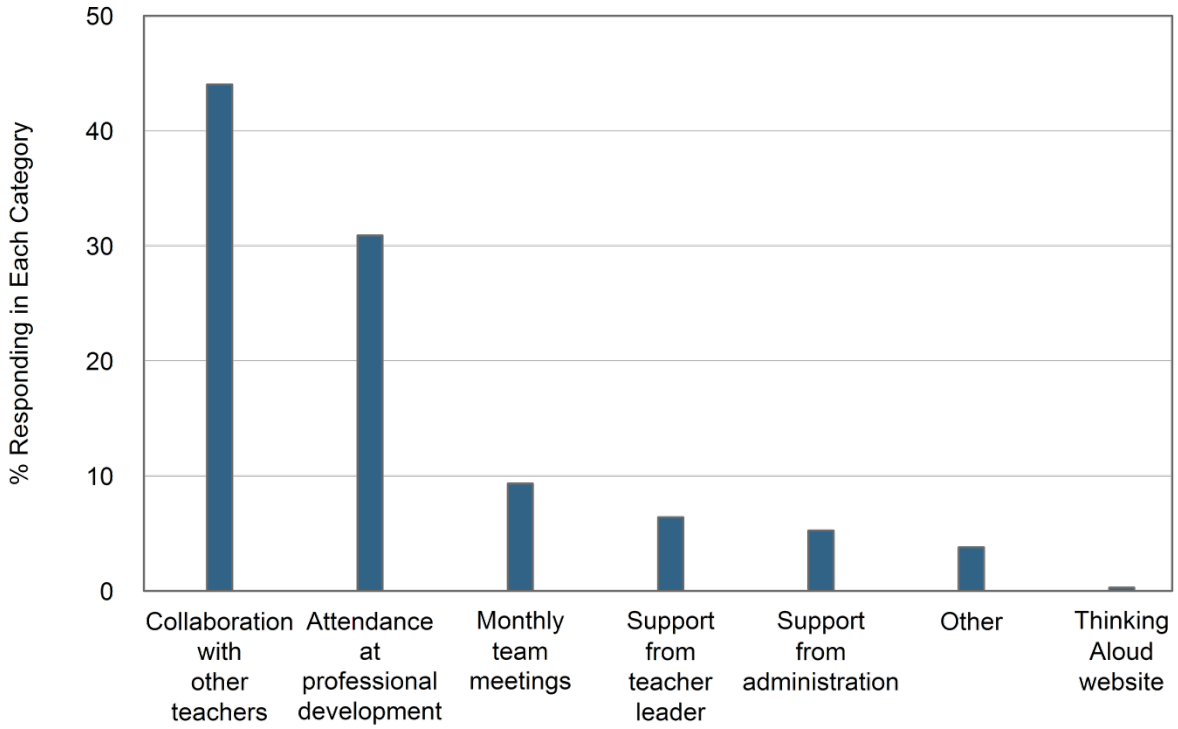

FIGURE D4. MOST EFFECTIVE ACTIVITIES TO BUILD CAPACITY

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

n = 343

Source. Teacher Survey 3 from 2012-13 school year

In our scale-up logic model, we define buy-in as commitment to RA as an appropriate strategy for literacy instruction, and as a means of improving student achievement. Therefore, we asked teachers to rate their levels of agreement with these statements at the end of the school year. Cohort 2 RAISE teachers reported high levels of buy-in to Reading Apprenticeship (Figure D5). By the end of their first year of implementation, 87% (*n* = 299) said they agreed or strongly agreed with the statement, "Reading Apprenticeship is an appropriate framework for literacy instruction in my classroom". Likewise, 87% (*n* = 299) agreed or strongly agreed that "The implementation of Reading Apprenticeship will improve student achievement in my classroom." At the end of the year, we also asked teachers to report their level of commitment to making Reading Apprenticeship work in their classroom and in their school. As shown in Figure 5, 79% (*n* = 275) of the Cohort 2 teachers were either fully committed or fairly committed to making Reading Apprenticeship work in their classrooms, while 65% (*n* = 226) reported to be fully or fairly committed to making RA work in their school. These buy-in and commitment levels are consistent with what Cohort 1 teachers reported in their first year of implementation. While teachers may feel that they have more influence and agency over what happens in their classroom, their commitment to building and supporting their RAISE school team will be important for sustainability.

