

Effects of Professional Learning Opportunities on Learner Growth:

Background Information Supporting the Three-Year TSL Grant

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

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The Learning Accelerator

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Introduction

Lindsay Unified School District (LUSD) has made a commitment to ensuring that all learners have the very best learning experiences every day. Through its Strategic Design, the district has articulated a clear vision for personalized, performance-based learning for both children and adults. Consequently, LUSD began a personalized professional learning program for its learning facilitators and leaders that has been supported by a federal Teacher and School Leader (TSL) grant. Over the course of three academic years (2017-2020), learning facilitators and leaders in LUSD have participated in a range of professional learning opportunities designed to develop their capacity to implement the district's vision of the Ideal Learning Experience. From multi-year master's degree programs to day-long Focus Institutes on specific instructional or leadership topics, LUSD offered a variety of scaled supports to address various levels of development and personalized paths for professional growth.

We use the following LUSD language throughout this report:

Learner = student
Learning Facilitator = teacher
Learning Environment = classroom
Learning Community = school
Content Level = grade level

To demonstrate and document how school systems can create high-quality, personalized, performance-based professional learning approaches for learning facilitators and leaders, The Learning Accelerator (TLA) has collaborated with the LUSD leadership team. As a result of this partnership, TLA has designed and implemented a comprehensive and ongoing research plan to analyze the effects of personalized professional learning and performance-based compensation on both learner achievement and adult competencies.

Overarching Purpose and Research Questions

All of the research and design work conducted in association with Lindsay's Empower TSL grant has been in service of an overarching research question:

"Which professional learning pathways or combinations are most powerful for increasing learner growth?"

To address this question, TLA and LUSD first examined the effects of Guided Reading professional learning on instructional behaviors and learner achievement as measured by learner performance on formative and summative standardized reading assessments. That initial report served as a means to understand patterns of engagement and the impact of one specific professional learning opportunity focused on the implementation of a single instructional strategy. The second report explored the effects of two general, content-area neutral programs (BetterLesson and PBLWorks) on learner growth across four core content areas: ELA, math,

science, and social studies. With both of the initial studies, we also examined the presence of Instructional Look Fors — specific educator actions intended to foster personalized learning. The third research study validated the Instructional Look Fors as a measurable, reliable, and valid way to understand the relationships between professional learning, observable behaviors within the learning environment, and learner outcomes. Finally, the research team conducted an initial, holistic analysis of all professional learning that occurred in association with the TSL grant to begin to understand which combinations of activities had the greatest impact on learner achievement.

With the initial three-year phase of the TSL Empower Grant program drawing to a close, the research team has conducted a comprehensive evaluation of the personalized professional learning program. Over the course of four modules, we offer an in-depth, iterative analysis. Each module aligns to specific research questions, as illustrated by Table 1, and builds towards a broader examination of the TSL Empower Grant program as well as the associated performance-based compensation strategies (PBCS) — the strategies identified by the district to provide stipends and certification awards based on participation in professional learning.

Table 1: Description of Modules and Associated Research Questions

Module	Research Questions	Analysis & Content Overview
Module 1: K-means cluster analysis of learning facilitator participation	*RQ1a - Which clusters of professional learning opportunities (PLOs) emerged in terms of the combinations of professional learning types?* *RQ1b - What are the defining characteristics of each cluster?*	RQ1a - K-means cluster analysis for each of the three grant years based on the structure of the professional learning (i.e., Focus Institutes, Learning Academies, etc). RQ1b - Descriptive analysis of each cluster to account for site-based conditions, focus areas, learning facilitator attributes, and the performance-based compensation strategies (PBCS).
Module 2: Analysis of the effects on TK-8 Learner Growth	*RQ2 - Which combination(s) of PLOs had the greatest effect on TK-8 learner growth?*	Analysis of growth by cluster and content level using reading and progress data for the core content areas (ELA, math, science, history/social studies). Expansion of the PBCS analysis from Module 1 to examine the relationship between the district's investment and learner growth.
Module 3: Deeper Analysis of the effects on TK-8 Learner Growth	*RQ3 - What are the characteristics of the clusters that could provide additional insights into the effects of professional learning on learner growth in TK-8?*	Conduct an analysis to identify whether professional learning characteristics or site-based conditions within the clusters influenced learner growth. Also look at the percentage of English Learners in each cluster to determine whether any combinations of professional learning had an effect on their growth.
Module 4: Analysis of the effects on 9-12 Common Core Literacy	*RQ4 - Which combination(s) of PLOs had the greatest effect on 9-12 learner growth in Common Core literacy?*	According to The Common Core, all educators at the secondary level are charged to develop learner literacy. Learner growth in literacy will be operationalized as a combination of SRI scores and ELA pacing/progress. After conducting a second cluster analysis with only the 9-12 learning facilitators, examine the relationships between participation in professional learning with learner growth — especially within the EL population.

