

Guided Reading Professional Learning: Effect on Instructional Behaviors and Learner Achievement

Prepared for: Lindsay Unified School District Teacher and School
Leader Initiative (TSL)

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Executive Summary

Lindsay Unified School District (LUSD) implemented a partnership with The Learning Accelerator (TLA) and software vendor Yet Analytics to conduct a study to understand the relationships between their learning facilitator and leader professional learning offerings and learner outcomes during the 2018-19 school year. These professional learning opportunities were funded by a federal Teacher and School Leader (TSL) Grant. LUSD is pioneering the use of research science to understand the potential impact of professional development; this study is its first step.

This executive summary highlights key findings from research conducted by TLA to understand if learning facilitators' (LUSD's preferred term for educators) participation in the TSL Guided Reading Learning Academies and Micro-Credentials professional development helps LUSD progress towards its mission to provide each learner with the best possible learning facilitator, as well as ensure all learners read at content level, by:

1. Testing for increases in learners' reading achievement (as measured by the SRI or DRA assessments) and language achievement (as measured by California's SBAC ELA assessment).
2. Documenting certified learning facilitators' engagement in educator actions related to the district's Adult Learning Curriculum outlined in LUSD's [Instructional Look Fors](#).
3. Investigating if a certain intensity of participation is critical to being effective.

Guided Reading is a small-group instructional method with the goal of building independent readers who can read fluently with comprehension. A Guided Reading learning facilitator plans lessons and focuses instruction on the areas where learners need support. By focusing instruction on these areas, a Guided Reading lesson prepares learners to be able to read the next level of text complexity.

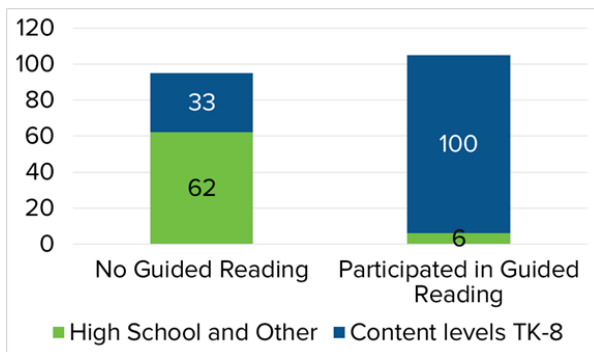
In LUSD, Guided Reading professional learning was delivered as a four-day, in-person professional learning workshop where learning facilitators were trained on specific skills to implement the Guided Reading model and protocols in their learning environments. Learning facilitators could opt to attend professional learning with or without the intent to seek certification of proficiency. Certification could be attained for either a Learning Academy or Micro-Credential, and only if all Guided Reading sessions were attended. The certification process included the following steps and incentives:



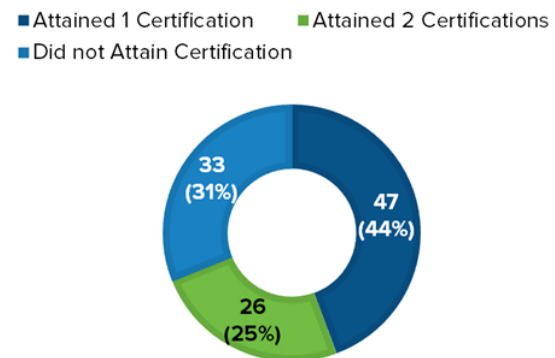
To date, two cohorts of learning facilitators ($n = 84$ and $n = 22$) have completed a Guided Reading professional learning opportunity. These 106 individuals represent 53% of all learning facilitators in LUSD (74% of learning facilitators in content levels Transitional Kindergarten-8) who serve 2,070 content level Transitional Kindergarten (TK)-8 learners.

In addition, 45 of the 52 learning facilitators who certified with Cohort 1 enrolled in subsequent Cohort 2 Guided Reading opportunities.

Number of Learning Facilitators who Participated in Guided Reading by School Level

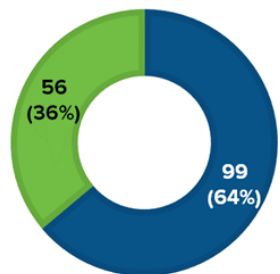


Percentage of Participating Learning Facilitators who Attained Guided Reading Certifications



Percentage of Guided Reading Enrollments Resulting in Certification

■ Resulted in Certification ■ Did Not Result in Certification

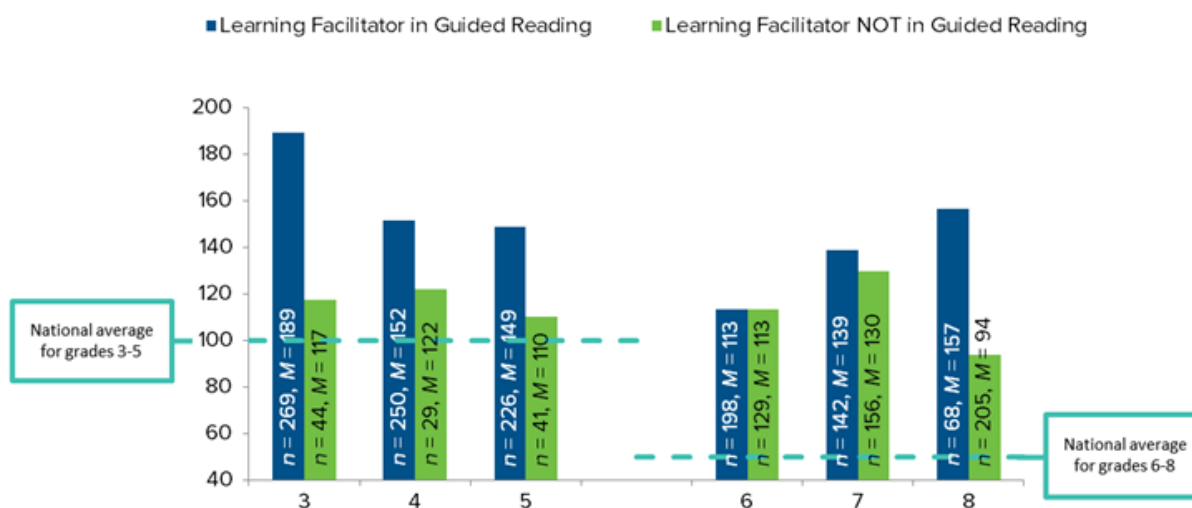


Key Finding #1: Overall, learners whose learning facilitator participated in Guided Reading professional learning had higher average reading score gains than learners whose learning facilitator did not participate.

Reading achievement gains were higher in elementary than middle content levels, and SRI reading scores **were higher than national average expected growth**¹. Overall, effect sizes ($0.10 \leq d \leq 0.634$) were small when compared to general effect size guidelines, but typical when compared to benchmarks of effect sizes in educational gains².

Trends were clearer and more pronounced in benchmark reading assessments, the Diagnostic Reading Assessment (DRA) and Scholastic Reading Inventory (SRI), than in California's annual language assessment, the Smarter Balanced Assessment Consortium's English Language Arts (SBAC). This was expected, partly because SBAC language outcome scores include subtest scores for writing, listening, and speaking, in addition to reading.

Mean SRI Growth from August 2018 to June 2019 by Content Level

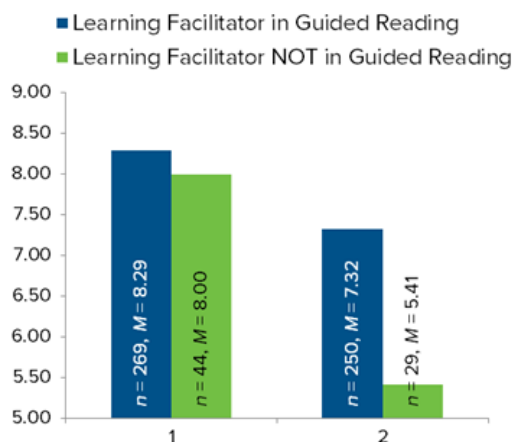


¹ Scholastic Inc. (2007b). *SRI Technical Guide (2007)*, New York, NY: Scholastic Inc. Education Group. Retrieved from:

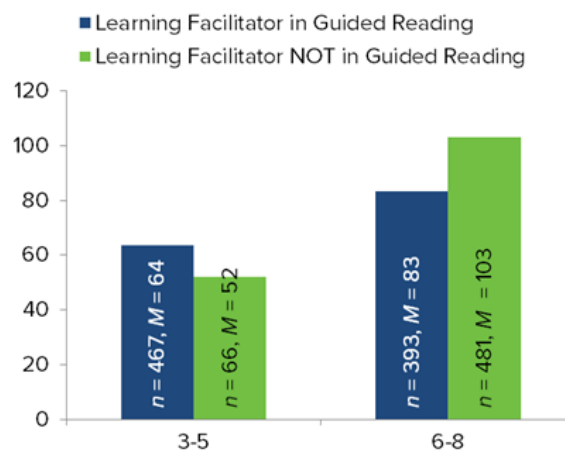
https://www.hmhco.com/product-support/content/techsupport/sri/manuals/SRI_Tech_Guide_05_10.pdf

² Lipsey, M. W., Puzio, K., Yun, C., Hebert, M. A., Steinka-Fry, K., Cole, M. W., Anthony, K., & Busick, M. D. (2012). *Translating the statistical representation of the effects of education interventions into more readily interpretable forms* (NCSE 2013-3000). Washington, DC: National Center for Special Education Research, Institute of Education Sciences.

Mean DRA Growth from August 2018 to June 2019 by Content Level



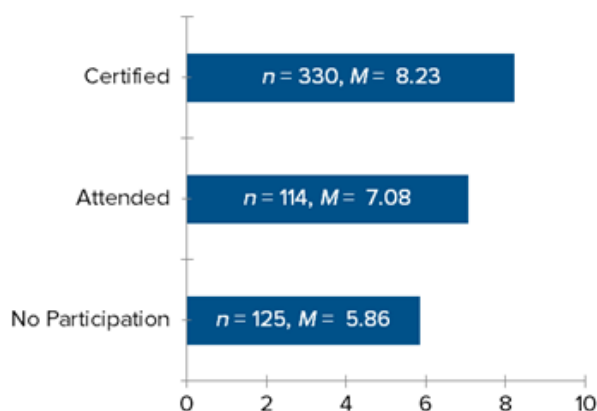
SBAC 2019 Growth from SBAC 2018 Scores by Content Level



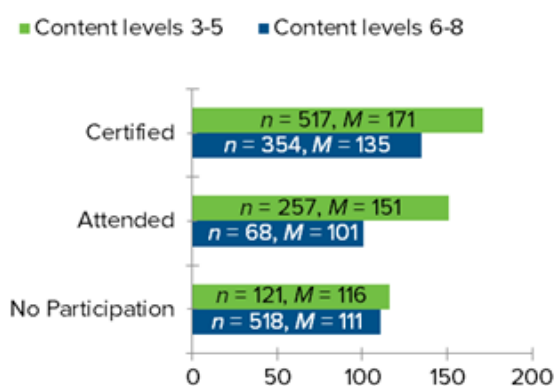
Key Finding #2: Certification matters.

Across content levels 1-8 **reading growth scores were higher when the learning facilitator certified** after participating in Guided Reading Learning Academy or Micro-Credential.

DRA Growth from August 2018 to June 2019 by Depth of Participation in Guided Reading for Content Levels 1-2

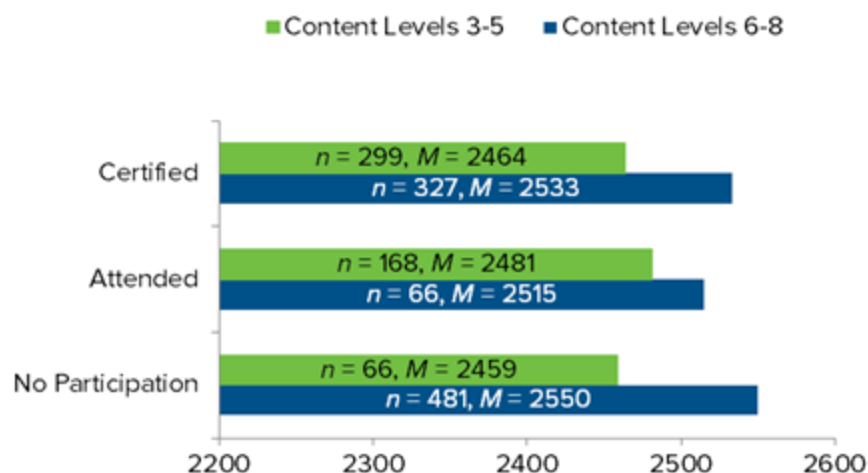


SRI Growth from August 2018 to June 2019 by Depth of Participation in Guided Reading for Content Levels 3-5 and 6-8



Similar to the trends in Key Finding #1, these trends did not hold for language outcome scores on SBAC. This was expected, partly because SBAC language outcome scores include subtest scores for writing, listening, and speaking, in addition to reading.

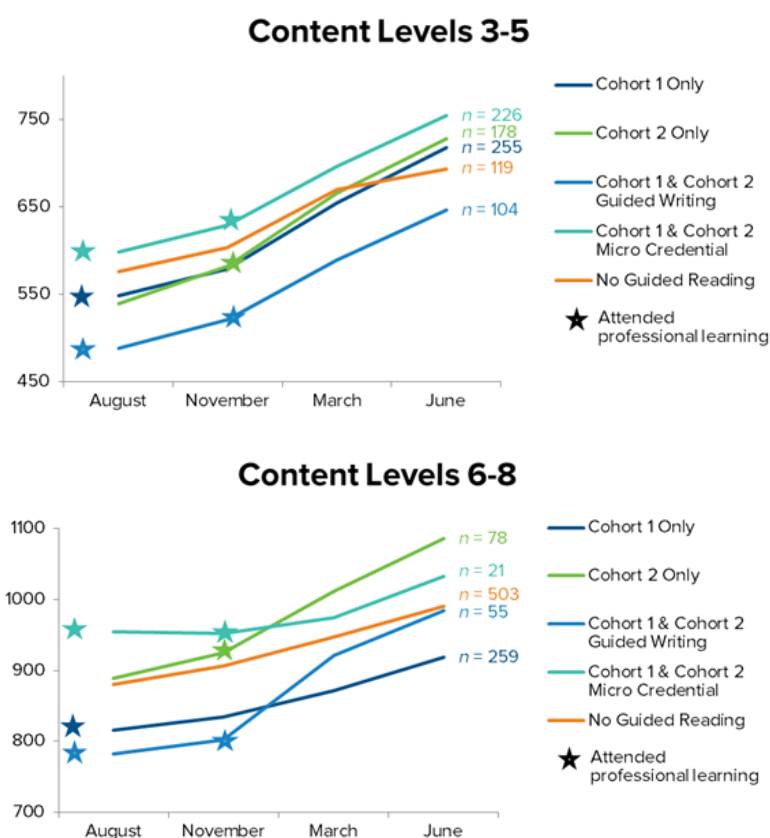
2019 SBAC Means, Adjusted for 2018 Scores, by Depth of Participation in Guided Reading for Content Levels 3-5 and 6-8



Key Finding #3: Guided Reading impacts on learners are both immediate and sustained.

Cohort 1 received the professional learning in July 2018, before measurement of August 2018 reading scores, so the August 2018 scores are not a true pretest for this group, and effects for this group are potentially underestimated. Growth scores were highest for Cohort 2, then Cohort 1, then learners who did not have a learning facilitator participating in Guided Reading professional learning. **This suggests both sustained effects of Guided Reading training in addition to more immediate, proximal effects from Cohort 2, who received training in November 2018.**

Timeline of SRI Growth Scores and Guided Reading Participation for each Cohort in Content Levels 3-5 (left) and 6-8 (right)



Note. n's in these charts represent the number of learners with learning facilitators in each cohort

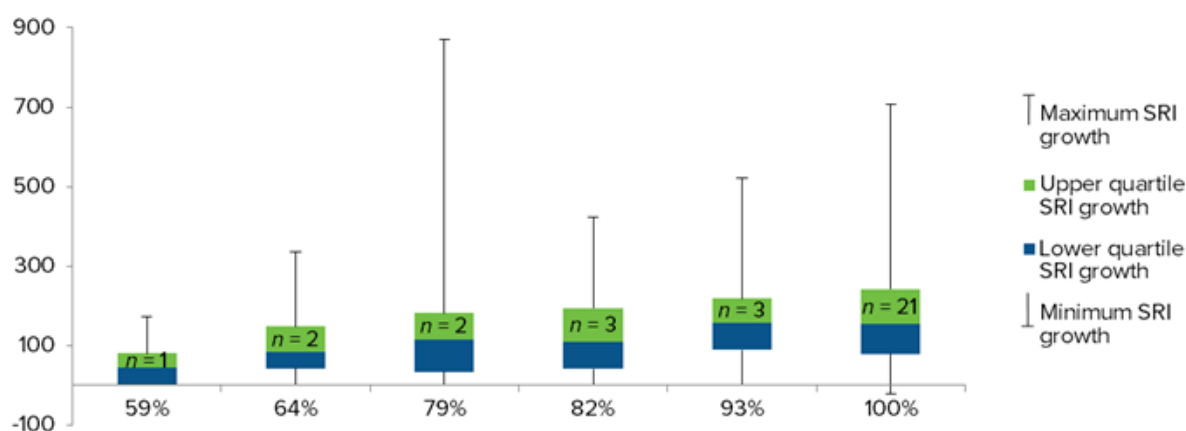
Key Finding #4: Guided Reading professional learning allows space for learning facilitators to exhibit educator actions aligned to the Adult Learning Curriculum in a learning environment.