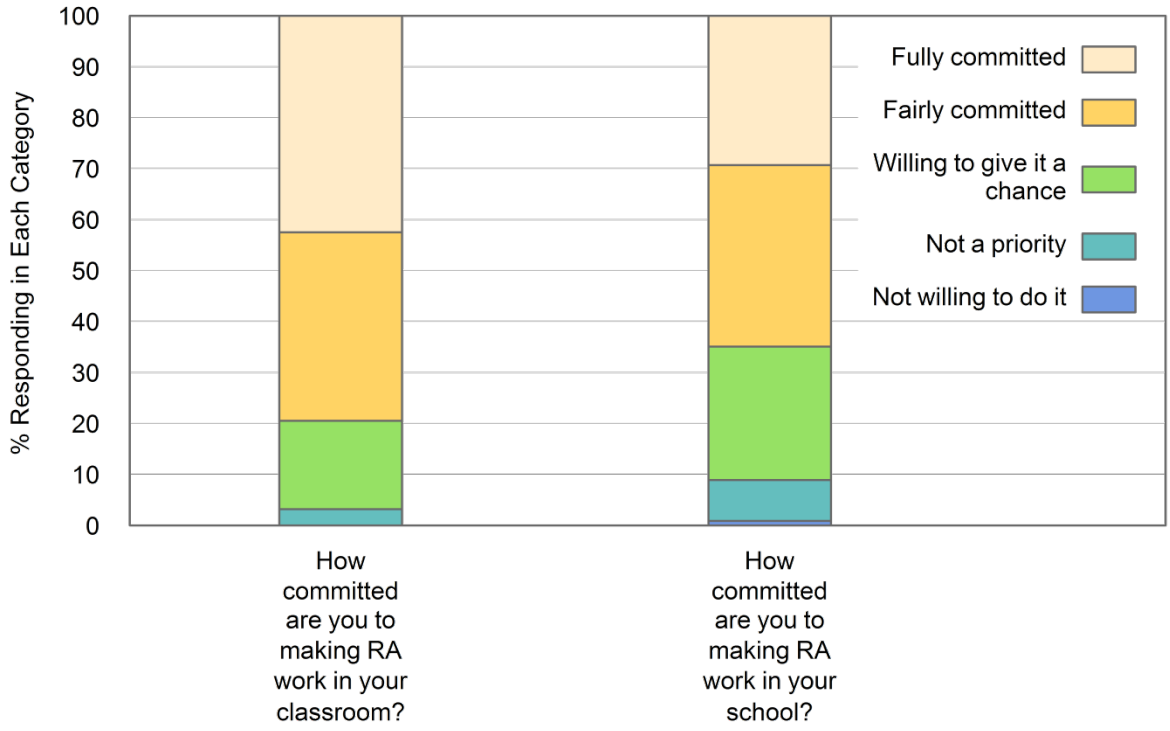

FIGURE D5. LEVEL OF COMMITMENT TO READING APPRENTICESHIP

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

n = 346 (classroom); 348 (school)

Source. Teacher Survey 3 from 2012-13 school year

Potential Supports and Barriers to Sustainability

To gauge which factors may hinder successful scale-up of RA, we asked teachers what challenges they faced implementing RA during their first year of implementation (teachers were able to check all that apply). Table D1 shows the responses ordered by most to least selected. The three most selected responses were:

- RA slowed down the pace of my instruction (48% [*n* = 168])
- Competing priorities (44% [*n* = 153])
- Insufficient time to collaborate (42% [*n* = 147])