Professional Learning Opportunities in LUSD

Learning facilitators voluntarily participated in as many opportunities as they desired during the three-year TSL grant. Subsequent analyses in each module therefore examine these grant years separately and under two assumptions.

- The effects of professional learning might carry over from year-to-year. For example, learners whose learning facilitator participated in Guided Reading during the first year of the grant, but not the second, could still benefit from its effects. As such, calculations of participation will be cumulative.

- Additional site-based conditions, learning facilitator attributes, and provided compensation may have an effect. Many analyses account for those factors.

Professional Learning Opportunity (PLO) Quality & Composition

Every professional learning opportunity has focused on a topic directly related to either LUSD's district academic initiative, Performance Based System, or Adult Learning Curriculum. Many were constructed and modeled after the LUSD vision of personalization. For example, by offering a variety of professional learning opportunities, LUSD allowed for voice and choice as well as customized skill development. Designed to foster learning facilitator and leadership capacity to implement the district's strategic vision for learning, each PLO highlighted specific strategies or content areas in addition to offering various levels of development and personalized paths for professional growth. Further, all TSL professional learning opportunities included a performance-based compensation strategy, such as a financial incentive or increased pay scale credit awarded upon completion or certification.

LUSD's Performance Based System is a comprehensive approach to learning in which the entire educational system is organized around engaging learners in developing 21st century skills while having them work at their performance level and advancing through their learning only when they have demonstrated proficiency of the required knowledge or skills.

Table 2: Types of Professional Learning Opportunities

Professional Learning Opportunities	
Focus Institutes 	One- to three-day events that addressed a specific topic of interest such as content literacy, digital skills, or supporting English Learners.
Learning Academies 	Multiple days of professional learning focused on an instructional topic or pedagogical practice. Learning facilitators could earn certification through learning environment observation and the development of a learning portfolio.
Micro Credential 	Multiple days of professional learning focused on an instructional topic or pedagogical practice. Learning facilitators could earn certification through learning environment observation, virtual coaching, as well as the development of a learning portfolio and other evidence.
Site-Based Learning Academies 	Offered beginning in Year Two, these learning-community (i.e., school site) specific events allowed learning facilitators to attend, complete, or certify in a topic. Unlike district-wide Learning Academies, these professional learning opportunities were specific to the learning community and occurred during work days vs. non-work days. Learning facilitators could choose to attend or certify.
Technology, Innovation, & Education (TIE) Courses 	Self-paced, asynchronous, online graduate courses that allowed learning facilitators to develop expertise in district-aligned topics such as blended learning, flipped classroom, learner engagement, project-based learning, and learner motivation.
Master's Courses 	Learning facilitators completed courses offered by university partners such as Wilson College, the University of Sioux Falls, or Arizona State University as part of Master's Degree programs in a number of fields aligned to the district's needs such as Mass Customized Learning, Special Education, and Teaching English Learners. In addition, specialized programs were allowed in content areas through individual universities.

Each professional learning opportunity adhered to at least one of the principles of quality as defined by a large-scale, seminal study from the American Institutes for Research and the U.S.