Learning facilitators who attained certification exhibited high rates of LUSD's desired Instructional Look For educator actions, particularly those actions associated with the Community principle. For example, across observations for Cohort 1 and Cohort 2, 83-86% of learning facilitators demonstrated all selected and aligned educator actions from the Community principle during a Guided Reading lesson observation. And, **the percentage of all educator actions was positively related to reading growth scores.**

Percentage of Learning Facilitators Demonstrating All of the Selected and Aligned Instructional Look Fors in Each Relevant Principle of the Adult Learning Curriculum



Relationship between Frequency of Observed Educator Actions and SRI Reading Growth Scores



Note. n's in this chart represents the number of Learning Facilitators in each category

The Take-Away

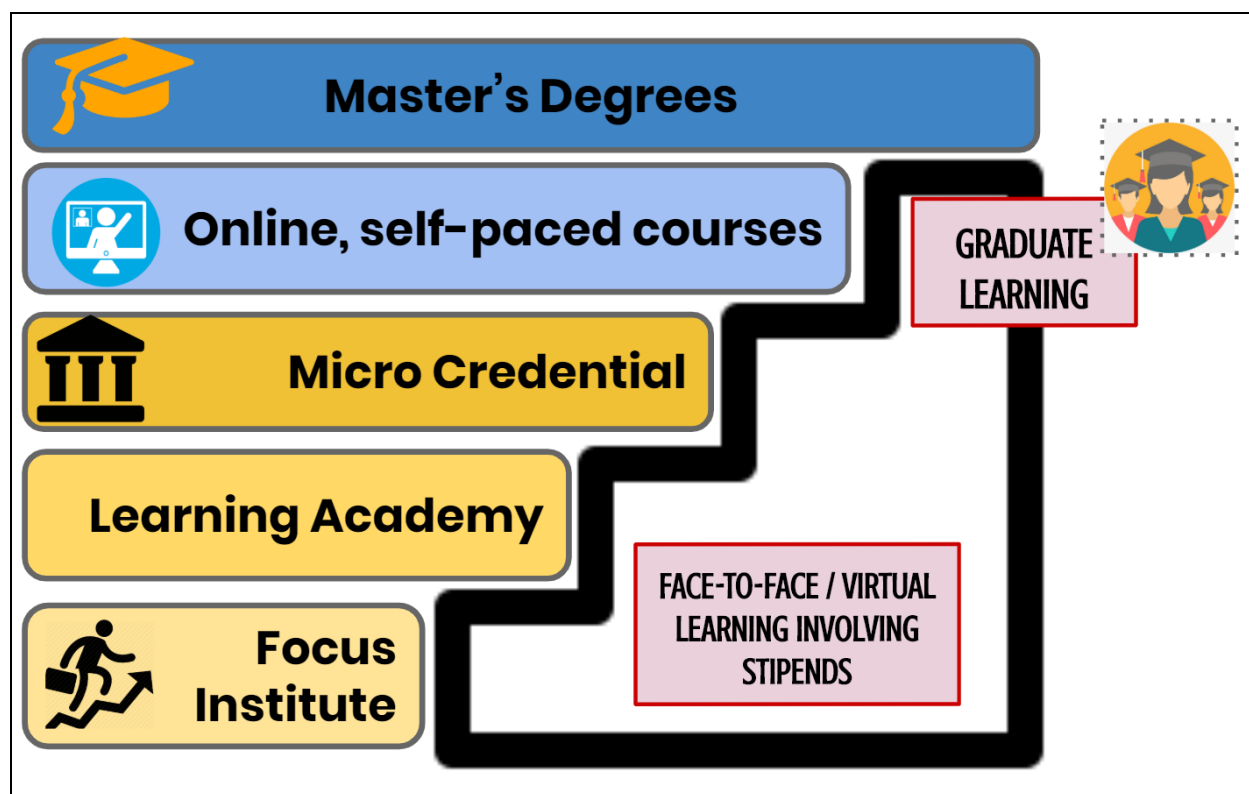
The results from the 2018-19 Academic Year showed a positive relationship between learning facilitators' participation in Guided Reading professional learning and learners' reading growth. **This suggests Guided Reading has been a successful tool for providing LUSD's learners with the best possible learning experience, and the opportunity to attain their fullest potential reading achievement. Certification is also a potentially powerful mechanism for converting professional learning experiences into visible instructional and achievement-related changes in the classrooms.**

As we continue to investigate LUSD's Teacher and School Leader professional learning offerings, additional cohorts and data will help illuminate where the most value lies and how LUSD's Adult Learning Curriculum principles and educator actions are related to learning.

Introduction


Driven by Lindsay Unified School District's (LUSD) TSL Empower Lindsay Grant, a federal Teacher and School Leader (TSL) Grant, learning facilitators are provided with a menu of professional learning opportunities. These opportunities are designed to develop the learning facilitators' and school leaders' capacity to bring to life the district's [Strategic Design](#) and the [Ideal Learning Experience](#) for each learner in LUSD, a commitment that learners have the very best learning experience every day. Professional learning opportunities are scaled to support various levels of development and personalized paths for each learning facilitator's professional growth. They range from supporting multi-year master's degree programs to providing daylong focus institutes on a specific instructional or leadership topic.

Chart 1: Types of Professional Learning offered by LUSD through the TSL Grant



All professional learning opportunities focus on topics directly related to LUSD's Adult Learning Curriculum, Performance-Based System, and district academic initiatives. Many are constructed and modeled after the LUSD vision of personalization, such as allowing learner voice and choice,

or customized skill development. All TSL professional learning opportunities include a performance-based compensation strategy, such as a financial incentive or increased pay scale credits, and all are voluntary.

 NOTE!	<p><i>We use the following LUSD language throughout this report:</i></p> <ul style="list-style-type: none"> • <i>Learner = student</i> • <i>Learning facilitator = teacher</i> • <i>Learning environment = classroom</i> • <i>Learning community = school</i>
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Guided Reading

This report focuses on the Guided Reading Learning Academy and Micro-Credential professional learning opportunities. Guided Reading is a small-group or individualized learning reading context that provides support and scaffolding for each learner to develop their reading skills and strategies. LUSD's Guided Reading professional learning series is an external collaboration with the renowned expert in the field, Dr. Jan Richardson (Richardson, 2019), and her consultancy team: Dr. Carolyn Gwinn, Ellen Lewis, Lisa Hall, Sandra Weaver, and Deb Rosenow. The professional learning program is described as follows:

“Participants will learn how to plan powerful, systematic Guided Reading lessons. Learn each of Jan Richardson’s five Guided Reading routines from Pre-A through Fluent, appropriate for pre-readers through Fluent readers, and learners across all elementary content levels.”

The Guided Reading 101 Learning Academy is a comprehensive four-day professional learning workshop with the additional option to earn a certification of proficiency via a portfolio of practice and a lesson observation. As part of the TSL grant, learning facilitators receive performance-based compensation for both attendance and for successful certification. The Guided Reading 201 Micro-Credential follows a similar four-day, in-person format with the certification option, but learning facilitators are given a more extensive training program, are expected to complete a more comprehensive portfolio of practice, and receive higher certification performance incentives. Participants are required to successfully certify in the Guided Reading 101 Learning Academy as a prerequisite to register for the Guided Reading 201 Micro-Credential.

Chart 2: Differences between the Learning Academy and Micro-Credential formats

 <p>LEARNING ACADEMIES</p> <p><i>Extended Professional Learning with Incentivized Certification</i></p>	<ul style="list-style-type: none"> → Multiple days of professional learning with certification through learning environment observation and learning portfolio → Focused professional learning on an instructional topic or pedagogical practice → May include relevant materials & resources for instruction with learners 	 <p>\$500 per day stipend for learning facilitators</p> <p>\$1000 stipend upon successful certification</p>
 <p>MICRO CREDENTIALS</p> <p><i>Comprehensive Professional Learning with Incentivized Certification</i></p>	<ul style="list-style-type: none"> → Multiple days of professional learning with certification through learning environment observation, virtual coaching, and learning portfolio and evidence → Focused professional learning on an instructional topic or pedagogical practice → May include relevant materials & resources for instruction with learners 	 <p>\$500 per day stipend for learning facilitators</p> <p>\$2000 stipend upon successful certification</p>

During the four-day Guided Reading workshop, sessions 1-3 focus on learning the Guided Reading procedures, protocols, and skill sets and session 4 focuses on discussing the learning facilitators' experiences with classroom implementation and next steps for deepening their practice. Learning facilitators who pursue certification in Guided Reading must have attended all four days, submitted a portfolio of practice, had a learning environment observation, and participated in individual coaching and feedback. The certification components focus on measuring implementation of Guided Reading strategies through actions that reflect the outcomes of Dr. Richardson's Guided Reading rubrics in alignment with LUSD's [Adult Learning Curriculum](#), which is comprised of six principles made up of Instructional Look Fors that can be demonstrated through observable educator and learner actions in learning environments. Typically, the certification component occurs between sessions 3 and 4. As of August 2019, two cohorts of Guided Reading professional learning opportunities have been offered; these completed offerings are the focus of this report.

Chart 3: The Six Adult Learning Curriculum Principles



Guided Reading and the Adult Learning Curriculum

In order to attain certification, learning facilitators must implement the Guided Reading model in their learning environments through Adult Learning Curriculum Instructional Look Fors. The Guided Reading consultants (Dr. Richardson and her team) ensure this by completing a learning environment observation that focuses on four outcomes:

1. Learning facilitator creates a learning environment conducive to Balanced Literacy.
2. Learning facilitator uses appropriate lesson components of the Next Step Forward in Guided Reading lesson plan aligned to the needs of the learner.
3. Learning facilitator ensures engagement of learners during the implementation of the Guided Reading lesson.
4. Learning facilitator engages in meaningful reflection using learner data from informal and formal assessments to determine next instructional steps to accelerate readers.

Observation Protocols

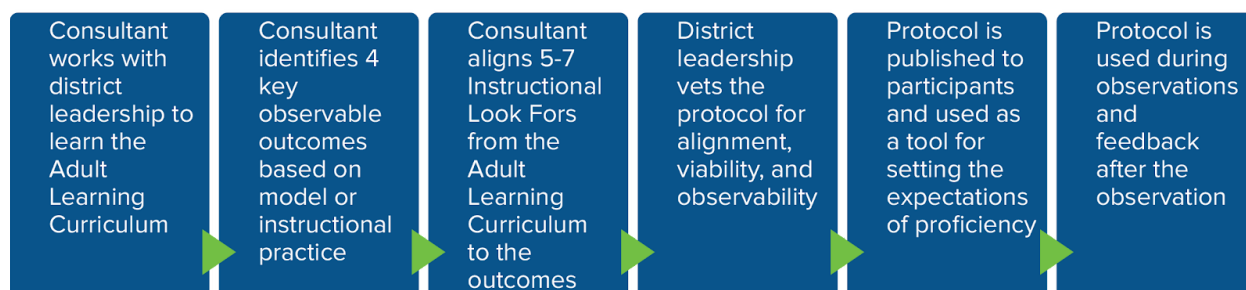
The four outcomes mentioned above represent what the observer expects to see when Guided Reading is implemented with proficiency in a learning environment. To determine the extent to which these four outcomes occur in a learning environment (classroom), the Guided Reading consultant team developed observation protocols to ensure alignment to Dr. Richardson's formal Guided Reading rubrics, the Adult Learning Curriculum, and viable implementation strategies. There are different observation protocols for each level of certification.



[Dr. Jan Richardson's Guided Reading Rubrics- Pre-A to Fluent](#)

[LUSD's Guided Reading 101 Observation Protocols](#)

To develop these protocols the consultants were first exposed to and given practice with the Adult Learning Curriculum, after which they selected appropriate educator actions from the Adult Learning Curriculum's Instructional Look Fors that aligned to the four instructional outcomes. Thus, each outcome was aligned to the formal Guided Reading rubrics and had five-seven associated Instructional Look For educator actions from an Adult Learning Curriculum principle. In order to attain certification, learning facilitators had to demonstrate that each outcome was being used in their learning environment by exhibiting educator actions during their observation. The flowchart below visualizes the process used to create, publish, and implement the observation protocol.



The structure of the observation protocol represents two intents: (1) to create quantitative data that can be analyzed for efficacy, implementation, and adult behaviors and, (2) to serve as a descriptive tool and allow the observer a space to capture qualitative notes and feedback to best

support and coach the learning facilitator. The visual below is the first outcome on the Guided Reading 101 observation protocol used in Cohort 2. This outcome focuses on the actual environment of the lesson and the importance of norms, procedures, routines, and seamless transitions between activities, as well as well-prepared Guided Reading tables that are ready for the small-group lesson of the day.

OUTCOME 1	LF has created a learning environment conducive to Balanced Literacy anchored by the Guided Reading Lesson.	Observed
CUSTOMIZATION	<i>2b-5: Establishing routines, procedures, and resources (such as task cards) so that students can drive their learning, know what to do when they need feedback, can assess when to complete a task or engage in collaborative support</i>	<input type="checkbox"/>
CUSTOMIZATION	<i>2b-1: Designed activities and resources so students can move fluidly between tasks without teacher direction or support, including extension activities</i>	<input type="checkbox"/>
COMMUNITY	<i>1b-5: Facilitating predictable routines and traditions that create a familiar and consistent learning environment.</i>	<input type="checkbox"/>
COMMUNITY	<i>5b-1: Maintaining a physical space that has a clean and orderly arrangement and helpful visual anchors that communicate community values, vision, and norms</i>	<input type="checkbox"/>
NOTES		

In capturing evidence for this outcome, the consultant (i.e., assigned learning environment observer) first looks at the outcome itself and considers:

- *Do I see a well-prepared Guided Reading table and environment?*
- *Is there evidence that the learning facilitator has practiced these routines and procedures with learners?*
- *Is it clear that the activities and resources are designed in a way to best utilize time and meet learners at their levels?*

In considering this, if the consultant sees sufficient evidence that these aspects are in place, per the outcome, they mark the respective educator actions for Outcome 1 as OBSERVED in the right-hand column. **A learning facilitator must proficiently demonstrate all four Guided Reading outcomes using Adult Learning Curriculum Instructional Look Fors to receive their certification.**

Research Questions

The LUSD grant team and TLA team worked together to identify two main research foci and six sub-questions.


First, is the Guided Reading professional learning initiative *effective* in achieving the desired outcomes? This set of research questions focuses on the efficacy of Guided Reading professional learning in producing the desired instructional and learner achievement outcomes.

1. Do learners with learning facilitators who participate in Guided Reading have higher reading achievement growth scores than learners with learning facilitators who have not participated in Guided Reading?
2. What Instructional Look Fors do learning facilitators engage in during observation for certification?
3. Is there a relationship between learning facilitators' enacting the Instructional Look Fors and learners' reading achievement?

Second, where is the best *value* in producing changes? This set of research questions focuses on the relative effectiveness of the different types of participation in the Guided Reading opportunities, or differing relationships between types of participation and instructional and learner outcomes.

4. Does reading growth differ across intensity of participation in Guided Reading?
5. Does reading growth differ across content levels?
6. Does engagement in Instructional Look Fors differ across intensity of participation in Guided Reading?

Effect sizes will be provided when available for each research question along with other metrics that may be useful in interpreting the importance of the results and effects (Lipsey et al., 2012).

 NOTE!	<i>These analysis and results sections of this report are organized by outcome: reading achievement and Instructional Look For educator actions; but the research questions are reviewed together in the same order as listed here (by foci) in the discussion section.</i>
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This report builds on, and in some places, refers to, mid-year analyses that were completed using March 2019 data and published in May 2019. While investigating the research questions listed above, some additional questions and perspectives were added; these are discussed in the “Additional Insights” section.