Competing school and district priorities has been well documented in the literature as a primary challenge to sustainability (Coburn, 2003), and nearly half of Cohort 2 teachers cited competing priorities as a challenge to sustaining RA. They also cited several classroom factors as hindrances, such as pacing of instruction, student behavior, and abilities.[12] To a lesser extent, teachers reported

[12] The teachers who selected student ability were asked to describe which student abilities made sustaining RA a challenge. Three general themes emerged in their responses: Student motivation (e.g. engagement in school, in general), varied (reading) abilities in the class, students with "very" low reading/comprehension skills.

organizational and time constraints as challenges to implementing RA. Only a small percent reported facing no challenges. These results reflect the real challenges in implementing a program like RA but can be viewed in relation to the level of commitment and buy-in expressed by teachers.

SLI and the site coordinators should continue to help RAISE teachers think about how RA can be embedded within, or a solution to, other priorities, rather than being seen as having a conflicting or divergent agenda. During the RAISE Institutes, facilitators discuss that while it may take more time initially to incorporate RA into instruction, teachers will be able to make up this time as the year(s) progress, as students become more familiar and engaged in the classroom routines and practices. However, during the transition period, SLI and the site coordinators can work with administrators to develop strategies that will allow teachers to adjust pacing of content covered, and provide more time for collaboration.

TABLE D1. CHALLENGES FACED IN IMPLEMENTING RA

Challenge	% of teachers who selected challenge
RA slowed down the pace of my instruction	48%
Competing priorities	44%
Insufficient time to collaborate	42%
Student ability	41%
Student behavior	32%
RA takes too much time to incorporate into my instruction	23%
Insufficient parent support	10%
Insufficient materials	9%
Insufficient school administrator support	8%
Insufficient understanding of how to implement RA in class	8%
Insufficient district support	7%
RA is too much work to implement	7%
Misalignment between RA and required curriculum	6%
Insufficient training on RA	3%
I have not faced any challenges implementing RA	5%
Other	7%

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

n = 348

Sources. Teacher Survey 3 2012-13 (Cohort 2) school year

With competing priorities identified as a challenge to implementation, we asked Cohort 2 teachers how well RAISE aligned with the instructional goals of their classroom, the rigor of their courses/classes, the needs of their students, and the content standards at their schools. As shown in Figure D6, approximately half of teachers responded that RAISE was very well aligned with each of these factors. For each consideration, less than 5% of the teachers thought RAISE was not aligned. This supports a conclusion that in spite of the challenges, teachers are committed to working through them. It will be important to see whether this level of commitment is maintained, or is eroded in subsequent years.