Department of Education[1]. After examining both structural and content components of available professional development offerings funded by the Eisenhower Professional Development Program, the researchers published a set of core tenets that they associated with improved classroom practice[2]:

- **Time:** the researchers linked longer durations over extended periods of time with teacher improvement
- **Focus:** professional development that focused on specific content areas or skills had a greater likelihood of translating into practice
- **Active Learning:** teachers needed opportunities to engage in hands-on learning such as lesson planning and direct observation
- **Relevance:** professional learning that directly related to daily practice also resulted in improved classroom performance

Later studies[3] reference this framework when identifying tenets of quality professional learning. For example, a 2007 review of evidence on the effectiveness of professional learning[4] found that quality professional development programs had a greater effect on student learning.

In alignment with its vision for personalization, LUSD presented learning facilitators and leaders with a variety of professional learning opportunities that each adhered to at least one measure of quality. These options varied in terms of content area and level of commitment as well as in prior knowledge, skill, and expertise. In addition, learning facilitators could also self-select a level of commitment: *Attended*, *Completed*, *Certified*, or *Earned Degree*. These different levels of commitment then resulted in different levels of performance-based compensation.

Table 3: Comparison of Professional Learning Opportunities

Professional Learning Opportunity	Average Duration	Possible Level of	Key Tenets of Quality	Compensation

[1] Garet, M., Birman, B., Porter, A., Desimone, L., Herman, R. (1999). *Designing effective professional development: lessons from the Eisenhower Program [and] technical appendices*. http://files.eric.ed.gov/fulltext/ED442634.pdf

[2] Garet, M., Porter, A., Desimone, L., Birman, B., Yoon, K. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915 - 945. https://dx.doi.org/10.3102/00028312038004915

[3] Dede, C., Ketelhut, D., Whitehouse, P., Breit, L., McCloskey, E. (2008). *A Research agenda for online teacher professional development. Journal of Teacher Education, 60*(1), 8 - 19. https://dx.doi.org/10.1177/0022487108327554

Didion, L., Toste, J., Filderman, M. (2019). Teacher professional development and student reading achievement: A meta-analytic review of the effects. *Journal of Research on Educational Effectiveness, 13*(1), 29-66. https://dx.doi.org/10.1080/19345747.2019.1670884

Penuel, W., Fishman, B., Yamaguchi, R., Gallagher, L. (2007). What makes professional development effective? Strategies that foster curriculum implementation. *American Educational Research Journal, 44*(4), 921 - 958. https://dx.doi.org/10.3102/0002831207308221

[4] Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement. Issues & Answers. REL 2007-No. 033. *Regional Educational Laboratory Southwest (NJ1)*. https://files.eric.ed.gov/fulltext/ED498548.pdf

	(in hours)	Commitment		
Focus Institute	3-24	Attended	Focus, Relevance	$500 per day stipend
Learning Academy	24-30	Attended, Completed, Certified	Time, Focus, Relevance, Active Learning	$500 per day stipend $1,000 upon certification
Micro Credential	12-30	Attended, Completed, Certified	Time, Focus, Relevance, Active Learning	$500 per day stipend $2,000 upon certification
Site-Based Learning Academy	24-65	Attended, Completed, Certified	Focus, Relevance, Active Learning	$500 per day stipend or appropriate prorate $1,000 upon certification
Master's Course	40+	Degree Earned	Time, Focus, Relevance	Certificated salary step schedule units Upon completion, annual district master's stipend of $2,193
Technology, Innovation, & Education (TIE) Courses	20	Completed	Time, Focus, Relevance	Certificated salary step schedule unit