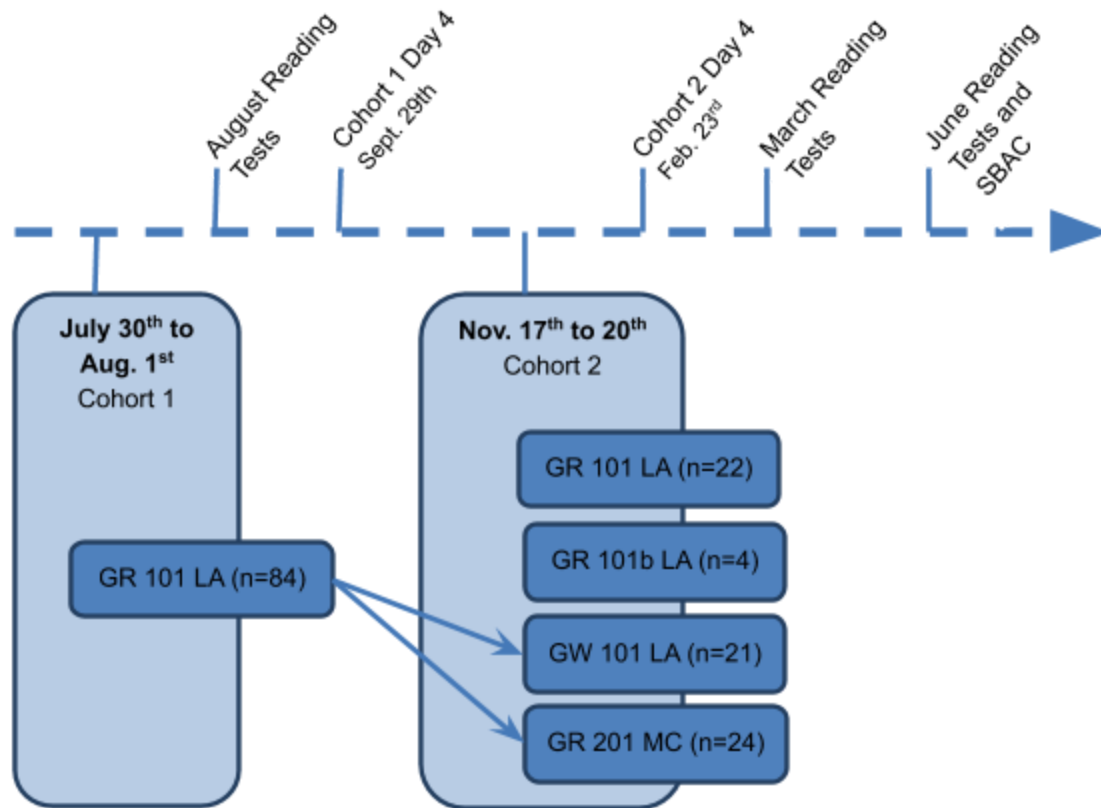
Research Methods

In this section we provide an overview of the 2018-2019 timeline for Guided Reading professional learning along with descriptive statistics on learning facilitators' participation rates and patterns (independent variables) as well as Instructional Look Fors observation protocols and learners' reading scores (dependent variables).

Guided Reading Participation






During the 2018 - 2019 school year, LUSD offered two standard Guided Reading 101 Learning Academies, one specialized Guided Reading 101b Learning Academy, one Guided Writing 101 Learning Academy, and one Guided Reading 201 Micro-Credential. The Guided Reading 101b Learning Academy was offered to a subset of four learning facilitators in Cohort 2 who benefitted from individualized attention during the training. Guided Writing 101 Learning Academy was a variation of Guided Reading offered to learning facilitators who had participated in Guided Reading 101 Learning Academy. As the objectives and targeted outcomes were aligned with the overall Guided Reading 101 Learning Academy goals, these versions were combined with Guided Reading 101 Learning Academy in the analysis. Learning facilitators could only enroll in the Guided Reading 201 Micro-Credential if they attained certification in the Guided Reading 101 Learning Academy.

Chart 4: Timeline and Enrollment in the 2018-19 Academic Year Guided Reading Professional Learning Opportunities



In total, there have been 106 participants across all five Guided Reading opportunities and 45 of these (42%) have engaged in more than one Guided Reading opportunity. An additional staff member enrolled in Guided Reading but was not retained in the analysis. The majority of participants sought at least one certification: 44% certified once ($n = 47$), 25% certified twice ($n = 26$), leaving only 31% of the participants who did not seek certification ($n = 33$). All but six of the participating learning facilitators taught in content levels Transitional Kindergarten (TK)-8 and the majority of participating learning facilitators (81%) were in content levels K-5.

Chart 5: Learning Facilitator Characteristics

<p>42% participated in more than one Guided Reading opportunity.</p> 	<p>45% certified once; 36% twice.</p> 
<p>77% are dedicated learning facilitators; 23% are education and literacy specialists.</p> 	<p>81% of the learning facilitators teach content levels TK-5.</p> 
	<p>100% of learning facilitators at Reagan and Roosevelt Learning Communities participated in Guided Reading.</p> <p>Across the remaining learning communities, 46-60% of the learning facilitators in each learning community participated.</p>

The majority of participants (77%, $n = 83$) were dedicated learning facilitators. About a quarter of the participants were Education Specialists, Intervention Specialists, or Literacy Specialists, who although they work with learners full time, are not consistently connected to specific learners. In this report, specialists' participation are included in the learning community-level comparisons.


 <p>NOTE!</p>	<p><i>A number of Certified and Classified Administrators also participated in the training but were not included in participation numbers nor in analyses. Only learning facilitators who participated in Guided Reading from July 2018 to February 2019 and had assigned learners were included in the data analysis sample.</i></p>
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Table 1: Number of learning facilitators who participated in Guided Reading and number of learners assigned to each, by learning community


Learning community	Number of learning facilitators in Guided Reading (number of learners)			% total learning facilitators in Guided Reading
	K-2	3-5	6-8	
Jefferson	5 (118)	6 (149)	0 (0)	55%
Kennedy	4 (96)	4 (109)	1 (27)	46%
Lincoln	5 (118)	4 (132)	2 (43)	60%
Reagan	5 (134)	5 (130)	4 (119)	100%
Roosevelt	5 (106)	7 (162)	6 (161)	100%
Washington	6 (208)	6 (119)	3 (85)	50%

Reading Achievement Measures

Learners' reading scores were measured using the Diagnostic Reading Assessment (DRA; Pearson, 2019) for those in levels TK-2 and the Scholastic Reading Inventory (SRI; Scholastic, 2019) for content levels 3-8 learners. Reading scores were reported in August 2018, November 2018, March 2019, and June 2019. A reading growth score was calculated for each learner by subtracting the August 2018 lexile score from the March 2019 lexile score (called mid-year) and June 2019 lexile score. Unless noted, the results presented below measure growth between August 2018 and June 2019 test dates.

$$\text{Reading growth score} = \text{June 2019 lexile score} - \text{August 2018 lexile score}$$

In addition, the Smarter Balanced Assessment Consortium was given at the end of the year to all content level 3-8 learners. There are substantial differences between these measures. Whereas the SRI and DRA are benchmark and interim reading assessments that are given at multiple points throughout the year, the SBAC is a summative assessment of language arts at a single point in time. Additionally, the SRI and DRA assess reading fluency, comprehension, and vocabulary acquisition and knowledge. The SBAC for English Language Arts is a broader language assessment that assesses writing, speaking, and listening in addition to reading.

 NOTE!	<i>Most descriptive analyses included all available data while empirical analyses employed listwise deletion, i.e., exclusion of learners missing a score (SRI/DRA: 3-4%; SBAC: 29%).</i>
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Diagnostic Reading Assessment (DRA)

The [DRA](#) measures reading ability in five key areas: phonemic awareness, phonics, vocabulary development, reading fluency and reading comprehension. The DRA is not administered in August in kindergarten, so TK-K was analyzed separately from content levels 1-2. TK and K analysis simply looked at March and June 2019 Lexile scores ($n = 366$) while growth scores were calculated for content levels 1 and 2 ($n = 576$).

Table 2: Descriptive statistics for DRA scores

Content level	n	Range	$M (SD)$		
			August	March	June
TK & K	374	0-24	--	3.19 (2.43)	4.64 (3.43)
1 & 2	585	1-70	12.94 (9.26)	17.2 (9.73)	20.50 (10.99)
1	317	1-40	7.32 (5.34)	12.09 (6.59)	15.34 (7.91)
2	264	1-70	19.36 (8.60)	23.03 (9.47)	26.60 (11.01)

Note. n = sample size. M = mean. SD = standard deviation.

 NOTE!	<i>The DRA is not administered in August in kindergarten, so TK-K was analyzed separately from content levels 1-2. TK and K analysis simply looked at March and June 2019 Lexile scores ($n = 374$) while growth scores were calculated for content levels 1 and 2 ($n = 576$).</i>
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Scholastic Reading Inventory (SRI)

The [SRI](#) is a criterion-referenced test of reading comprehension. Overall, 1,836 learners had August 2018 and June 2019 data and were included in the analysis. Because expected annual growth in SRI reading scores is higher in elementary than middle content levels (SRI trends, [Scholastic, 2007](#); national trends, NCES, 2016), the relationship between Guided Reading on reading growth scores might be underestimated if all content levels are combined. Thus, learners were grouped into two levels: elementary (content levels 3-5) and middle (content levels 6-8).

Elementary and middle level groups also differed substantially in the number of learning facilitators who participated in Guided Reading professional learning, further justifying analyzing these groups separately.

Table 3: Descriptive statistics for SRI scores

Level	<i>n</i>	Range	<i>M (SD)</i>		
			August	March	June
Elementary	900	0-1333	556 (259)	662 (240)	717 (242)
3	322	0-1076	402 (225)	529 (208)	586 (210)
4	289	0-1311	588 (222)	688 (207)	742 (206)
5	289	0-1355	696 (240)	789 (230)	841 (234)
Middle	942	0-1557	859 (250)	930 (241)	979 (232)
6	340	0-1381	785 (238)	852 (241)	902 (224)
7	313	0-1542	879 (214)	957 (203)	1011 (192)
8	289	0-1557	923 (277)	994 (257)	1037 (257)

Note. *n* = sample size. *M* = mean. *SD* = standard deviation.

Smarter Balanced Assessments (SBAC)

The [SBAC](#) is a state level summative assessment designed to provide more meaningful information into a student's language skills. It is a computer adaptive assessment that measures balanced literacy by providing content claims and assessment targets for reading, writing, speaking and listening. This report focuses on the learners' end of year [Literacy Scale Score](#).

Table 4: Descriptive statistics for SBAC scores

Level	<i>n</i>	Range	<i>M (SD)</i>
			June
Elementary	869	2185-2701	2447 (93)
3	316	2190-2619	2408 (81)
4	282	2185-2663	2458 (90)
5	271	2251-2701	2480 (92)
Middle	906	228-2769	2540 (93)
6	330	2288-2708	2495 (87)
7	302	2333-2745	2561 (76)
8	274	2288-2769	2571 (94)

Note. *n* = sample size. *M* = mean. *SD* = standard deviation.

Instructional Look For Measures

Learning facilitators' demonstration of [Instructional Look Fors](#) were measured by the observation protocols scored by the Guided Reading consultant during the lesson observation for certification. As part of the certification process, the Guided Reading consultant visited each learning facilitator's learning environment and observed their instructional practices using the predetermined observation protocol of educator actions from the Instructional Look Fors. The observation protocol for Cohort 1 had 17 educator actions and Cohort 2 had 14 educator actions; seven of these educator actions were the same for both cohorts. Learning facilitators were scored as observed or not observed (dichotomously) for demonstrating each Instructional Look For educator action. One Instructional Look For was only on one observation protocol and was dropped from the analysis.

In total, there were 106 learning environment observations. All but one learning facilitator who had a learning environment observation successfully passed it; in some cases, the learning facilitator needed more than one attempt. The learning environment observation was only one part of the certification structure. There were 26 learning facilitators who certified in both a Guided Reading 101 Learning Academy and also in a Guided Writing 101 Learning Academy or a Guided Reading 201 Micro-Credential. As mentioned above, some learning facilitators had a second observation if their first observation resulted in recommendations for improvement. If multiple observations were recorded for a learning facilitator, the most recent observation was

used in the analysis. In addition, six learning facilitators delayed their observation after the February cohort. This resulted in a total of 74 unique observations.


 NOTE!	<i>These educator action analyses only include learners whose learning facilitator had an observation. Unlike the participation measures, where the lack of attendance signaled lack of participation, Instructional Look Fors can occur in learning environments without Guided Reading, but we have no way of knowing if/when they are. Thus, no comparison group is available.</i>
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Table 5: Descriptives for Instructional Look For Educator Actions

	Cohort 1 (Sept 2018) <i>n</i> = 24	Cohort 2 (Feb 2019) <i>n</i> = 44	Cohort 2B (after Feb. 2019) <i>n</i> = 6
Collaboration (79-100%)			
Individual Accountability (2b-1)	96% (<i>n</i> = 23)	96% (<i>n</i> = 42)	100% (<i>n</i> = 6)
Individual Accountability (2b-4)	79% (<i>n</i> = 19)		
Community (88-100%)			
Belonging (1b-2)		98% (<i>n</i> = 43)	100% (<i>n</i> = 6)
Belonging (1b-5)	100% (<i>n</i> = 24)	100% (<i>n</i> = 44)	100% (<i>n</i> = 6)
Equitable Engagement (3b-1)		98% (<i>n</i> = 43)	100% (<i>n</i> = 6)
Connectedness (4b-1)		89% (<i>n</i> = 39)	100% (<i>n</i> = 6)
Connectedness (4b-3)	92% (<i>n</i> = 22)		
Upholding Norms (5b-1)	88% (<i>n</i> = 21)	100% (<i>n</i> = 44)	100% (<i>n</i> = 6)
Customization (75-100%)			
Appropriate Challenge (1b-7)		86% (<i>n</i> = 38)	100% (<i>n</i> = 6)

Appropriate Challenge (1b-8)		84% (<i>n</i> = 37)	100% (<i>n</i> = 6)
Student Driven (2b-1)	75% (<i>n</i> = 18)	91% (<i>n</i> = 40)	100% (<i>n</i> = 6)
Student Driven (2b-5)	88% (<i>n</i> = 21)	100% (<i>n</i> = 44)	100% (<i>n</i> = 6)
Additional Support for Students with Defined Needs (e.g., IEP or ELL) (3b-5)	88% (<i>n</i> = 21)		
Purposefulness (75-100%)			
Awareness of Progress (2b-1)	92% (<i>n</i> = 22)		
Academic Urgency (4b-3)	96% (<i>n</i> = 23)	93% (<i>n</i> = 41)	100% (<i>n</i> = 6)
Academic Urgency (4b-5)	83% (<i>n</i> = 20)	77% (<i>n</i> = 34)	83% (<i>n</i> = 5)
Academic Urgency (4b-6)	75% (<i>n</i> = 18)	86% (<i>n</i> = 38)	100% (<i>n</i> = 6)
Academic Urgency (4b-9)	88% (<i>n</i> = 21)		
Rigor (82%-100%)			
Cognitive lift (1b-4)	92% (<i>n</i> = 22)		
Higher order thinking (2b-8)		82% (<i>n</i> = 36)	100% (<i>n</i> = 6)
Essential Knowledge (3b-2)	88% (<i>n</i> = 21)		
Essential Knowledge (3b-3)	83% (<i>n</i> = 20)		
Essential Knowledge (3b-4)	83% (<i>n</i> = 20)		

Note. A full description of each educator action can be found by matching the educator action and number in the first column to the Adult Learning Curriculum principles, Instructional Look Fors, and sample strategies [here](#). IEP = individualized education plan. ELL = English language learner.

Presentation of Methods and Analysis

The plan of analysis for each research question is presented at the start of each results section.

This report was prepared following APA guidelines with some adaptations for an applied research project. Full results tables are not provided due to space constraints but are available upon request from The Learning Accelerator report team: info@learningaccelerator.org.

An early version of this report was compiled in April 2019 using mid-year data from the March testing results. Relevant findings from the mid-year point are referenced throughout this report and are included in the Appendix. This current version (August 2019) focuses on the full 2018-2019 year of data, using August 2018 to June 2019 results.


Results: Guided Reading and Reading Achievement

RQ1: Do learners with learning facilitators who participated in Guided Reading have higher reading achievement scores than learners with learning facilitators who have not participated in Guided Reading?

Key Finding:

- For all content levels, learning facilitators' Guided Reading participation was positively related to increases in their learners' reading growth scores.

We calculated a growth score for each learner from August 2018 to June 2019 for the SRI and DRA, with the exception of content levels TK-K. The DRA was not administered August 2018 for these content levels, so there was no pre-test score with which to calculate growth. We then compared reading growth scores for learners who had a learning facilitator with *any* participation in any Guided Reading professional learning (i.e., attended at least one day) to those whose learning facilitators had no participation in Guided Reading using an independent sample *t*-test. For content level TK, we did not examine between-group differences because there were too few learners with June 2019 scores whose learning facilitators did not participate in Guided Reading.

 <p>NOTE!</p>	<p><i>For content levels TK-K, a growth score could not be calculated because the DRA was not administered in August 2018 for these content levels. This is in grey below to remind the reader.</i></p>
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For all content levels, learning facilitators' Guided Reading participation was positively related to increases in their learners' SRI and DRA reading growth scores. On average, when their learning facilitator participated in Guided Reading professional learning in *any* way, by June 2019 learners improved by an additional 2.07 lexile points on the DRA, and an additional 40.56 lexile points on the SRI compared to their peers with learning facilitators who did not participate in Guided Reading. SBAC 2019 language results are discussed further below.

Table 6: Independent Sample T-Test Results

	Learning facilitator participated		Learning facilitator did not participate		t-test ^a	ΔM	Cohen's <i>d</i> effect size ^b
	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>n</i>	<i>M</i> (<i>SD</i>)			
Reading Scores at March Testing							
DRA TK-K March 2018 score	346	3.25 (2.45)	20	2.20 (1.96)	<i>t</i> (364) = 1.88, <i>p</i> = .06	1.05	0.46
DRA growth score	451	4.70 (4.57)	125	3.55 (4.70)	<i>t</i> (574) = 2.48, <i>p</i> = .02	1.14	0.25
SRI growth score	1195	93.86 (114)	637	71.69 (108)	<i>t</i> (1362) = 4.12, <i>p</i> < .001	22.17	0.20
Reading Scores at June Testing							
DRA TK-K June 2019 score	352	4.76 (3.44)	22	2.77 (2.74)	<i>t</i> (372) = 2.65, <i>p</i> = .008	1.98	0.61
DRA growth score	444	7.94 (5.08)	125	5.86 (5.64)	<i>t</i> (567) = 3.93, <i>p</i> < .001	2.07	0.39
SRI growth score	1196	152 (127)	640	111 (116)	<i>t</i> (1410) = 6.92, <i>p</i> < .001	40.56	0.33
SBAC score	1167	2476 (101)	608	2529 (101)	<i>t</i> (1225) = -10.43, <i>p</i> < .001	-52.60	0.52

Note. *n* = sample size. *M* = mean. *SD* = standard deviation.