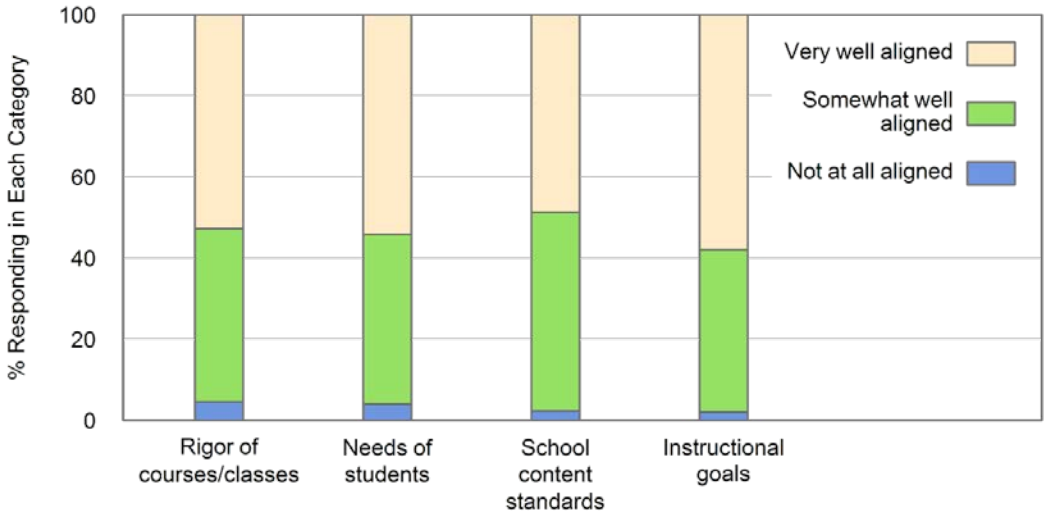

FIGURE D6. ALIGNMENT OF RAISE TO GOALS, RIGOR, NEEDS OF STUDENTS, SCHOOL STANDARDS

Note. For this question, teachers were asked to select the one response option that they felt best answered the question. *n* = 345-347, depending on question (Cohort 2)

Source. Teacher survey 3 from 2012-13 school year

ADMINISTRATOR SURVEY RESULTS

The following are results from the 2012-13 school year administrator survey. These results include data from administrators from schools with only Cohort 1 teachers (*n* = 16), administrators from schools with only Cohort 2 teachers (*n* = 52), and administrators with Cohort 1 and Cohort 2 teacher in their schools (*n* = 15).

Primary Reasons for Participating in RAISE

State site coordinators are primarily responsible for reaching out to and recruiting schools to participate in RAISE. While there are several reasons why districts and schools may choose to join RAISE, we asked school administrators to select up to three primary factors that led to their school's participation. Cohort 2 administrators identified the alignment of RA's pedagogy to their schools' practices and RA's prior evidence of effectiveness as two of the primary reasons to join RAISE.

- There is prior research showing that RA is effective at improving student achievement (52% [*n* = 27]).

- The pedagogy corresponds to the literacy practices advocated by my school (56% [*n* = 29]).

Additionally, 56% (*n* = 29) of the Cohort 2 administrators said that they joined because their teachers wanted to participate.

Evidence of Commitment, Buy-in, and Capacity

Administrators can support their RAISE teams in a variety of ways, including providing space/time for monthly meetings, materials, or planning/release time for trainings and collaboration. In order for administrators to provide a deeper level of instructional support and feedback, they must have a conceptual knowledge of the RA framework. At the end of the 2012-13 school year, we asked administrators to select which of the following responses best described their level of understanding of the RA model:

- I **don't know** anything **about it**.
- **I've heard about the general approach**, but do not yet know what RA looks like in practice.
- **I'm starting to be able to identify RA practices** as I observe/walk through teachers' **classrooms**.
- **I understand how the ideas of apprenticeship**, the four dimensions, and students' metacognitive conversations can **apply to teaching** at my schools.
- **I get it** and am referring to it often in my instructional feedback to participating teachers.
- Other.

As shown in Figure D7, 20% (*n* = 18) reported that they "get it" and refer to it often in their instructional feedback to teachers, and 30% (*n* = 26) reported that they understand the four dimensions, how students' metacognitive conversation can apply to teaching in their school, and 35% reported that they are able to identify RA practices as they observe/walk through teachers' classrooms. Less than 10% of the administrators reported that they didn't know about it or had only heard about the approach.