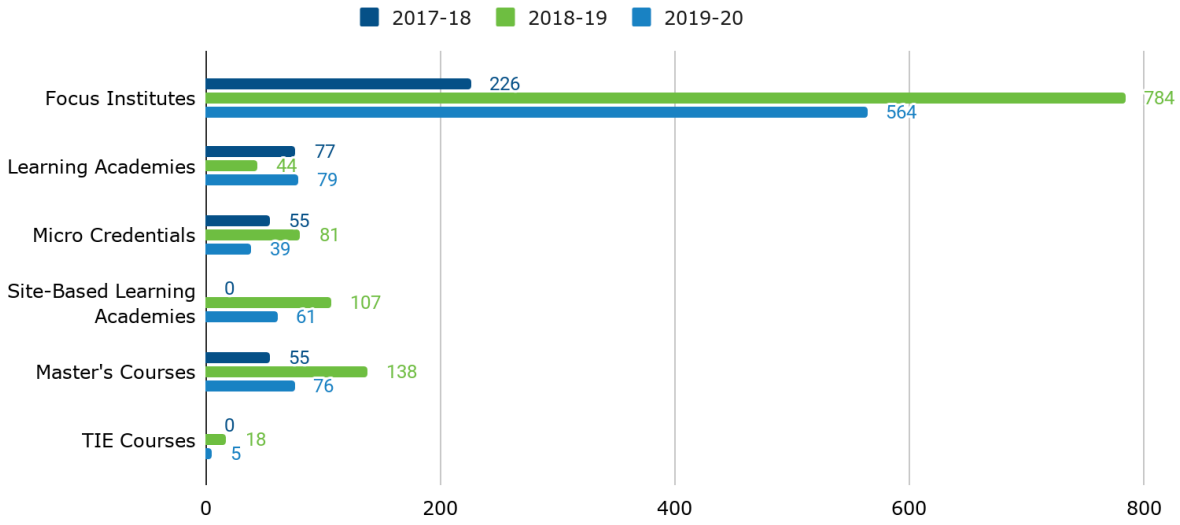
LUSD set the amount of compensation based upon analysis of existing, average hourly rates paid to learning facilitators. Because many Site-Based Learning Academies occurred during the afternoon on work days and not as full-day experiences, learning facilitators received a prorated stipend. With Master's Courses and the TIE online courses, learning facilitators earned graduate units which increased their salary schedule upon completion. Those who earned a Master's degree became eligible to receive an additional district stipend upon completion and conferment of the degree.

Professional Learning Participation

During the first year of the TSL grant, LUSD offered nine Focus Institutes, four Learning Academies, and four Micro Credentials — the latter two included optional certification. The district expanded the opportunities in the second year to provide 26 different Focus Institutes, four Learning Academies, four Micro Credentials, as well as additional Site-Based Learning Academies and Technology, Innovation, & Education (TIE) online courses. Additionally, 38 learning facilitators began Master's degree programs in 2018 with expected completion dates between fall 2019 and summer 2021. Although Grant Year 3 was cut short due to COVID-19 school closure, learning facilitators still participated in 21 different Focus Institutes, two Learning Academies, two Micro Credentials, 10 Site-Based Learning Academies, and three TIE Courses. They also completed 45 different Master's courses (see Appendix A for titles and descriptions of the various professional learning opportunities).

Figure 1 illustrates the total number of different professional learning opportunities completed by participating learning facilitators during each year of the grant. For example, in 2017-18, learning facilitators collectively completed a total of 226 individual Focus Institutes as compared to 784 during Grant Year 2 (2018-19) and 564 in Grant Year 3 (2019-20). Because neither Site-Based Learning Academies nor TIE Courses were completed during the first grant year, those two PLO types had zero participation.