^aAll *t*-tests had a significant Levene's test; equal variances were not assumed.

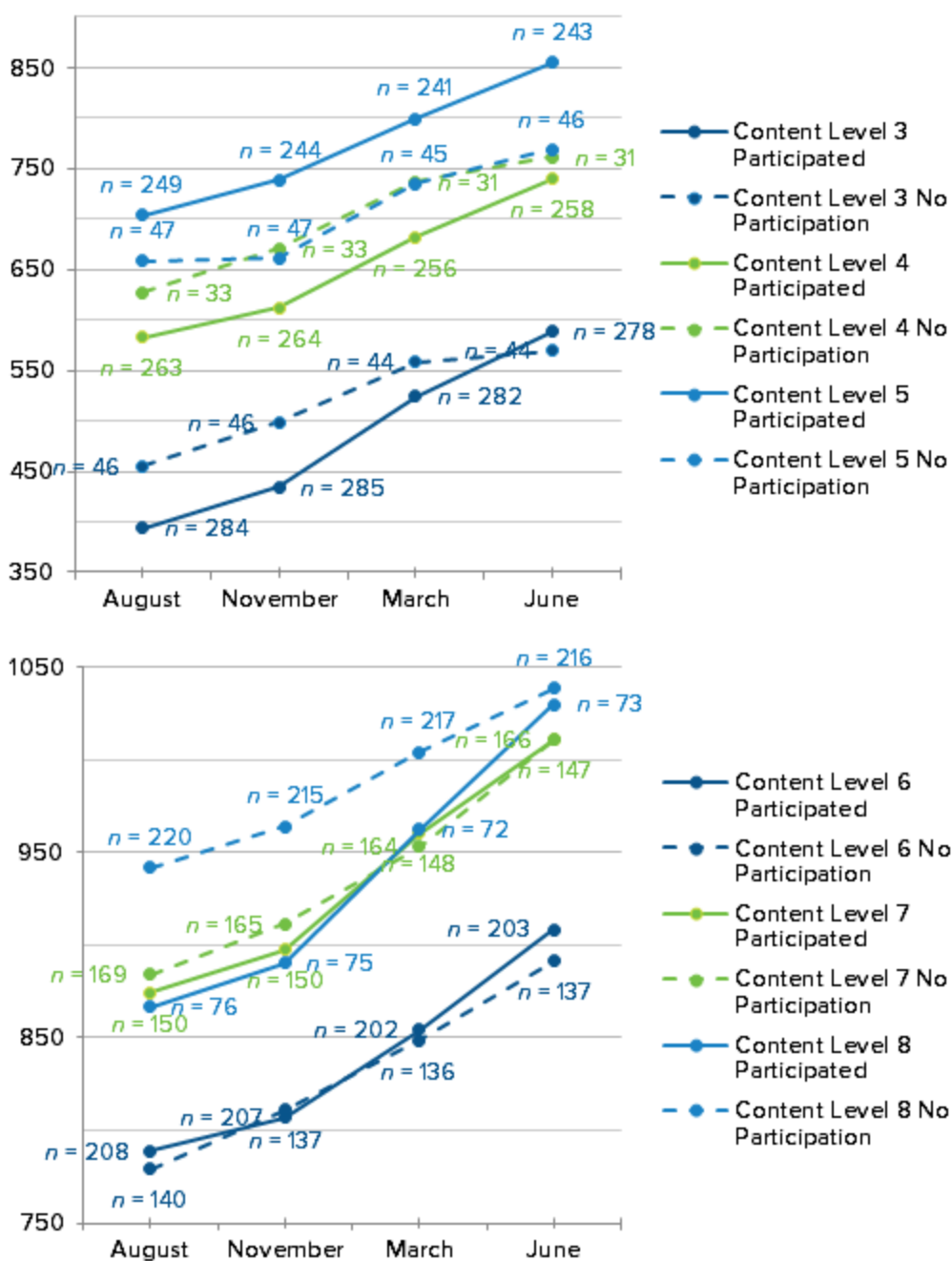
^bCohen's *d* effect sizes are generally classified as small = 0.2, medium = 0.5, large = 0.8 (Cohen, 1992).

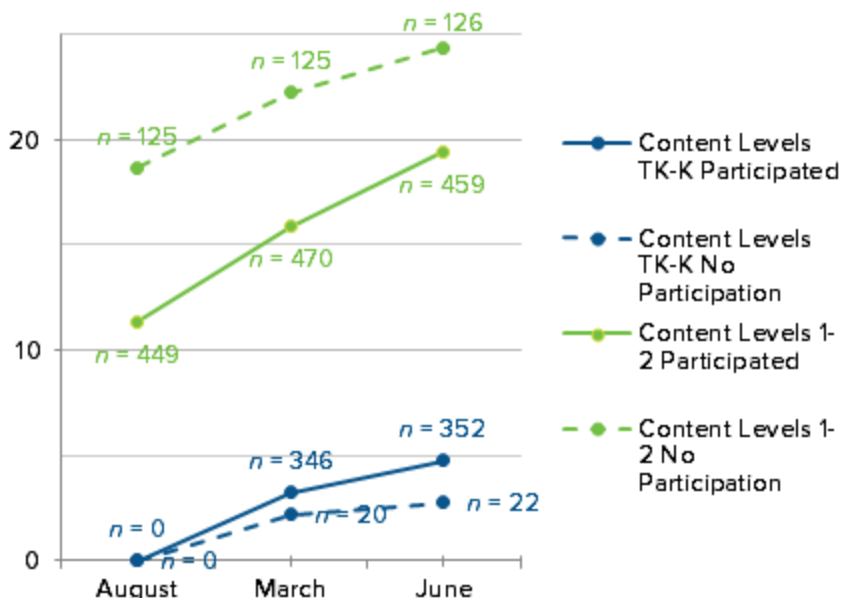
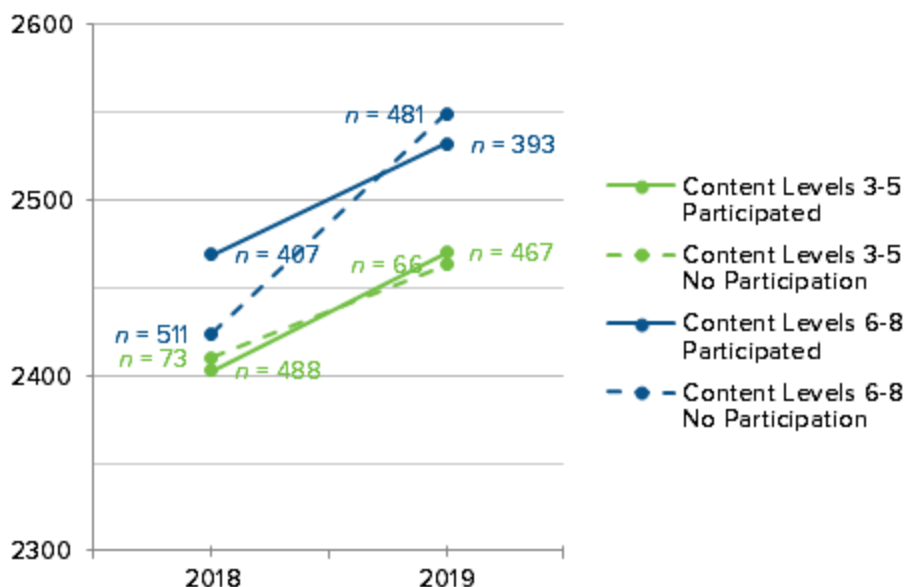
Cohen's *d* indicated a moderate effect size of Guided Reading in DRA scores for content levels 1-2 and a small effect size in the remaining content levels. Graphs of the average August 2018 and June 2019 scores for learners with learning facilitators in Guided Reading and with learning

facilitators who did not participate Guided Reading illustrate the patterns of change underlying these effect sizes.

Chart 6 (Set of Four): August 2018 to June 2019 Reading Scores

SRI



DRA**SBAC**

While the SRI and DRA demonstrated a positive effect of Guided Reading on learner reading growth, the result of the independent sample *t*-test examining mean differences in the 2019 SBAC score indicated a reverse trend on learners' language achievement. Learners' SBAC scores were on average 52.59 points lower when their learning facilitator participated in Guided Reading. However, this analysis did not account for prior language achievement, and so did not account for any selection bias from learning facilitators electing to participate in Guided Reading due to having learners who started the school year with lower language proficiency. To examine this possibility, we conducted a one way ANCOVA using learners' 2018 SBAC scores as a

covariate. This analysis uncovered the surprising fact that learners who had a learning facilitator in Guided Reading had *higher* SBAC 2018 (covariate) scores than learners who did not, so the groups were indeed unequivalent at the beginning of the 2018 - 2019 school year. Overall ($F(1,2) = 109$), $p < .001$, $\eta_p^2 = .135$); the main effects of both 2018 SBAC scores and learning facilitator participation were significant ($F(1,2) = 155$), $p < .001$, $\eta_p^2 = .100$; $F(1,2) = 65.2$), $p < .001$, $\eta_p^2 = .044$).

**NOTE!**

Remember, the analysis and results sections are organized by outcome: reading achievement and Instructional Look For educator actions; but the research questions are reviewed by foci (efficacy and value) in the methods and discussion.

RQ4: Do reading growth scores differ across intensity of participation in Guided Reading?

Key Findings:

- Attaining certification in Guided Reading was generally related to higher reading growth scores.
 - The relationship between depth of participation (attending vs. attaining certification) and language achievement was inconsistent and unclear.
- Participating in a second Guided Reading professional learning opportunity was related to higher reading growth and higher language achievement.
 - The relationship between specific second opportunities (Guided Writing vs. Micro-Credential) and increases in reading growth or language achievement were inconsistent.

Next, we sought to understand if there was a relationship between learners' reading gains and the intensity of their learning facilitator's participation in Guided Reading. We based "intensity" on a learning facilitator's depth of participation and breadth of participation. Depth of participation was measured as only attending training versus attending *and* seeking certification. For breadth of participation, learning facilitators were grouped by their decision to enroll in a second training, either the Guided Writing Learning Academy, or the Guided Reading Micro-Credential. This was only an option for Cohort 2, as participation in Guided Reading 101 Learning Academy was a prerequisite for both of these professional learning opportunities.

Depth

- No Guided Reading
- Attended Guided Reading only
- Certification

Breadth

- No Guided Reading
- Guided Reading 101 Learning Academy only
- Guided Reading 101 Learning Academy and
 - Guided Writing 101 Learning Academy or
 - Guided Reading 202 Micro Credential

This resulted in two sets of groups (the same group of learning facilitators who did not participate in Guided Reading served as a comparison in both sets). To examine whether SRI and DRA reading growth from August 2018 to June 2019 differed across the groups, we conducted a series of ANOVAs. To examine differences in the 2019 SBAC mean scores across the groups, accounting for prior language achievement using 2018 SBAC scores, we conducted a series of ANCOVAs. ANCOVA was selected in lieu of Repeated Measures ANOVA due to the summative, single point-in-time nature of the SBAC assessment.

Post-hoc tests (Games-Howell due to lack of variance and unequal group sizes) were conducted to examine significant group differences. Pairwise comparisons were examined for the ANCOVA analysis. Groups that significantly differ are indicated by matching superscripts within a column.

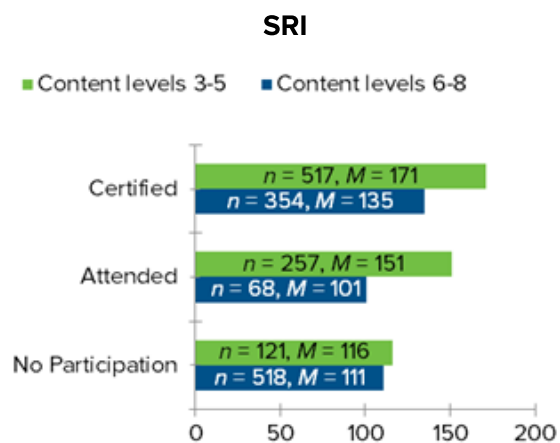
Effect sizes were calculated for the overall ANOVA using the partial eta-squared statistic which measures the proportion of variance explained by the effect (i.e. independent variable) while accounting for its associated error (Richardson, 2011). For example, a partial eta-squared of 0.05 signifies that 5% of the variance in the outcome is due to the intervention. In social sciences, a recommended value for a minimally practically significant effect size for the partial eta-squared is 0.04 and a moderate effect is 0.25 (Ferguson, 2009). Due to the number of significant post-hoc group differences, effect sizes were not calculated for 1:1 group differences but readers interested in knowing an effect size for a comparison can do this using the sample size, means, and standard deviations in the tables and this [online Cohen's *d* calculator](#).

Intensity of Participation: Depth (SRI)

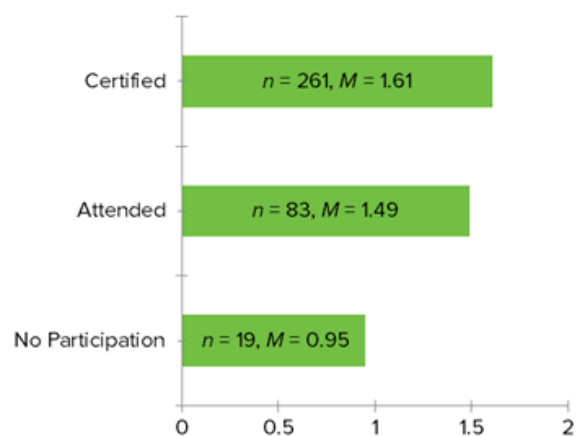
Learners were categorized into three depth of participation groups: no Guided Reading, learning facilitators who attended Guided Reading, and learning facilitators who certified in Guided Reading. The results suggested that across all content levels, **a greater intensity of participation is related to higher reading growth scores**, and follow up tests indicated that this was primarily driven by the group of learning facilitators who pursued certification. Effect sizes were small, with about 1% of variance in reading growth explained by depth of participation. All content level 3-8 learners with learning facilitators who attained certification demonstrated significantly higher SRI reading growth scores (a mean difference in growth of 20 points for content levels 3-5 and 26.5 points for content levels 6-8) than learners whose learning facilitator had only attended Guided Reading opportunities. For content levels 1-2, the difference was driven by learners with certified learning facilitators compared to learners with learning facilitators who had not participated (mean difference in growth on the DRA of 1.33). The results for the DRA in content levels TK-K were non-significant, but this is likely driven by growth only being measured from March 2019 to June 2019 due to data unavailability in the lower content levels.

An ANCOVA was also conducted to investigate the difference in SRI June 2019 lexile scores across groups, using August 2018 lexile scores as a covariate. Overall and main effects were significant for content levels 3-5 (overall model: $F(1,3) = 977, p < .001$) and content levels 6-8 (overall model: $F(1,3) = 1052, p < .001$).

Chart 7 (Set of Three): 2018-19 Growth Scores by Depth of Participation for Significantly Differing Groups



DRA Content Levels TK and K



DRA Content Levels 1 and 2

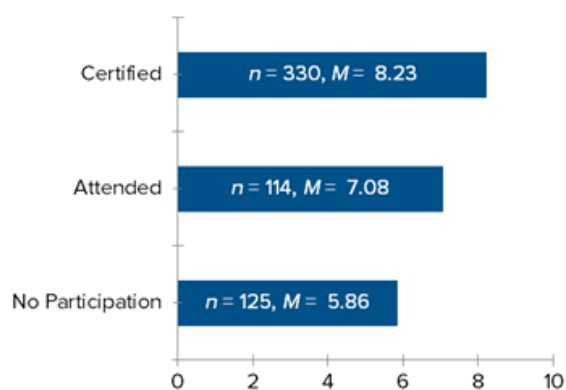



Table 7: ANOVA results for Reading Growth from August 2018 to June 2019 by Depth of Participation

		DRA Growth (TK-K) ¹	DRA Growth (1-2)	SRI Growth (3-5)	SRI Growth (6-8)
Attempted or passed certification	<i>n</i>	261	330 ^{ab}	517 ^{ab}	354 ^{ab}
	<i>M</i> (<i>SD</i>)	1.61 (1.5)	8.23 (5.2)	171 (135)	135 (120)
Attended	<i>n</i>	83	114 ^a	257 ^{ac}	68 ^a
	<i>M</i> (<i>SD</i>)	1.49 (2.1)	7.08 (4.8)	151 (120)	101 (95)
No Guided Reading participation	<i>n</i>	19	125 ^b	121 ^{bc}	518 ^b
	<i>M</i> (<i>SD</i>)	.95 (.91)	5.86 (5.6)	116 (92)	111 (121)
ANOVA		$F(2, 360) = 1.53$ $p = .217$	$F(2, 569) = 9.87$ $p < .001$	$F(2, 895) = 9.82$ $p < .001$	$F(2, 940) = 5.36$ $p < .005$
Partial η^2 (η_p^2)		.008	0.34	.022	.011

Note. *n* = sample size. *M* = mean. *SD* = standard deviation. Matching superscripts identify groups that differed significantly from each other within each column.