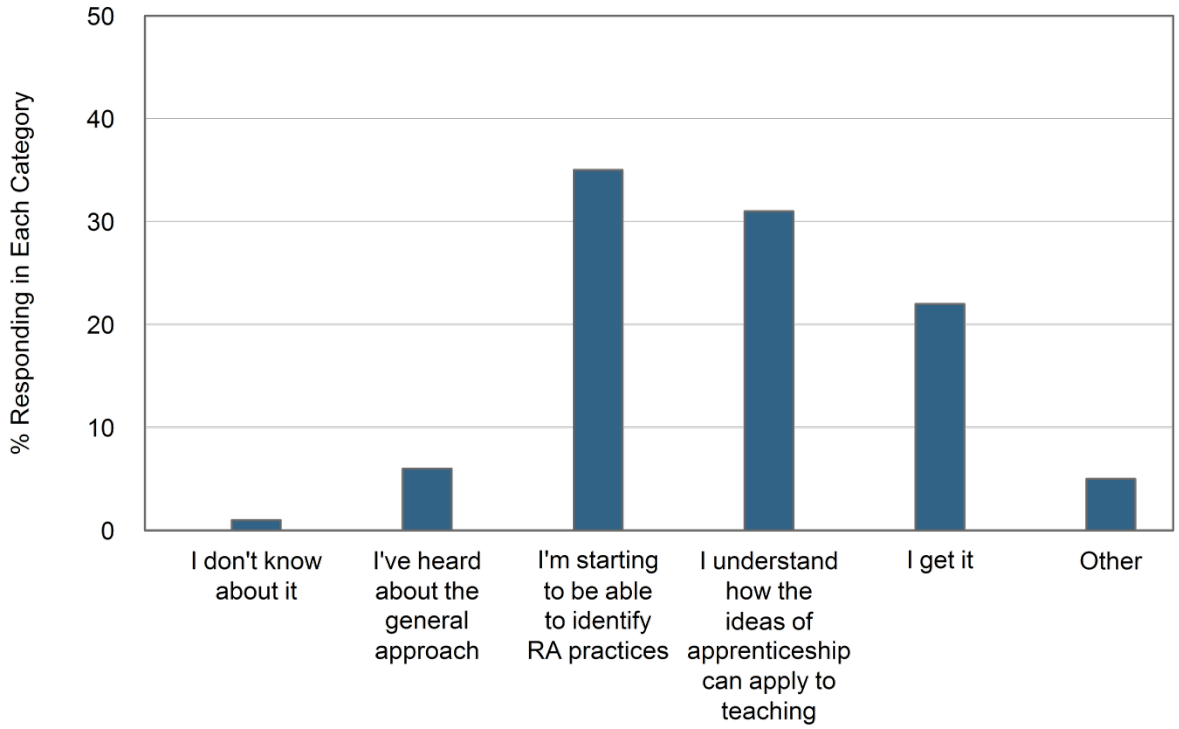

FIGURE D7. LEVEL OF UNDERSTANDING OF READING APPRENTICESHIP

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

n = 83

Source. 2012-2013 school year administrator survey

By the end of 2012-2013 school year, commitment and buy-in levels reported by RAISE administrators were fairly high. Eighty-seven percent (*n* = 72) of the RAISE administrators who completed the survey were either fully or fairly committed to making RA work in their schools (with half reporting that they were fully committed). One administrator reported that RAISE was "not a priority", however, none of the administrators said that they were "not willing" to commit to RAISE. Additionally, 95% (*n* = 79) strongly agreed or agreed that RA was an appropriate framework for literacy instruction in their school and 94% (*n* = 78) strongly agreed or agreed that the implementation of RA would improve student achievement at their school. It is important to point out that this survey was deployed in May, giving administrators a year of RAISE implementation in their schools to resolve their commitment level.

Potential Supports and Barriers to Sustainability

We asked several survey questions related to the specific contextual factors that may hinder or support successful scale-up and sustainability. At the end of the 2012-13 school year, we asked administrators what they thought would be the biggest challenges to sustaining RAISE in their schools over several years. As shown in Table D2, over a quarter of administrators said they did not think there would be any challenges to sustaining RAISE long term. However, 25% of the administrators identified competing initiatives and 13% identified budget constraints as primary challenges. By the end of the 2012-13 school year, most administrators saw challenges

to continuing implementation. RA was seen as competing with other priorities, rather than as a program that could facilitate new reforms. To alleviate these concerns, site coordinators should continue to work with administrators to better understand the local level priorities and continue providing cross-walks between RAISE and other initiatives. For example, cross-walks showing similarities between RAISE components and the Common Core, an important initiative being implemented in many of the RAISE districts.