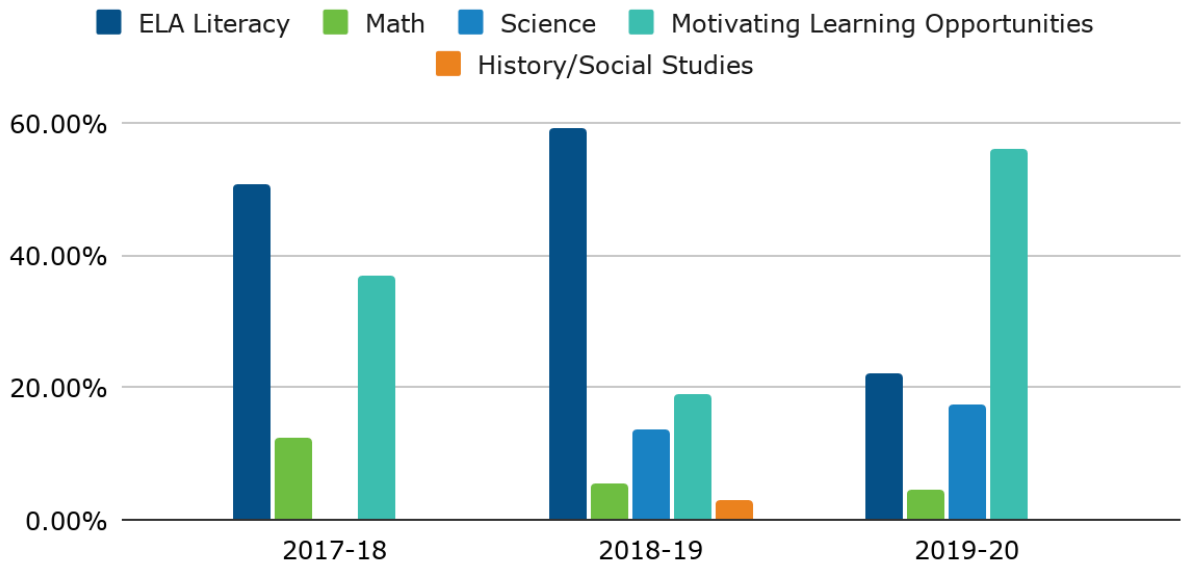
Figure 1: Total Count of Learning Facilitator Participation by PLO Type



In addition to differing in type, each PLO also allowed learning facilitators to choose different focus areas: English Language Arts (ELA) Literacy, math, science, or history/social studies. An additional category included what the district referred to as “Motivating Learning Opportunities.” These PLOs introduced concepts that did not adhere to traditional areas of isolated study and included topics such as Project Based Learning, Blended Learning, and Digital Skills.

During the first two years, over half of the learning facilitators completed professional learning related to ELA Literacy, which also included English Learner development. However, during the third grant year, 56.1% of the learning facilitators engaged in PLOs related to Motivating Learning Opportunities. Of note, fewer opportunities were available for math, history/social studies, or science; as such, only a small percentage of learning facilitators chose to focus in those areas (see Figure 2).

Figure 2: Percentage of PLOs by Focus Area per Grant Year



It is important to remember that learning facilitators, leaders, and staff ***volunteered*** to participate in the professional learning opportunities. In the first year, 148 individuals participated in at least one PLO including 114 learning facilitators, 10 specialists, and 24 administrators. During the second year, the number increased to 188 (142 learning facilitators, 28 specialists, and 18 administrators). In the third year, 185 individuals took part in the program (141 learning facilitators, 22 specialists, and 23 administrators). Because the analysis conducted to measure the effects of various combinations of professional learning directly involved learner growth, we looked more specifically at the learning facilitators based on their content-level range (See Table 4). Of note, specialists could span from TK-8 and were therefore accounted for separately.