¹Post-hoc not performed due to small number of scores for learners whose learning facilitator did not participate in Guided Reading.

 <p>NOTE!</p>	<p><i>These same analyses were first conducted in March 2019 for both the SRI and the DRA for content levels 1-8. The March analyses found a similar trend as the ones reported above, although slightly smaller in size. This suggests that the effect of Guided Reading participation on reading scores occurs throughout the school year. March 2019 results are included in the Appendix.</i></p>
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Intensity of Participation: Depth (SBAC)

While we sought to understand the difference between learners' reading growth scores for the SRI and DRA, the SBAC language scores are better understood by examining the overall mean differences in scores for the three groups of learners (categorized by their learning facilitators' depth of participation: did not participate in Guided Reading, attended Guided Reading, and certified in Guided Reading). The SBAC 2019 results were less clear and smaller than in the DRA

and SRI. This was expected, partly because SBAC language outcome scores include subtest scores for writing, listening, and speaking, in addition to reading. An ANCOVA was conducted to estimate the mean difference in SBAC 2019 scores between the three groups, using the previous year's scores as a covariate to account for prior language proficiency. Post-hoc group differences were examined by estimating the marginal means.

The ANCOVA was significant for both content level groups. In both content level groups 3-5 and 6-8, the learners' 2018 SBAC score predicted their 2019 score ($F(1,3) = 147.1, p < .001$; $F(1,3) = 74.8, p < .001$). After controlling for learners' 2018 score, learning facilitators' participation in Guided Reading further predicted learners' language proficiency ($F(2,3) = 2.77, p = .064$; $F(2,3) = 6.50, p = .002$). The estimated marginal means for each pairwise comparison suggested that **in content levels 3-5, the results were driven by learners with learning facilitators who certified in Guided Reading scoring higher than learners whose learning facilitators had only attended**. In content levels 6-8, however, learners with learning facilitators who attended or certified in Guided Reading scored lower than learners with a learning facilitator who had not participated, and there was no difference between the certified and attended groups. This suggests that, while content level 3-5 learners may benefit from the targeted nature of Guided Reading on their overall language achievement, all learners, and especially those in content levels 6-8, need more balanced literacy support, beyond reading, to meet all of their language needs (e.g., writing, listening, and speaking which are also measured by SBAC).

Chart 8: 2019 SBAC Marginal Means, Adjusted for SBAC 2018 Scores, by Depth of Participation

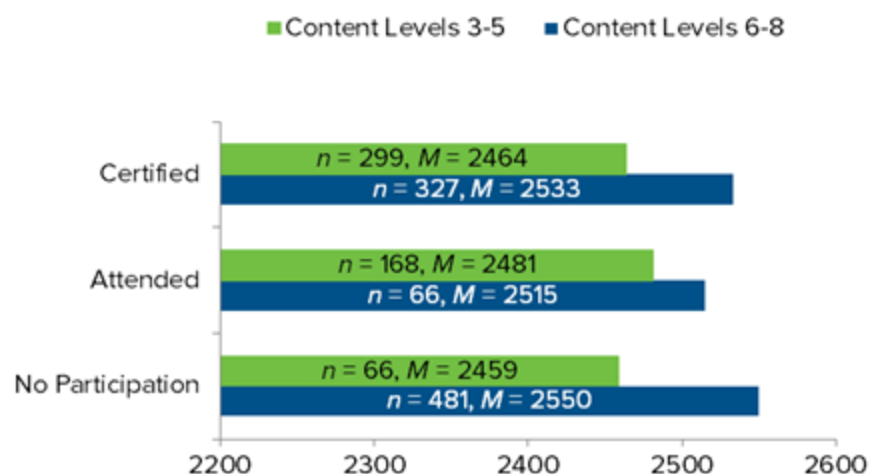



Table 8: ANCOVA results for SBAC 2019 Language Proficiency by Depth of Participation

		SBAC (3-5)	SBAC (6-8)
Marginal Means and Sample Sizes			
Attempted or passed certification	<i>n</i>	299	327
	<i>M (SE)</i>	2464 (4.69) ^a	2533 (4.88) ^a
Attended	<i>n</i>	168	66
	<i>M (SE)</i>	2481 (6.27) ^a	2515 (10.86) ^b
No Guided Reading participation	<i>n</i>	66	481
	<i>M (SE)</i>	2459 (9.99)	2550 (4.02) ^{ab}
ANCOVA			
2018 SBAC score		$F(1,3) = 147.1, p < .001$	$F(1,3) = 74.8, p < .001$
Partial η^2 (η_p^2)		.218	0.079
Depth of Participation Group		$F(2,3) = 2.77, p = .064$	$F(2,3) = 6.50, p = .002$
Partial η^2 (η_p^2)		.010	.015

Note. *n* = sample size. *M* = mean. *SD* = standard deviation. Matching superscripts identify groups that differed significantly from each other within each column.

 NOTE!	Listwise deletion was used for all ANOVAs and ANCOVAs unless otherwise specified. The SBAC 2019 mean scores increased when the learners without SBAC 2018 scores (29% of the dataset) were excluded.
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Intensity of Participation: Breadth

Learners were categorized into six groups based on the breadth of their learning facilitators' participation in Guided Reading: 1) attended once, 2) attended twice, 3) attended once and certified, 4) attended twice and certified once, 5) attended twice and certified twice, and 6) did not participate. The results from the ANOVAs affirmed that **any training was better than none and learners with learning facilitators in Cohort 2 experienced greater reading growth than those with learning facilitators in Cohort 1, particularly within the Learning Academy-only groups.**

These results suggest several characteristics of the relationship between participation in Guided Reading and reading growth. First, there appears to be a sustained relationship between participation and reading growth, because learners with Cohort 1 learning facilitators who did not seek additional training showed higher growth than those whose learning facilitators did not participate in any Guided Reading professional learning. Second, there also appears to be immediate and refresher effects, evidenced by higher reading growth for learners with learning facilitators who took their first Guided Reading in Cohort 2 and learning facilitators who took a second Guided Reading in Cohort 2. However, because Cohort 1 and Cohort 2 trainings were only four months apart and in the same school year, this should be reviewed again with equally spaced cohorts to rule out other variables. For example, it might be possible that learning facilitators who receive the training during the school year implement Guided Reading methods better than learning facilitators who receive the training during the summer (see the analysis note below).

We also investigated the difference between participating in a second professional learning opportunity in Guided Writing 101 versus the Guided Reading 201 Micro-Credential. **For content levels TK-5, the type of second training did not seem to be as important as having the second training. For learners in content levels 6-8, learning facilitators who took the Guided Writing 101 had learners who demonstrated higher reading growth.** This may suggest that a second Guided Reading course focused on writing is more important in higher content levels than lower content levels, which aligns with language assessment results from the 2019 SBAC that suggest content levels 6-8 learners have more balanced literacy needs than reading alone. The differences for each content level are summarized below.

Table 9: ANOVA results for Reading Growth by Breadth of Participation

		DRA March - June Growth (K)	DRA Growth (1-2)	SRI Growth (3-5)	SRI Growth (6-8)
ANOVA		$F(1,4) = 2.34, p = .055$	$F(1,4) = 7.70, p < .001$	$F(1,4) = 6.19, p < .001$	$F(1,4) = 19.40, p < .001$
η_p^2		.025	.052	.027	.077
Cohort 1 Learning Academy	<i>n</i>	109	97	261	262
	<i>M</i> (<i>SD</i>)	1.83 (2.06) ^a	6.87 (5.01) ^a	165 (128) ^a	98 (87) ^a
Cohort 2 Learning Academy	<i>n</i>	21	137	181	81
	<i>M</i> (<i>SD</i>)	0.90 (1.04) ^a	7.28 (5.51) ^b	186 (128) ^{bd}	190 (141) ^{ab}
Cohort 1 Learning Academy and Cohort 2 Guided Writing	<i>n</i>	139	120	105	58
	<i>M</i> (<i>SD</i>)	1.51 (1.36)	8.45 (4.31) ^c	155 (126) ^c	205 (143) ^{acd}
Cohort 1 Learning Academy and Cohort 2 Micro-Credential	<i>n</i>	75	90	227	21
	<i>M</i> (<i>SD</i>)	1.55 (1.62)	9.41 (5.06) ^{abd}	150 (103) ^{bd}	78 (73) ^{bd}
No Guided Reading participation	<i>n</i>	19	125	121	519
	<i>M</i> (<i>SD</i>)	0.95 (0.91) ^a	5.86(5.64) ^{cd}	116 (92) ^{abcd}	119 (120) ^{bc}

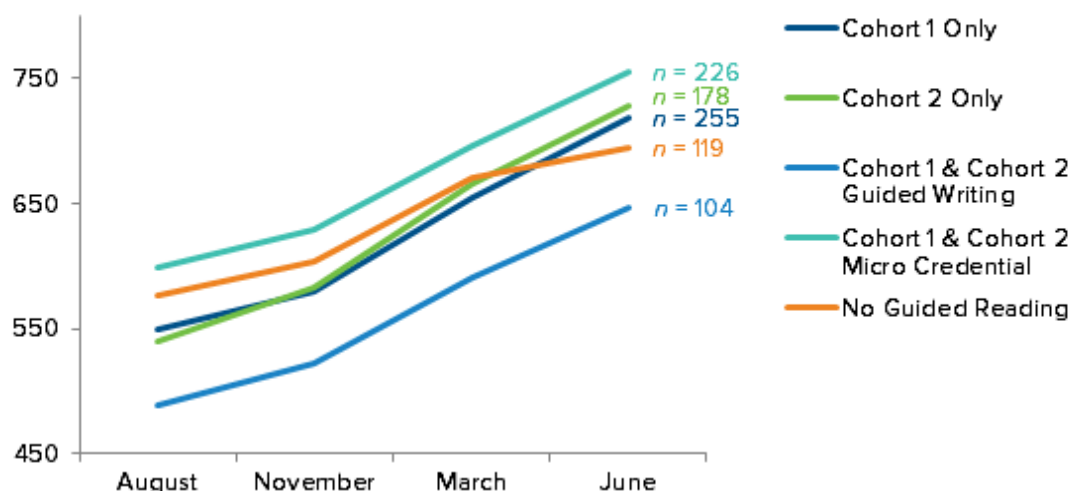
Note. *n* = sample size. *M* = mean. *SD* = standard deviation. Matching superscripts identify groups that differed significantly from each other within each column.

The ANOVA above provided insight into how breadth of participation affected overall reading growth scores. Additional analysis using an ANCOVA to predict June 2019 scores controlling for August 2018 provided similar results. The descriptive trend lines across the school year show that each group had distinct SRI means initially and over time. Future work may need to consider

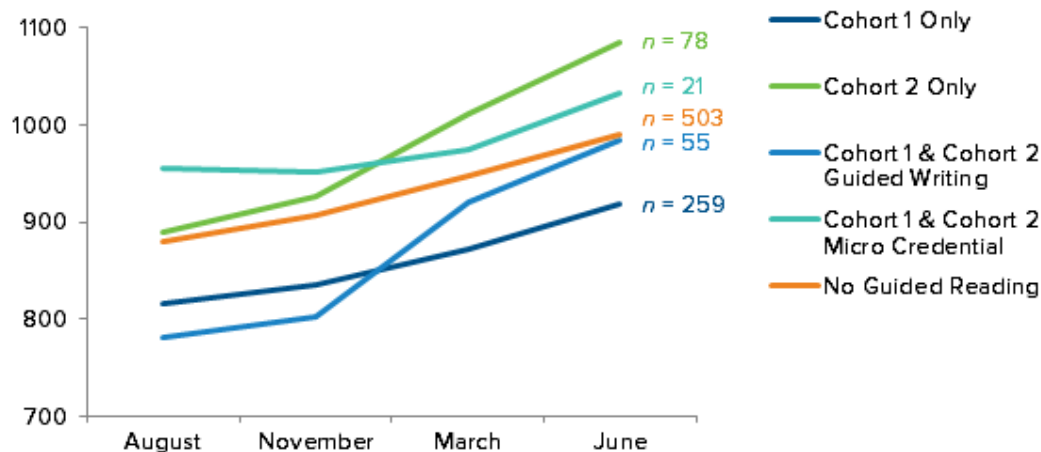
how learners' needs for the school year might be influencing self-selection into Guided Reading professional learning, particularly as this work supports the hypothesis that Guided Reading can help increase reading growth.

Chart 9: Mean SRI Score at each Data Collection Point by Breadth of Participation

Content Levels 3-5



Content Levels 6-8




We also examined the relationship between the breadth of participation and learners' language achievement measured by SBAC 2019 scores. The ANCOVA results indicate that while the 2018 SBAC scores are still the strongest predictor of the 2019 scores, learning facilitators' breadth of participation in Guided Reading was associated with higher SBAC 2019 scores (content levels 3-5: $F(1,4) = 2.08, p = .082$; content levels 6-8: $F(1,4) = 7.51, p < .001$). **In particular, in content levels 3-5, learners with learning facilitators who had participated in the Cohort 1 Guided Reading Learning Academy and the Cohort 2 Micro-Credential had the highest mean SBAC 2019 score.**

Table 10: SBAC 2019 results for Reading Growth by Breadth of Participation

		SBAC (3-5)	SBAC (6-8)
ANCOVA			
2018 SBAC		$F(1,4) = 144.8, p < .001$	$F(1,4) = 74.23, p < .001$
η_p^2		.216	.079
Level		$F(1,4) = 2.08, p = .082$	$F(1,4) = 7.51, p < .001$
η_p^2		.016	.033
Cohort 1 Learning Academy	<i>n</i>	137	244
	<i>M (SE)</i>	2477 (6.93) ^a	2516 (5.59) ^a
Cohort 2 Learning Academy	<i>n</i>	103	79
	<i>M (SE)</i>	2474 (8.00)	2555 (9.84) ^a
Cohort 1 Learning Academy and Cohort 2 Guided Writing	<i>n</i>	63	52
	<i>M (SE)</i>	2445 (10.24) ^a	2540 (12.12)
Cohort 1 Learning Academy and Cohort 2 Micro-Credential	<i>n</i>	164	18
	<i>M (SE)</i>	2472 (6.34)	2582 (20.6) ^a
No Guided Reading participation	<i>n</i>	66	481
	<i>M (SE)</i>	2459 (9.98)	2549 (3.99) ^a

Note. *n* = sample size. *M* = mean. *SD* = standard deviation. Matching superscripts identify groups that differ significantly within each column.

 NOTE!	Initial analysis in the mid-year (May 2019) report examined three levels of participation in the Learning Academies only: no Guided Reading, Cohort 1 Learning Academy, and Cohort 2 Learning Academy. Similar results were found and are available in the Appendix.
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RQ5: Does reading growth differ across content levels?

Key Findings:

- Generally, reading growth was higher in lower content levels than in higher content levels, which aligns with broader, national trends.
 - In elementary content levels, reading growth also differed across learning communities.

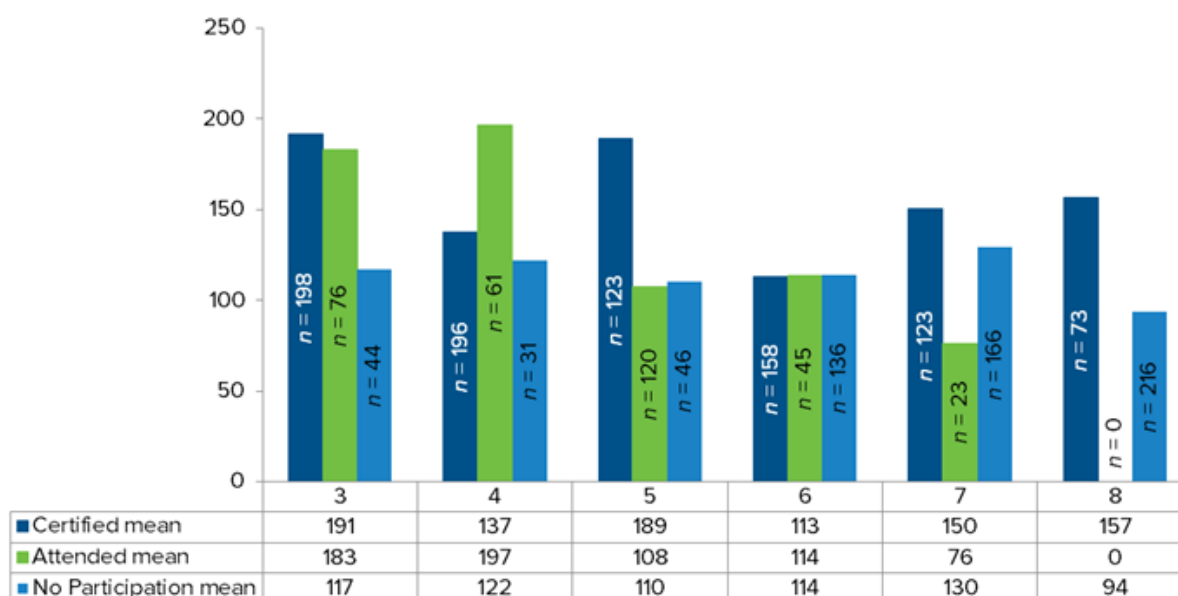
Descriptive analyses indicated that, excluding content level 4, **reading scores increased with content level while the average reading growth decreased with content level**. This aligns with national expectations for reading proficiency across grade levels as well as decreased margins of growth in later grades (SRI, 2019; DRA2, 2011). As described earlier, descriptive analyses also highlighted the need to separate elementary and middle content level learners to account for differences in rates of participation of elementary vs. middle content level learning facilitators. Thus, we have and continue to separate findings based on reading measure and reading expectations: content levels TK-K, content levels 1-2, content levels 3-5, content levels 6-8. Parts of this research question are embedded throughout this report. In this section we specifically examine if the effect of learning facilitator participation in Guided Reading differs across content levels, and if there are interactions.