TABLE D2. CHALLENGES TO SUSTAINING RAISE IN SCHOOL LONG TERM

Challenge	Percent
Competing initiatives	25%
Budget constraints	13%
Misalignment between RAISE and teacher preferences	7%
Teacher turnover	6%
Too time consuming	6%
Administrator turnover	5%
Misalignment between RAISE and district policy	1%
Too difficult for students	0%
Insufficient district support	0%
Other	8%
I don't know enough about RAISE to respond	1%
No challenges	27%

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

n = 83

Source. 2012-2013 school year administrator survey

With the ongoing concern of funding and budget constraints, we asked if administrators thought that RAISE would continue in their schools without the i3 federal funding. At the end of the 2012-13 school year, across the four states, 40% (*n* = 33) said "Yes", 20% (*n* = 17) said "No", and 40% (*n* = 33) said "I don't know." Thus, while 74% perceived challenges, only 20% anticipated that these would definitely end the program.

Based on similar patterns of reported challenges and funding issues found in Year 1, we wanted to examine if the barriers to sustainability were due to administrators' *knowledge* of potential supports, *access* to those supports, and/or *use* of the supports to sustain RAISE. Further understanding these barriers would allow us to provide more actionable feedback to SLI. For example, if we found an indication that knowledge or access to RAISE supports was low, we could suggest that SLI focus on disseminating information about available supports to local level administrators, and/or work with

administrators to identify ways to increase access. If, however, the likelihood of using supports was low, that may be an indication of low buy-in to RAISE, and we could try to further examine why. To learn more about these potential barriers, we asked administrators to rate their level of knowledge, access, and likelihood of use of the following supports to sustain RAISE:

- Funding sources for additional teachers to be RAISE trained
- RAISE professional networks of schools/districts/SLI to collaborate
- Resources (or materials) to provide to your district administrators about the benefits of RAISE
- Instructional resources to support classroom implementation of RA
- Additional RA professional development opportunities

Figure D8 through Figure D10 show the percent of administrators responding within each level of knowledge, access, and likelihood of use, for each type of support. The patterns for each type of support are similar, and we will focus on the relationships among administrators' knowledge of, perceived access to, and perceived likelihood of use of the supports that are potentially available for continuing support.

Figure D8 shows that, on average, about one-third of administrators reported that they were not at all knowledgeable about RAISE supports, while half said that they were somewhat knowledgeable. Figure D9 shows that a majority (about 70%, on average) of the administrators said that supports were somewhat accessible. Figure D10, however, shows that on average, 45% of administrators reported that they were very likely to use supports, with only 5% saying that they were not at all likely. The lower levels of knowledge, medium levels of access, and higher levels of "likelihood of use" indicate that administrators may benefit from more in-depth knowledge about RAISE supports, which would potentially increase the likelihood of use.