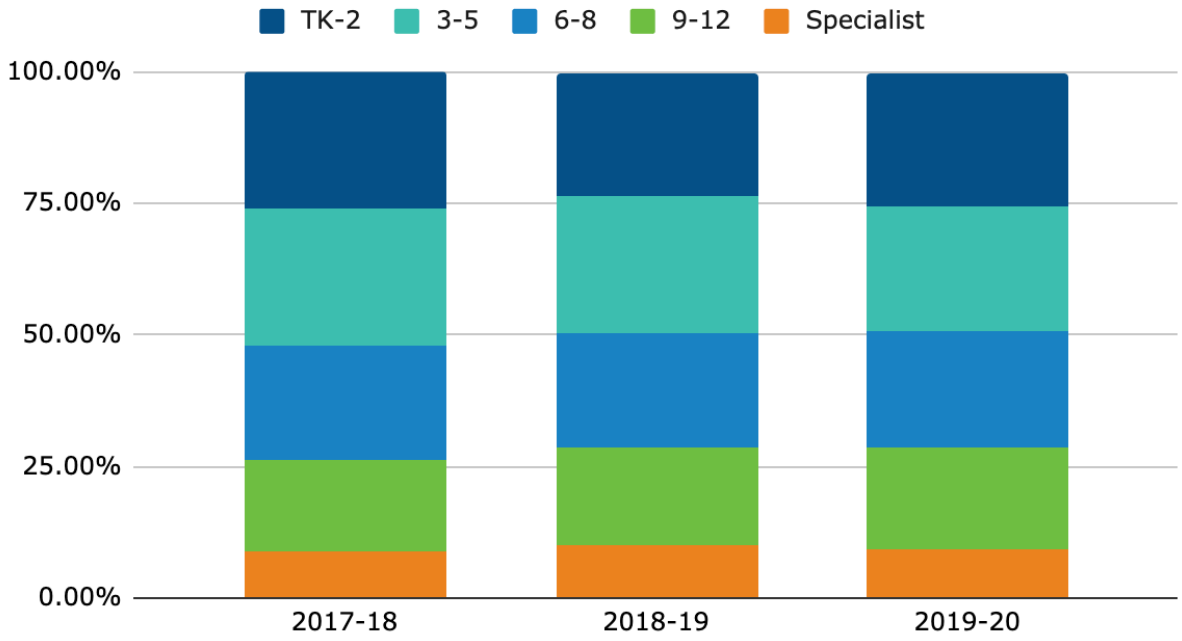
Table 4: Number of Learning Facilitators who Participated in Professional Learning

Content Level Range	Grant Year 1 (2017-18)	Grant Year 2 (2018-19)	Grant Year 3 (2019-20)
TK-2	33	37	31
3-5	29	36	33
6-8	24	34	32
9-12	29	34	41
Specialists	14	29	27

As illustrated by Figure 3, TK-8 learning facilitators comprised the majority of the participants who participated within each grant year. Since LUSD has more than twice as many learning facilitators associated with those content levels than at the high school, it is reasonable to assume that they would represent a majority of the sample. Regardless, as will be discussed in the next section, the

high school had one of the lower rates of participation when looking across learning communities.

Figure 3: Participation by Content Level Range



** Specialists worked with multiple content levels at the TK-8 level and could not be categorized.*

Understanding Learning Communities in LUSD

Although the analyses in the modules examine the relationship between learning facilitator participation in professional learning and learner growth, it is important to remember that this is not a direct relationship. As Bronfenbrenner's Ecological Systems Theory[5] illustrates, children develop within a set of nested systems. For example, the development of a child is influenced by their immediate relationships with friends and family, their surrounding environment, and even global forces such as federal policy and the economy. Relatedly, learners are nested in environments with learning facilitators, which are nested in learning communities, which are nested within the district. Therefore, to understand the effects of the personalized professional learning program on learner growth, it is also critical to understand the broader ecology in which the learner exists.

Overall, LUSD has six TK-8 learning communities, one 9-12 learning community, and one Alternative Education community (which consists of three, small 9-12 learning communities). For these modules, all three of the Alternative Education communities are combined as a total of seven learning facilitators work in those three communities. This section first describes each learning community individually before making cross-community observations.

[5] Bronfenbrenner, U. (1979). *The Ecology of Human Development.* Harvard University Press

Learning Community Profiles

Examination of both the professional learning participation data as well as the learning facilitator and learner demographic data allowed for a deeper understanding of the site-based conditions within each learning community. As will be discussed in later modules, membership within these different communities does influence the interpretation of different analyses. The profiles on the subsequent pages provide detailed descriptions of each learning community in LUSD.

Jefferson

In comparison to the other learning communities, Jefferson consistently had the largest percentage of English Learners during the three years of the TSL grant. At the same time, it also had the lowest learner-learning facilitator ratios implying that learners may experience more support.