SRI

To examine if the effects of Guided Reading differed across content levels, an ANOVA was conducted to examine the main effects of content level and learning facilitator participation in Guided Reading, as well as the possible interaction between content level and learning facilitator participation [overall ANOVA: $F(1,16) = 9.53, p < .001, \eta_p^2 = .077$]. Main level effects of content level were found and followed expected differences, such as content level 3 learners demonstrating mean reading growth 40 points higher than content level 8 learners [$F(1,5) = 5.49, p < .001, \eta_p^2 = .015$]. Main level effects for participation in Guided Reading also followed expected differences, such as learners with learning facilitators who participated in Guided Reading growing 45 points more, on average, than learners who had learning facilitators who did not participate in Guided Reading [$F(1,2)=16.62, p < .001, \eta_p^2 = .018$]. The interaction between Guided Reading participation and content level was also significant, in content levels 5 and 7, learners with learning facilitators who only attended Guided Reading scored higher than those with learning facilitators who attained certification [$F(1,9) = 6.46, p < .001, \eta_p^2 = .031$].

An ANCOVA was also conducted to investigate the difference in SRI June 2019 lexile scores across groups, using August 2018 lexile scores as a covariate. Similar results and significance levels were obtained.

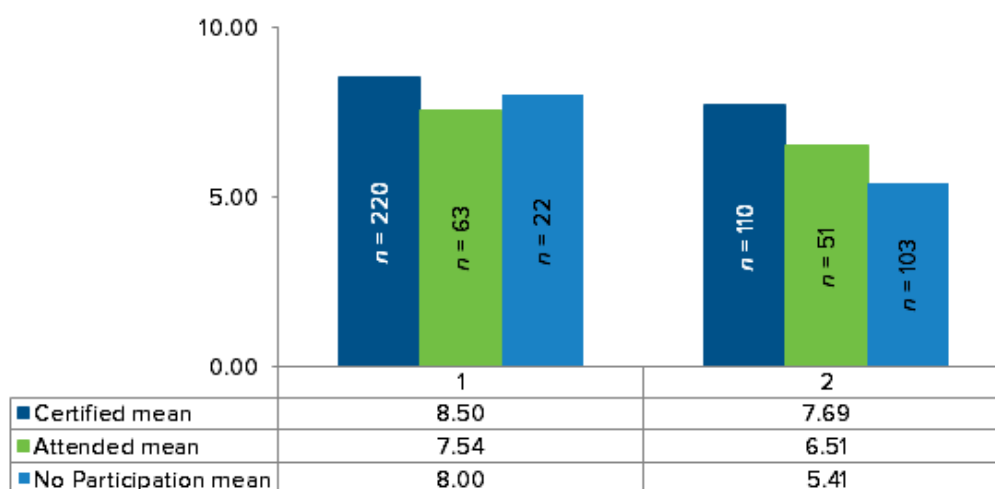
Chart 10: SRI August 2018 - June 2019 Reading Growth by Content Level



DRA: Content Levels 1 and 2

Identical tests were conducted using DRA scores in content levels 1-2, examining the main effects of content level and Guided Reading participation, and the interaction by content level. Only the main effects were significant for both content level ($F(1,5) = 7.06, p = 0.008, \eta_p^2 = .012$) and for participation ($F(1,2) = 3.13, p = 0.044, \eta_p^2 = .011$). On average, **content level 1 learners had reading growth scores 1.48 points higher than content level 2 learners**. And learners with a learning facilitator who attained certification scored 2.37 points higher than learners whose learning facilitator did not participate. However, these results should be interpreted with caution as sample sizes were different across the groups; there was a high rate of participation in content levels 1-2. The highest mean growth score represented a single content level 1 learning environment with learning facilitator who had not participated in Guided Reading.

Chart 11: DRA August 2018 - June 2019 Reading Growth by Content Level



Additional Insights: Differences across Learning Communities

Due to the differences in Guided Reading participation rates across learning communities, we wanted to understand if this was systematically associated with differences in mean reading growth within a learning community. We conducted a two-way ANOVA to examine the main effect and interaction of learning community and learning facilitator participation on reading growth.



NOTE!

Due to small sample sizes and lack of comparison groups, we were unable to estimate certain combinations of comparisons and all results below should be considered exploratory.

The overall model for content levels 6-8 was not significant. For the DRA, and SRI in content levels 3-5, the ANOVA model found main effects of participation in Guided Reading and learning community, meaning that **there were significant differences in reading growth scores based on a learning facilitator's participation and depending on the learning community the learner was enrolled in.** A significant interaction was found for learning community and Guided Reading participation in content levels 3-5. These findings held for language proficiency (SBAC 2019) when prior language achievement (SBAC 2018) was controlled for.

Table 11: ANOVA results for Reading Growth by Guided Reading Participation and Learning Community

	DRA (1-2)	SRI (3-5)	SRI (6-8)
Intercept	$F(1, 13) = 38.45$, $p < .001$, $\eta_p^2 = .065$	$F(1,14) = 272.34$, $p < .001$, $\eta_p^2 = .236$	$F(1,11) = 538.75$, $p < .001$, $\eta_p^2 = .367$
Guided Reading Participation	$F(1,2) = 56.92$, $p < .001$, $\eta_p^2 = .17$	$F(1,2) = 7.07$ $p = .001$, $\eta_p^2 = .016$	$F(1,2) = 0.32$, $p = .73$, $\eta_p^2 = .001$
Learning Community	$F(1,5) = 23.18$ $p < .001$, $\eta_p^2 = .173$	$F(1,5) = 32.66$ $p < .001$, $\eta_p^2 = .157$	$F(1,5) = 23.97$, $p < .001$, $\eta_p^2 = .114$
Participation x Learning Community	$F(1,6) = 19.41$ $p < .001$, $\eta_p^2 = .173$	$F(1,7) = 1.64$ $p = .12$, $\eta_p^2 = .013$	$F(1,4) = 0.72$, $p = .579$, $\eta_p^2 = 0.003$

Table 12: ANCOVA results for SBAC 2019 by Guided Reading Participation and Learning Community

	SBAC (3-5)	SBAC (6-8)
Intercept	$F(1,14) = 1483.92$, $p < .001$, $\eta_p^2 = .741$	$F(1,12) = 12826.66$, $p < .001$, $\eta_p^2 = .937$
SBAC Reading 2018	$F(1,14) = 124.02$, $p < .001$, $\eta_p^2 = .193$	$F(1,12) = 61.90$, $p < .001$, $\eta_p^2 = .067$
Guided Reading Participation	$F(1,2) = 3.02$ $p = .05$, $\eta_p^2 = .012$	$F(1,2) = 10.22$, $p < .001$, $\eta_p^2 = .023$
Learning Community	$F(1,5) = 3.36$ $p = .005$, $\eta_p^2 = .031$	$F(1,5) = 3.79$, $p = .002$, $\eta_p^2 = .022$
Guided Reading x Learning Community	$F(1,6) = 6.53$ $p < .001$, $\eta_p^2 = .07$	$F(1,4) = 4.05$, $p = .003$, $\eta_p^2 = .018$

Because these differences were hypothesized to be due to differences in Guided Reading participation within each learning community and not differences between learning communities, we formed groups of learning communities based on the level of uptake within each of them. We defined uptake as the percentage of learning facilitators within a learning community that participated in any way in Guided Reading. High uptake was defined as 80% or more learning facilitators participating in Guided Reading professional learning. Low uptake was defined as 29% or fewer learning facilitators within a learning community participating. Learning communities with between 30% and 79% of learning facilitators participating in Guided Reading were considered mixed uptake.


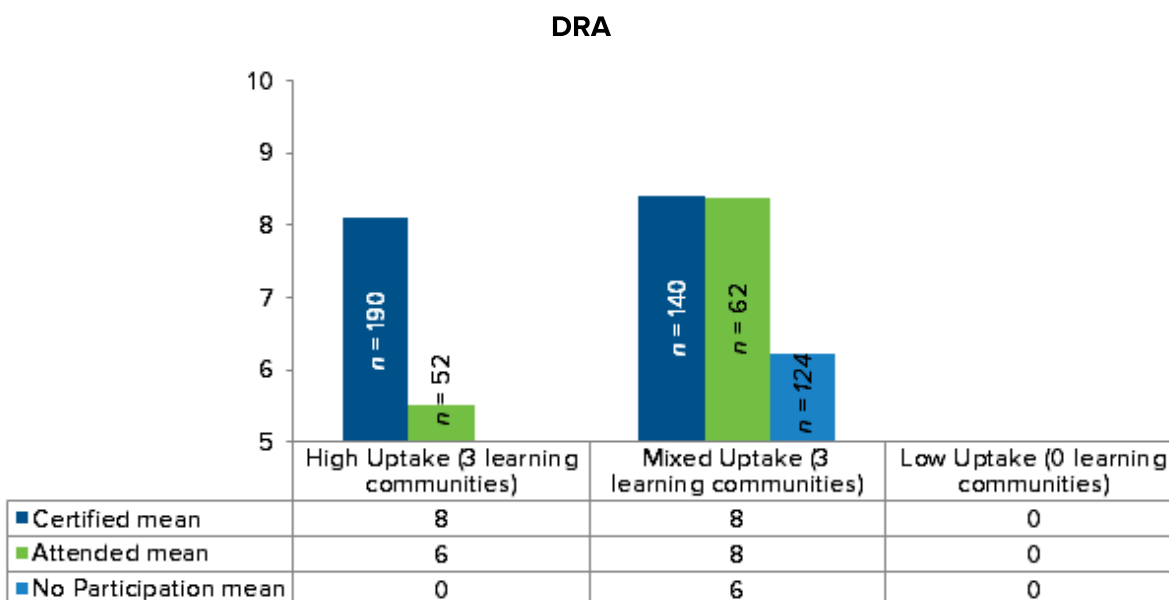
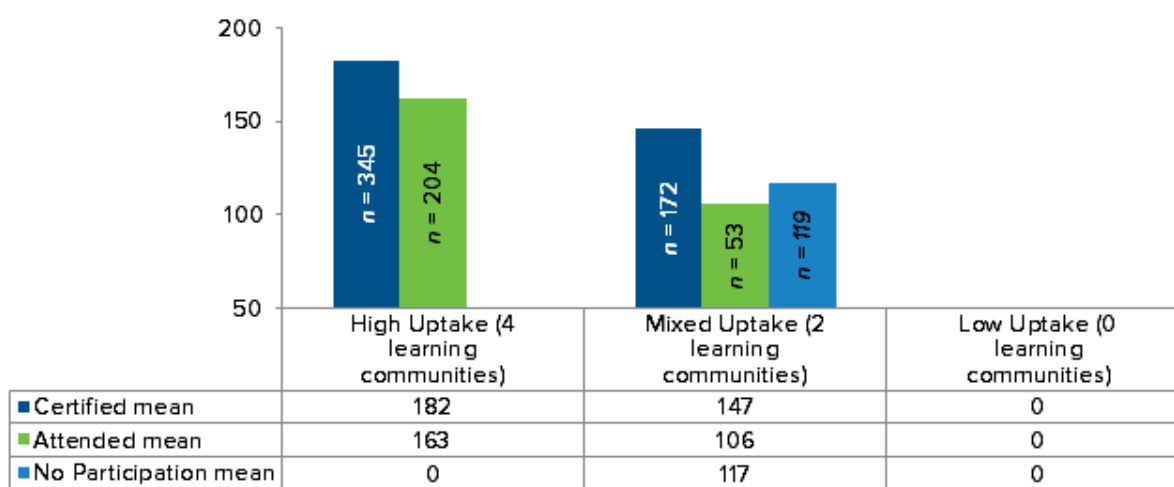
 NOTE!	<p><i>ANOVAs were run using the school uptake variable instead of learning community variable as a factor. Results mirrored the ANOVAs with learning community as a factor.</i></p>
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Chart 12 (Set of Three): August 2018 - June 2019 Reading Growth by Guided Reading Participation and Learning Community Uptake



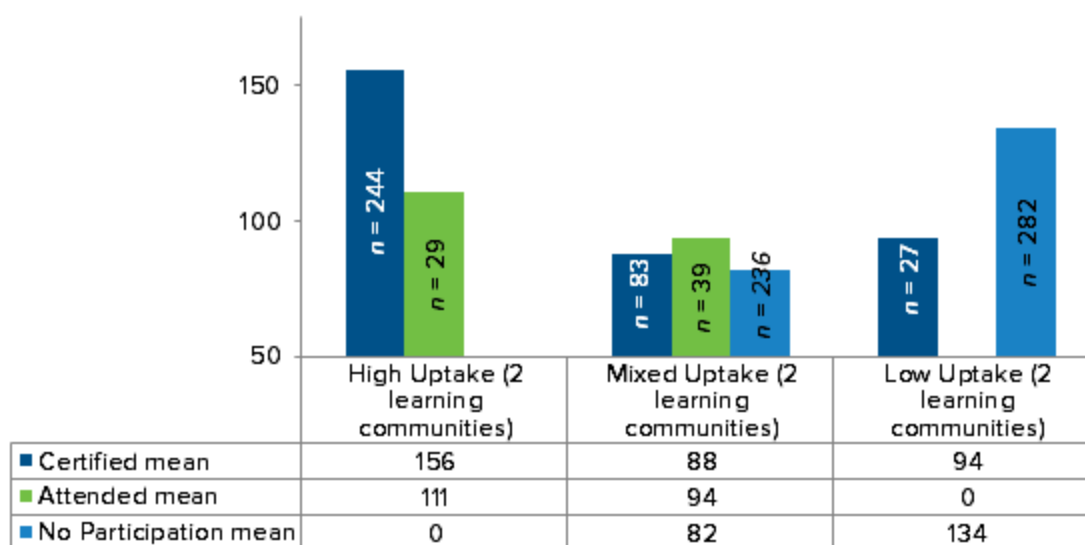
Note. Means of 0 represent groups in which there were 10 or fewer learners.

SRI Content Levels 3-5



Note. Means of 0 represent groups in which there were 10 or fewer learners.

SRI Content Levels 6-8



Note. Means of 0 represent groups in which there were 10 or fewer learners.



Snapshots of Guided Reading implementation at each learning community are available. These were designed to provide additional insight into Guided Reading implementation within a learning community for leaders separate from this overall report. These mini-reports include ANOVAs looking at the main effect of Guided Reading within each learning community, as compared to across learning communities as in charts above. Most, but not all learning communities, demonstrated significant main effects of differences between Guided Reading

	<p><i>participation and reading growth scores, similar to the overall LUSD results. When the effect was not significant, descriptive analysis mainly suggested it was due to lack of sample sizes, such as all learners in a learning community having a learning facilitator who had attended or certified.</i></p>
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Results: Guided Reading and Instructional Behaviors

This set of research questions seeks to understand if Guided Reading is a mechanism for learning facilitators to integrate the Adult Learning Curriculum principles into learning environments, and if so, whether participation in Guided Reading predicts a positive relationship between learning facilitators' engagement in [Instructional Look For](#) educator actions and learner outcomes. In this report, the term Instructional Look Fors is used interchangeably with the educator actions in the learning environment that align to the principles of the Adult Learning Curriculum.

RQ2: What Instructional Look Fors do learning facilitators exhibit during observation for certification?

Key findings:

- Learning facilitators who were observed as part of their attainment of certification exhibited Instructional Look For educator actions at high frequencies.
- Instructional Look Fors from the Community and Customization principles from the Adult Learning Curriculum observed most frequently.
 - Learning facilitators exhibited education actions from the Purposefulness principle least often during observations.

The Guided Reading consultants conducted learning environment observations as part of the certifying process for four groups of learning facilitators. The majority of these occurred before Day 4 of each cohort's Guided Reading professional learning opportunity, but six learning facilitators delayed their observations. Even with delays, all observations occurred before the end of the academic year. Except where noted, results in this section are separated by Cohort 1 or Cohort 2, because the observation protocol was modified between Cohort 1 and Cohort 2, with only seven Instructional Look For educator actions appearing on both protocols. One observation protocol in Cohort 2 had an additional item which was not included in the analysis. The protocols for the observations are below:

- Cohort 1 [Guided Reading 101 Learning Academy Protocol](#)
- Cohort 2 [Guided Reading 101 Learning Academy Protocol](#)
- Cohort 2 [Guided Writing 101 Learning Academy Protocol](#)
- Cohort 2 [Guided Reading 201 Micro Credential Protocol](#)

Cohort 1 ($n = 34$) includes all learning facilitators who attempted certification during the first Guided Reading 101 Learning Academy, and did not seek a second certification. Cohort 2 ($n = 39$) includes all learning facilitators who attempted certification during the second Guided Reading 101 Learning Academy or certified a second time in Guided Writing 101 Learning Academy or Guided Reading 201 Micro-Credential.