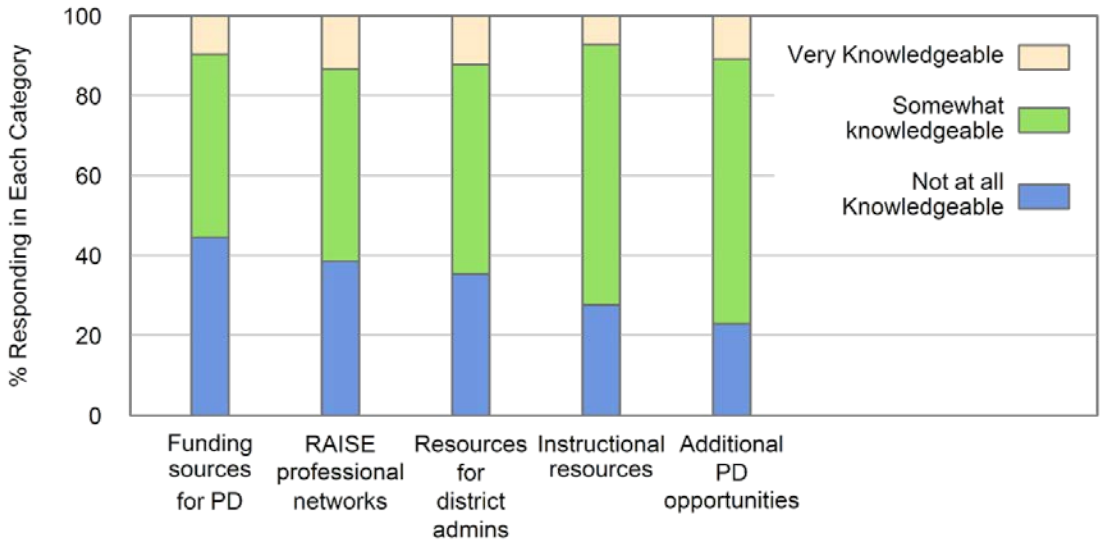

FIGURE D8. LEVEL OF KNOWLEDGE OF SUPPORTS TO SUSTAIN RAISE

Note. For this question, administrators were asked to select the one response option that they felt best answered the question. *n* = 83