Each Instructional Look For educator action listed on the relevant protocol was scored as either observed or not observed. For these analyses we determined:

1. The rate of each individual educator action.
2. The combined count of educator actions for each Adult Learning Curriculum principle.
3. The percentage of individual educator actions exhibited by each learning facilitator. The percentage allowed for comparison across cohorts, when there were unequal educator actions per Adult Learning Curriculum on the observation protocols.

To start, we examined the frequency with which each educator action was observed. These are detailed in the research methods section, Table 5: Descriptives for Instructional Look For Educator Actions. **Across all Instructional Look Fors, there were high rates of observation of the educator actions.** No Instructional Look For educator action was observed less than 75% of the time and one community action, *“Facilitating predictable routines and traditions that create a familiar and consistent learning environment,”* was exhibited by every learning facilitator in every observation. These high rates of educator actions were consistent across learning facilitators. Specifically, 58% of learning facilitators in Cohort 1 engaged in every Instructional Look For educator action, 54% of learning facilitators in Cohort 2; and 83% of the learning facilitators in the delayed Cohort 2. Less than 17% of Cohort 1 and 14% of Cohort 2 failed to engage in at least 75% of the educator actions.

Three learning facilitators in Cohort 1 and one learning facilitator in Cohort 2 demonstrated less than 50% of the Instructional Look Fors. However, as these learning facilitators did pass their certification, discussions with LUSD staff revealed that their low observation counts were due to modifications necessary to teach groups of learners with defined needs, such as those receiving special education services, and not due to a lack of training or the learning facilitators’ skill sets.

We then ranked the Adult Learning Curriculum principles by rate of observation of each associated Instructional Look For. **Educator actions within Community and Customization principles were observed most often while educator actions from Collaboration and Purposefulness were least observed.**

Table 13: Ranking of Adult Learning Curriculum Principles by the Most and Least Observed Instructional Look For Educator Actions

Principles Ranked by Most Observed Educator Actions	Principles Ranked by Least Observed Educator Actions
Community (100%)	Collaboration (79%)
Customization (96%)	Purposefulness (80%)
Collaboration (96%)	Rigor (83%)
Purposefulness (95%)	Customization (86%)
Rigor (92%)	Community (90%)

Note. When there was a tie, the Adult Learning Curriculum principle was rank ordered based on the frequency of its least observed educator action.

The principles of Community and Customization were highest on most observed and lowest on least observed, suggesting consistently high observation counts. The principle of Purposefulness demonstrated the opposite trend, suggesting consistently low observation counts. However, the remaining principles appeared at similar rankings on both lists. This suggests variability in the learning facilitators' use of the full set educator actions for some Adult Learning Curriculum principles. In other words, some Adult Learning Curriculum principles were inconsistently observed (some associated Instructional Look Fors were observed at high rates and others at low rates) in a learning environment.

To explore this, we created count variables for each Adult Learning Curriculum principle made up of the number of associated educator actions demonstrated by each learning facilitator. For example, the Purposefulness variable had a range of 0-5 for Cohort 1 and 0-3 for Cohort 2. Then, we looked at the percentage of total actions that were observed for each Adult Learning Curriculum principle. Community and Collaboration had more learning facilitators engaging in all their educator actions than the other Adult Learning Curriculum principles (Table 13).

Table 14: Percentage of learning facilitators engaging in all educator actions for each Adult Learning Curriculum principle

	Cohort 1 (n = 24)	Cohort 2 (n = 50)
Community	83%	86%
Collaboration	80%	96%*
Customization	75%	75%
Purposefulness	67%	66%
Rigor	75%	82%*

Note. *This principle was scored by only one educator action, i.e., demonstrating the one educator action equated to demonstrating 100% of the Adult Learning Curriculum principle.

Finally, we calculated correlations to determine which Instructional Look Fors were most often observed occurring together. For this analysis, we used the previously created count variables and completed separate analyses for Cohorts 1 and 2. Cohort 1 demonstrated stronger relationships between all of the Adult Learning Curriculum principles than Cohort 2.

Table 15: Correlation between observed Adult Learning Curriculum (ALC) Principles

ALC Principle	Community	Collaboration	Customization	Purposefulness	Rigor	Cohort 1
Community		.603**	.830**	.873**	.845**	
Collaboration	.176		.753**	.462**	.555**	
Customization	.598**	.326*		.717**	.799**	
Purposefulness	.327*	.190	.544**		.809**	
Rigor	.519**	.463**	.388**	.410**		
Cohort 2						

Note. Asterisks identify level of significance for each correlation: * = less than .05; ** = less than .01; *** = less than .001.

There was a clear ceiling effect in Cohort 2 observations with all educator actions being observed at least 78% of the time, which is reflected in the lower correlations for that cohort. Learning facilitators in Cohort 1 were all seeking their first certification, while 26 of the 50 learning facilitators observed in Cohort 2 were seeking their second certification. Therefore, the weaker correlations might signal learning facilitators using specific behaviors for instruction (i.e., preferring a specific educator action instead of consistently using multiple actions), or they might signal learning facilitators exhibiting favorite instructional strategies (i.e., choosing to use one

instead of two, and thus reducing the observed frequency of a correlated action). This difference in the strength of correlations across cohorts might also just be an artifact of the change in the observation protocols. Additional research, along with a more nuanced indicator of learning facilitators' use of the Instructional Look Fors, whether they participated in Guided Reading professional learning or not, is needed to better understand and contextualize these patterns and correlations.

RQ6: Does engagement in Instructional Look Fors actions differ across intensity of certification in Guided Reading?

Key finding:

- It appears that engagement in Instructional Look For educator actions is consistent across observations for certification, regardless of the number of certifications (1st or 2nd) being sought, and the type of certification (Learning Academy versus Micro-Credential).

To examine if observed frequency of Instructional Look Fors differed across intensity of certification, we looked at two indicators: number of certifications attained (one or two) and type of Guided Reading opportunity for which the observation was conducted (Learning Academy or Micro-Credential). Chi-square tests were performed to examine possible relationships between these dichotomous variables.

Only four of the relationships between educator actions and number of certifications; or between educator actions and type of certification were found to be significant (see table 15). **This suggests that there is no relationship between the observing of an Instructional Look For educator action and the number, nor type, of certification being sought.**

When the chi-square was significant, it favored the more advanced certification. In other words, when Instructional Look Fors were observed statistically significantly more frequently than expected, it was during an observation for either a learning facilitator's second certification or certification in the Guided Reading Micro-Credential.

Table 16: Significance of Pearson Chi-Squared for Number and Type of Certification and Observed Frequency of Instructional Look Fors

	Number of Certifications		Certification in Learning Academy vs Micro-Credential	
	Cohort 1	Cohort 2	Cohort 1	Cohort 2
Collaboration (79-96%)				
Individual Accountability (2b-1)	non-sig	non-sig	non-sig	non-sig
Individual Accountability (2b-4)	non-sig		non-sig	
Community (88-100%)				
Belonging (1b-2)		non-sig		non-sig
Belonging (1b-5)	non-sig	non-sig	non-sig	non-sig
Equitable Engagement (3b-1)		non-sig		non-sig
Connectedness (4b-1)		non-sig		4.28, $p = .038$
Connectedness (4b-3)	non-sig		non-sig	
Upholding Norms (5b-1)	non-sig	non-sig	non-sig	non-sig
Customization (75-100%)				
Appropriate Challenge (1b-7)		non-sig		non-sig
Appropriate Challenge (1b-8)		3.03, $p = .08$		non-sig
Student Driven (2b-1)	non-sig	non-sig	non-sig	non-sig
Student Driven (2b-5)	non-sig		non-sig	
Additional Support for (ex) IEP or ELL (3b-5)	non-sig		non-sig	
Purposefulness (75-96%)				
Awareness of Progress (2b-1)	non-sig		non-sig	
Academic Urgency (4b-3)	non-sig	non-sig	non-sig	non-sig
Academic Urgency (4b-5)	non-sig	non-sig	non-sig	2.97, $p = .085$

Academic Urgency (4b-6)	non-sig	non-sig	non-sig	non-sig
Academic Urgency (4b-9)	non-sig		non-sig	
Rigor (82%-92%)				
Cognitive Lift (1b-4)	non-sig		non-sig	
Higher Order Thinking (2b-8)		non-sig		2.97, $p = .085$
Essential Knowledge (3b-2)	non-sig		non-sig	
Essential Knowledge (3b-3)	non-sig		non-sig	
Essential Knowledge (3b-3)	non-sig		non-sig	


In the analysis above, we treated each Instructional Look For as a unique variable. However, Instructional Look Fors might be clustered within the principles of the Adult Learning Curriculum. Therefore, we conducted independent sample *t*-tests comparing the mean number of observed Instructional Look Fors in each of the five Adult Learning Curriculum principles for each pair of independent groups (one vs two certifications; Learning Academy vs Micro-Credential certification). The results of these analyses were similar to the chi-square tests, no significant differences in means across Adult Learning Curriculum principles were found for number of certifications nor for type of certification.

RQ3: Is there a relationship between learning facilitators' exhibiting Instructional Look Fors and learners' reading growth?

Key finding:

- There was a small but significant positive relationship between the percentage of behaviors a learning facilitator engaged in and their learners' reading growth score for both elementary and middle content level learners.

To look at the relationship between learners' reading growth and the number of Instructional Look Fors exhibited by their learning facilitator, we calculated the percentage of educator actions the learning facilitator engaged in and merged this with learner data.

 NOTE!	<i>All Instructional Look Fors data come from learning facilitators who attempted certification, therefore we have no data on the use of Instructional Look Fors by learning facilitators who did not attempt certification (regardless of their participation in Guided Reading). Thus, any direct comparisons between reading outcomes and learning facilitator educator actions for intensity of certification should be cautioned against as there is no comparison group through which to contextualize such comparisons.</i>
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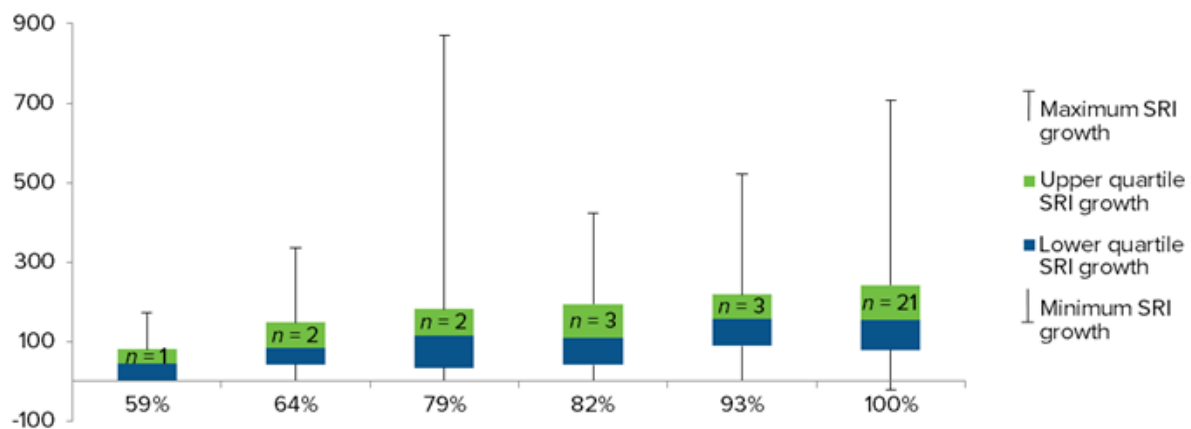
A simple linear regression found **small but significant positive relationships between the percentage of behaviors a learning facilitator engaged in and learners' reading growth score for both elementary and middle content level learners**, but no relationship for content levels 1-2, DRA reading lexile growth score.

Specifically, 3% for content levels 3-5, and 8% for content levels 6-8. These findings should be interpreted with caution, as the variance explained was small and learners are nested within learning environments.

Table 17: Regression of Reading Growth on Observed Instructional Look Fors

	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	Model Summary
% Observed Instructional Look Fors (DRA 1-2)	-1.18	-.018	-0.33	< .001	$R^2 = .018$, $F(1,319) = 0.106$, $p = .742$
% Observed Instructional Look Fors (SRI 3-5)	212.6	50.5	4.21	.000	$R^2 = .033$, $F(1,515) = 14.37$, $p < .001$
% Observed Instructional Look Fors (SRI 6-8)	290	55.84	5.19	< .001	$R^2 = .085$, $F(1,290) = 27.01$, $p < .001$

Chart 13: Relationship between Frequency of Observed Educator Actions and SRI Reading Growth Scores



Note. *n*'s in this chart represent the number of learning facilitators in each category.

The correlations between the percentage of Instructional Look Fors observed and reading growth yielded similar findings as the linear regression above.

Table 18: Correlation between percentage of Instructional Look Fors observed and reading growth

	Pearsons (ρ)	p
TK-K	-.192	.002
Content Levels 1-2	-.080	.161
Content Levels 3-5	.182	<.001
Content Levels 6-8	.292	< .001

We attempted to model the number of educator actions observed for each Adult Learning Curriculum principle as a predictor of reading growth using the count as a categorical predictor in the ANOVA model. Due to small sample sizes, these models did not fit or they produced inconsistent results. However, the one ANOVA that did fit suggested that there were differences in SRI growth scores by the number of observed Purposefulness Instructional Look Fors. This was also reflected in the correlations. Correlating all five Adult Learning Curriculum principles and the SRI growth score, Purposefulness showed a significant positive correlated with SRI growth for middle content level learners.

Although % observed is theoretically a continuous variable, the educator actions were scored dichotomously during the learning environment observations, and most learning facilitators demonstrated all or almost all of the Instructional Look Fors. This resulted in truncated frequency distributions where the learning facilitators clustered together rather than spanning the entire distribution.

Discussion

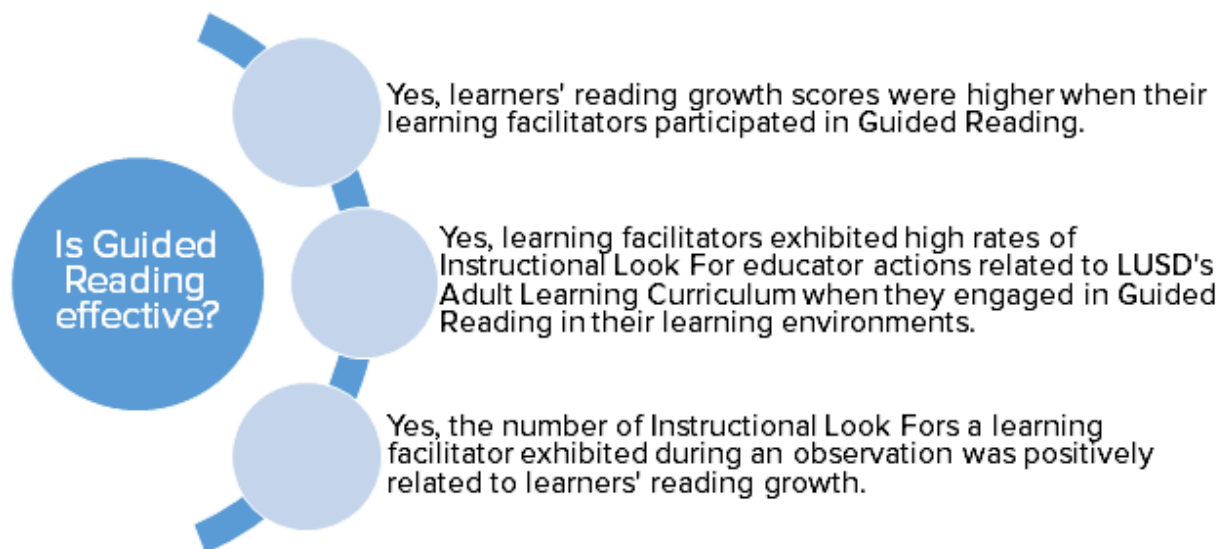
It should be noted that learning facilitators self-selected into intensity of Guided Reading participation and certification, so these analyses cannot uncover causal links between Guided Reading, reading growth, language achievement, nor use of Instructional Look For educator actions. However, the trends noted in this report *do* illustrate relationships between Guided Reading, educator actions, and learner outcomes.

Overall, these results suggest that Guided Reading professional learning opportunities can increase learning facilitators' use of relevant Instructional Look Fors in learning environments and contribute to improvements in learners' reading growth. Learning facilitators who had exposure to Guided Reading were able to sustain small and medium effects on their learners' reading growth scores, when compared to their peers, and this was particularly evident for learning facilitators who attained the optional certification. However, it remains unclear whether multiple Guided Reading certifications or professional learning opportunities are more valuable, and exactly how the Instructional Look For educator actions are related to learners' reading growth.

This study set out to clarify the answers to two key questions:

1. Is the Guided Reading professional learning initiative effective in achieving desired outcomes?

This set of questions focused on the efficacy of Guided Reading professional learning opportunities in producing instructional and learner achievement outcomes.