Source. 2012-2013 school year administrator survey

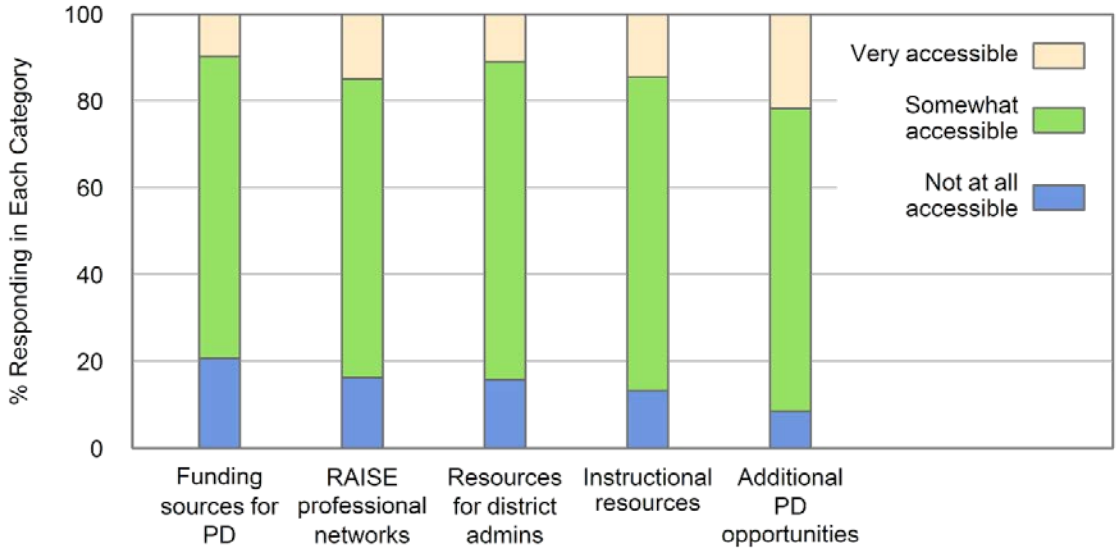

FIGURE D9. LEVEL OF ACCESS TO SUPPORTS TO SUSTAIN RAISE

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

n = 83

Source. 2012-2013 school year administrator survey

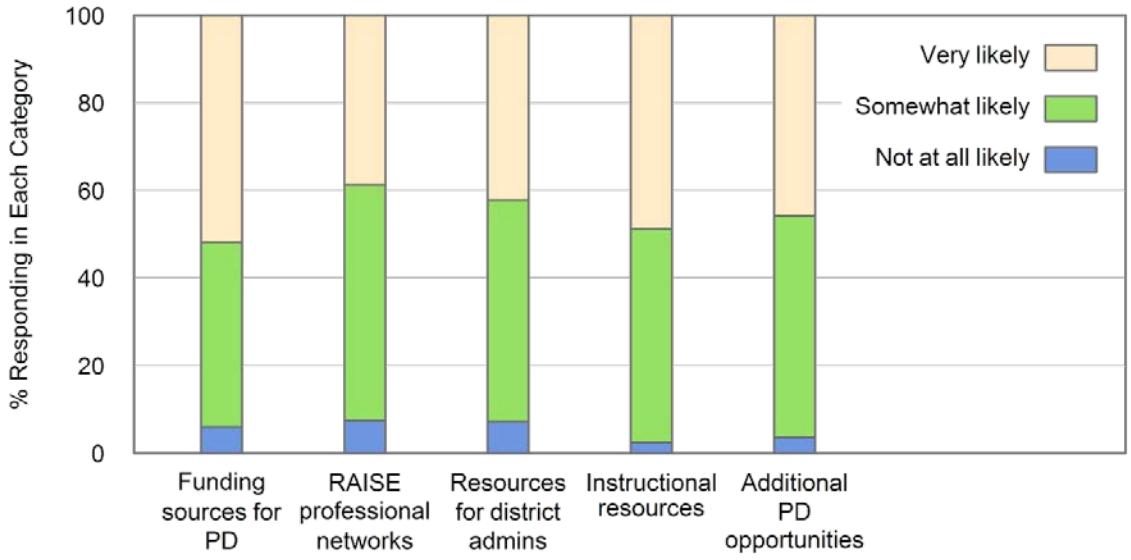

FIGURE D10. LIKELIHOOD OF USE OF SUPPORTS TO SUSTAIN RAISE

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

n = 83

Source. 2012-2013 school year administrator survey

Primary Takeaways

Takeaway 1: High rating of Professional Development and Use of RA Practices

- Over 80% of the Cohort 2 teachers reported that the RAISE Summer 5-Day Institute led to changes in their teaching practices. Likewise, the RAISE professional development was identified as one of the most effective activities for building capacity. While this indicates a high level of effectiveness, there are no formal RAISE trainings offered after the second summer. SLI does, however, offer ongoing training opportunities for teachers who choose to participate in the RAISE leadership positions (i.e. teacher leaders or RAISE professional development facilitators). Observing the level of challenge teachers face and the possible drop off in attendance at the monthly meetings, SLI might consider offering "refresher" training/courses for all other teachers. Given the cost and capacity associated with face-to-face trainings, an online course/platform may be more appropriate. Learning about the weaknesses of the *Thinking Aloud* site will be necessary.
- In the first year of implementation, nearly ¾ of Cohort 2 teachers reported using RA practices at least weekly. While there are currently no prescribed usage parameters, we would expect to see usage increase over time, as teachers are becoming more familiar and comfortable with the framework. We will continue to investigate these usage levels across cohorts and years. We may also examine how identified challenges of competing priorities affect usage. Furthermore, we will determine if the self-reported usage varies by subject area (e.g., if ELA teachers report higher usage than history or biology teachers).

Takeaway 2: High Levels of Commitment and Buy-in

- Both surveyed teachers and administrators reported high levels of commitment and buy-in to the RA framework. We will continue to investigate if this trend continues over time (and with no additional formal training). SLI may be able to support buy-in and sustainability by providing administrators with additional information about available supports to help them sustain RAISE.

Takeaway 3: Collaboration is an Important Support for Sustainability; Competing Initiatives and Priorities are a Barrier.

- Teachers report that opportunities for collaboration are an important support for sustaining RAISE. Collaboration was identified by teachers as the primary support for building capacity. The lack of time to collaborate was identified as a primary challenge of implementation. For many schools and teachers, implementing RA is a shift in pedagogy. SLI and site coordinators should consider working with administrators to set up structures to support collaboration in school (e.g. common prep periods), and outside of the school structure. SLI developed the *Thinking Aloud* website as a support for collaboration and sharing ideas. However, it has failed to take off (there was very limited use in either Cohort 1 or 2). Additionally, teachers are not necessarily using the monthly meetings as collaboration opportunities (attendance decreased throughout the year). The nature of collaboration that is most useful (e.g. grade or subject specific, formal or informal) will continue to be an area of investigation.
- Teachers and administrators identified competing initiatives and priorities as a primary challenge to sustaining RAISE. These results indicate that SLI and the state site coordinators should continue to work with the local level stakeholder to develop supports and plans to

address 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, SLI 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.