It is possible that these analyses have underestimated the effects of Guided Reading as most of the learning facilitators who participated had exposure to Guided Reading before the initial 2019

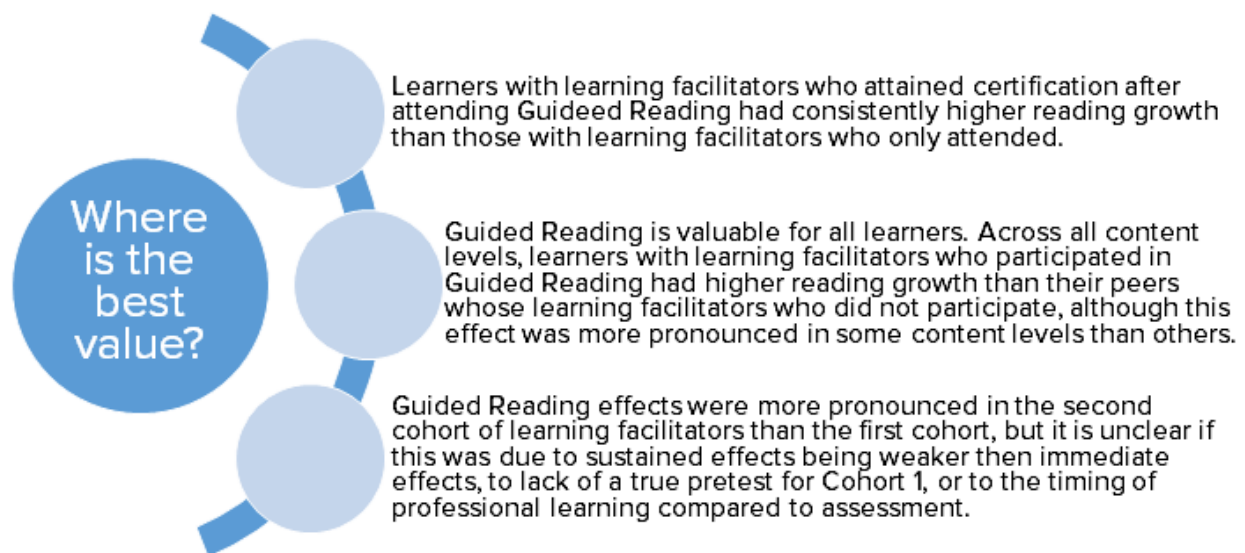
- 2019 reading assessments were administered to learners in August 2018. Only the learning facilitators in the second cohort who enrolled in Guided Reading 101 Learning Academy taught learners for whom the August 2018 assessments were a true pretest.

Recommendations: What we still need to understand

Future work should consider looking at learners' reading growth in comparison to their personalized learning plan. Although calculating a reading growth score allowed us to investigate reading gains independently of prior reading achievement, and set similar growth expectations for each learner, beginning of year fall reading scores are useful benchmarks to identify an appropriate, individualized reading growth goal and would allow us to determine if Guided Reading is more or less critical for learners with personalized learning plans that differ from average growth expectations.

2. Where is the best **value** in producing behavioral and learning changes?

This set of questions focused on the relative effectiveness of different types of participation in Guided Reading opportunities, or differing relationships between types of participation and instructional and learner outcomes.



However, earning more than one certification was not strongly related to greater reading growth, and attending multiple Guided Reading opportunities had unclear benefits. As Guided Reading, like all of the professional learning opportunities under the TSL grant, is an incentive-based program, the greatest value to LUSD would be in having each learning facilitator participate in one Guided Reading opportunity and certify.

Recommendations: What we still need to understand

We were not able to measure how long the impact of Guided Reading professional learning is sustained. Future work should seek to understand if learning facilitators may benefit from “boosters,” for example, attaining certification in a second Guided Reading opportunity every two years.

Although reading growth was smaller in higher content levels, these differences were consistent with the typical slowing in reading gains at higher content levels across all reading interventions (Lipsey et al., 2012). Thus, the value of Guided Reading served as a more consistent, typical enhancer of reading growth than an inconsistent booster of growth in some content levels but not others.

Recommendations: What we still need to understand

Although there were consistent patterns in the analysis of Guided Reading value, there were small nuances that warrant future research into possible covariates or interactions that are not currently being included. For example, overall Guided Reading was related to positive reading growth scores but this relationship was weaker in content levels 4 and 7. Understanding variables that may interact with these results, such as fewer learners with reading needs in these content levels, or learner needs shifting from reading-specific to more balanced literacy needs as they develop could focus the value of Guided Reading even further.

Unexpectedly, there was no discernible difference in the frequency of observed Instructional Look For educator actions either across the number (1st or 2nd) of certifications being attempted, or the type of certification being sought (Learning Academy vs Micro-Credential). This means that if a learning facilitator is certifying for the first time after a Learning Academy, the learning facilitator will likely be observed using similar educator actions to provide Guided Reading in the learning environment as a learning facilitator who is certifying a second time after a Micro-Credential.

Recommendations: What we still need to understand

In order to answer more nuanced questions about the Adult Learning Curriculum generally, and the Instructional Look For educator actions specifically, we highly recommend:

- Future observation protocols be consistent within each professional learning opportunity in the specific Instructional Look For educator actions being measured during observations.
- Observations be conducted for all learning facilitators, including those who do not participate in professional learning opportunities or seek certification.
- A scale or other continuous metric for measuring educator actions be explored, to be able to answer questions such as how well or often an educator action was exhibited in the lesson.

Educator actions are important because learners observe and may model these behaviors. Collecting early observations of learners can help begin to build a larger model of how educator actions are related to reading growth scores.

Thank You

Congratulations to LUSD for implementing Guided Reading professional learning opportunities that resulted in increases in their learners' reading achievement. This report represents hard and passionate work by key LUSD staff, school leaders, learning facilitators, external partners, and Lindsay learners, and was made possible by their diligent record keeping, observations, and a process for matching learning facilitators with their learners' reading scores.

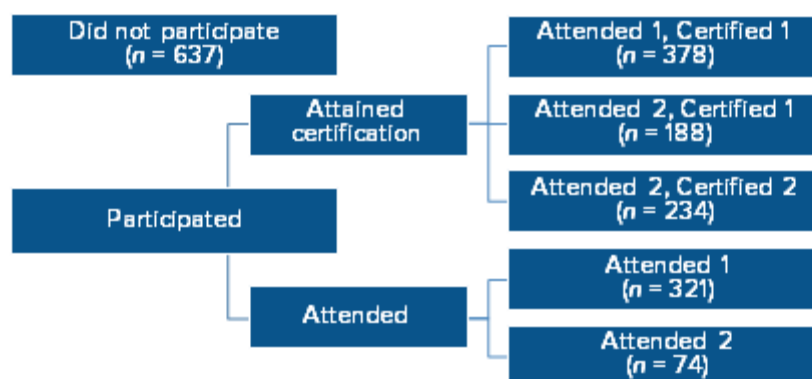
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Appendix A: Additional Insight into Depth of Participation (using Mid-Year Data)

Within the two “depth of participation” groups, learning facilitators who pursued certification and learning facilitators who only attended at least one day, can be further separated by the number of certifications pursued and number of Guided Reading opportunities attended.

Chart 1: Flowchart of Participation Patterns



Note. *n*'s in this chart represent the number of learners assigned to the learning facilitators in each category.

We tested for differences in reading growth on the SRI and the DRA across these five groups at the mid-year point in March 2019; all were significant with small effect sizes. Post-hoc tests found significant mean differences between learners whose learning facilitators had one or two certifications and learning facilitators who had no certifications or only attended at least one day. However, in content levels 3-5, we saw the largest mean differences for the group of learning facilitators who attended two Guided Reading opportunities and attained certification in one of them, compared to others (42 to 71 point difference) with the reverse finding for content levels 6-8 content levels. This may suggest that *participation* in a second Guided Reading opportunity is more important as a refresher course for elementary content level learning facilitators, while for middle content level learning facilitators a second *certification* is more important. Sample sizes also differed substantially across these five groups, as well as between elementary and middle levels. Differing participation rates may represent a source of unmeasured bias driving these results.

Chart 2: Mean SRI Growth Scores by Participation Pattern

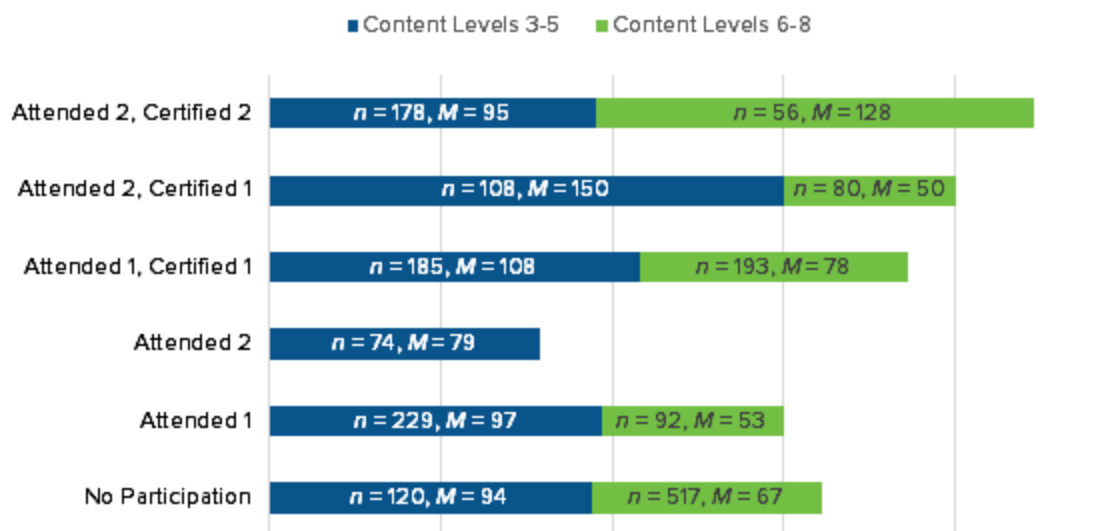


Table 1: ANOVA results for Reading Growth by Participation Pattern

		DRA- K	DRA (1-2)	SRI (3-5)	SRI (6-8)
ANOVA		$F(1,5) = 3.87$ $p = .002$	$F(1,5) = 3.45$, $p = .004$	$F(1,5) = 5.08$, $p < 0.001$	$F(1,5) = 5.68$, $p < 0.001$
η_p^2		0.051	0.029	0.028	0.024
A1,CO	<i>n</i>	59	88	229	93
	<i>M (SD)</i>	3.81 (3.6)	3.60 (2.9) ^a	97 (108) ^a	53 (98) ^a
A1,C1	<i>n</i>	48	84	185	193
	<i>M (SD)</i>	3.33 (2.9)	4.60 (3.3)	108 (104)	78 (111) ^b
A2,C0	<i>n</i>	26	52	74	0
	<i>M (SD)</i>	1.73 (2.0)	5.42 (4.2)	79 (90) ^b	---
A2,C1	<i>n</i>	69	38	108	80
	<i>M (SD)</i>	3.58 (2.5)	3.71 (3.2)	150 (152) ^{abcd}	50 (86) ^c
A2,C2	<i>n</i>	144	189	178	53

	<i>M (SD)</i>	3.11 (1.5)	5.25 (5.7) ^{ab}	95 (113) ^d	128 (128) ^{abcd}
No Guided Reading participation	<i>n</i>	20	125	120	517
	<i>M (SD)</i>	2.20 (1.9)	3.55 (4.7) ^b	94 (101) ^c	67 (109) ^d

Note. A = number of Guided Reading professional learning opportunities attended. C = number of certifications attained. *n* = sample size. *M* = mean. *SD* = standard deviation. Matching superscripts identify groups that differ significantly within each column.

These results mirrored those in the analyses that did not take repeated participation into account, and were similar across SRI and DRA data, so participation pattern was not taken into account for the remaining analyses in this report. This maximized power and sample sizes while minimizing the number of groups for post-hoc comparisons.

Appendix B: Research Question Results from the Mid-Year (March) Data Collection

As mentioned in the body of this report, many of the analyses conducted with June 2019 data were also conducted earlier this year with March 2019 middle of year data. Results from the March 2019 analyses are included in this appendix.

Table 1: ANOVA results for Reading Growth from August 2018 to March 2019 by Depth of Learning Facilitator Participation in Guided Reading

		DRA- K (March)	DRA Growth (1-2)	SRI Growth (3-5)	SRI Growth (6-8)
Certification Attempt or Pass	<i>n</i>	261	311	471	329
	<i>M (SD)</i>	3.27 (2.1) ^a	4.88 (4.9) ^a	112.6 (121) ^a	79.7 (111) ^a
Attendance Only	<i>n</i>	85	140	303	92
	<i>M (SD)</i>	3.18 (3.3)	4.28 (3.6)	92.5 (104) ^a	53.2 (98) ^a
No Guided Reading Participation	<i>n</i>	20	125	120	516
	<i>M (SD)</i>	2.20 (1.9) ^a	3.55 (4.7)	93.7 (101)	67.1 (108)
ANOVA		$F(2, 363) = 1.82$ $p = .164$	$F(2, 573) = 3.92$ $p < .020$	$F(2, 891) = 3.40$ $p = .03$	$F(2, 934) = 2.59$ $p = .08$
Partial η^2 (η_p^2)		0.010	0.013	0.008	0.006

Note. n = sample size. M = mean. SD = standard deviation. Matching superscripts identify groups that differ significantly within each column.

Table 2: Mid-Year (March) ANOVA results for Reading Growth by Level of Learning Facilitator Participation in Guided Reading

		DRA- K (Mar. score)	DRA (1-2)	SRI (3-5)	SRI (6-8)
ANOVA		$F(4,361) = 3.07, p = .017$	$F(4, 571) = 3.08, p = .016$	$F(4,889) = .669, p = .61$	$F(4,933) = 4.96, p = .001$
η_p^2		.033	.021	.003	.021
Cohort 1 Guided Reading Learning Academy	n	103	90	228	247
	$M (SD)$	3.68 (3.3) ^{abc}	4.10 (3.3)	106.4 (134)	54.7 (87) ^{ab}
Cohort 2 Guided Reading Learning Academy	n	21	137	168	96
	$M (SD)$	2.62 (1.6) ^a	4.22 (3.3)	91.8 (104)	93.8 (118)
Cohort 1 Guided Reading Learning Academy and Cohort 2 Guided Writing Learning Academy	n	82	105	197	51
	$M (SD)$	3.48 (2.4) ^{de}	5.27 (6.9) ^a	102.4 (108)	77.3 (123) ^a
Cohort 1 Learning Academy and Cohort 2 Micro-Credential	n	139	118	112	62
	$M (SD)$	2.90 (1.6) ^b	5.20 (3.7) ^b	112.4 (114)	112.3 (130) ^{bc}
No Guided Reading	n	21	126	189	482
	$M (SD)$	2.19 (1.9) ^{cde}	3.56 (4.6) ^{ab}	105.1 (102)	66.6 (109) ^c

Note. n = sample size. M = mean. SD = standard deviation. Matching superscripts identify groups that differ significantly within each column.

Appendix C: Investigation into Cohort Effects

To look a little further into possible differences due to cohort effects rather than intensity of participation, we compared learning facilitators who participated in Guided Reading 101 Learning Academy in Cohort 1 and did not sign up for a second training with learning facilitators who participated in Guided Reading 101 Learning Academy in Cohort 2. Results did not demonstrate a consistent pattern across all content levels: gains were stronger in Cohort 2 for middle content levels and in Cohort 1 for content levels TK-K. No differences were observed for content levels 1-5.

Table 1: ANOVA results for Reading Growth by Participation Cohort

		DRA- K (Mar. score)	DRA (1-2)	SRI (3-5)	SRI (6-8)
ANOVA		$F(1,2) = 2.83$, $p = .062$	$F(1,2) = 1.06$, $p = .346$	$F(1,2) = 0.882$, $p = .415$	$F(1,2) = 4.80$, $p = .008$
η_p^2		.038	.006	.003	.012
Cohort 1 Guided Reading Learning Academy	n	103	90	228	247
	$M (SD)$	3.68 (3.3) ^a	4.10(3.3)	106 (134)	55 (87) ^a
Cohort 2 Guided Reading Learning Academy	n	21	137	168	96
	$M (SD)$	2.62 (1.6)	4.22 (3.3)	92 (104)	94 (118) ^{ab}
No Guided Reading	n	21	126	189	482
	$M (SD)$	2.19 (1.9) ^a	3.95 (3.9)	102 (106)	67 (111) ^b

Note. n = sample size. M = mean. SD = standard deviation. Matching superscripts identify groups that differ significantly within each column.

About this Project:

This report was developed as part of a multi-stage data science project for Lindsay Unified School District's federally funded [Teacher and School Leader Incentive Program](#). This 18-month project is supported by [The Learning Accelerator](#) (TLA) and [Yet Analytics](#).

TLA, the lead research partner and co-author of this report, is a national nonprofit that makes the 'potential' possible and practical for every teacher and every learner. TLA envisions a future in which each student receives an effective, equitable, and engaging education – one that is informed by data and supported by technology – enabling them to reach their full and unique potential. Its mission is to connect teachers and leaders with the knowledge, tools, and networks they need to enact personalized and mastery-based practices to transform K-12 education.

Yet Analytics, a Baltimore-based software firm, is a leading provider of data technology solutions to learning and training organizations and aims to make learning data more accessible, visible, and actionable.



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