Although Jefferson had consistent leadership, with the same principal for all three years of the grant, the community did experience learning facilitator turn-over as retention rates ranged from 73-80% during the three years. Despite this turn-over, relatively high percentages of learning facilitators participated in professional learning; and in Grant Year 3, Jefferson had the highest rate of participation (80.77%). Additionally, only one learning facilitator who participated in Grant Year 1 professional learning did not return in Grant Year 2, and only two who participated in Grant Year 2 did not return in Grant Year 3. This implies that the learning community continued to benefit from their professional learning experiences despite challenges of retention.

Table 5: Jefferson Learner and Learning Facilitator Characteristics

		Grant Year 1	Grant Year 2	Grant Year 3
Learner Characteristics	**Total Number of Learners**	457	435	436
	English Learners	60%	53%	48%
	Free or Reduced-Priced Meals	96%	92%	92%
	Housing Characteristics	14% Unhoused 21% Migrant 1% Foster Care	13% Unhoused 20% Migrant 0.5% Foster Care	7% Unhoused 22% Migrant 0.9% Foster Care
Learning Facilitator Characteristics	**Total Number of Learning Facilitators**	21	20	26
	Retention Rate	76%	80%	73%
	Participation Rate in Professional Learning	62%	90%	81%

Kennedy

Similar to the other TK-8 learning communities, most learners in Kennedy received free or reduced-price meals and 41-48% could be classified as English Learners. Of note, Kennedy had some of the highest percentages of unhoused and migrant learners. In Grant Year 2, 25% of the learners could be classified as unhoused. The percentage of migrant learners increased from a low of 17% in Grant Year 1 to a high of 27% in Grant Year 3.

Kennedy experienced the most internal change during the three years of the grant. First, a new principal assumed leadership at the start of Grant Year 1. Second, 29% of the previous years' learning facilitators did not return to begin the first year of the grant, and 23% left before the second year, so the principal began her tenure in a state of transition.

During Grant Year 1, Kennedy then had one of the lower participation rates (61.9%) in professional learning. However, although 23% of the learning facilitators did not return to Kennedy for Grant Year 2, only three of the 13 learning facilitators who had participated in professional learning during Grant Year 1 left the learning community. Kennedy increased its professional learning participation between Grant Years 2 and 3. After 95.45% of the learning facilitators participated in professional learning during Grant Year 2, 91% of those who participated remained in the community to start Grant Year 3.

Table 6: Kennedy Learner and Learning Facilitator Characteristics

		Grant Year 1	Grant Year 2	Grant Year 3
Learner Characteristics	**Total Number of Learners**	443	447	428
	English Learners	48%	47%	41%
	Free or Reduced-Price Meals	96%	92%	89%
	Housing Characteristics	20% Unhoused 17% Migrant 0.7% Foster Care	25% Unhoused 21% Migrant 0.7% Foster Care	19% Unhoused 27% Migrant 0% Foster Care
Learning Facilitator Characteristics	**Total Number of Learning Facilitators**	21	22	23
	Retention Rate	71%	77%	91%
	Participation Rate in Professional Learning	62%	95%	78%

Lincoln

Over the three grant years, the percentage of learners who received free or reduced-price meals and the percentage of English Learners decreased slightly. On the contrary, there was an increase in the number of learners identified as unhoused or migrant. However, none of these percentages varied substantially from any of the other TK-8 learning communities. Lincoln did experience a relatively large decrease in their learner-learning facilitator ratio: from 22.79-to-1 in 2017-2018 to 18.09-to-1 in 2019-2020. As a result, learners may have experienced smaller class sizes, and potentially more support, over the three years.

Lincoln experienced two notable transitions during the grant: learning facilitator turnover and a new principal. After retaining all 19 of its learning facilitators to start Grant Year 1, only 15 (75%) returned in Grant Year 2 and 19 (83%) in Grant Year 3. At the start of the third year, a new principal replaced the one who had been in the learning community for four years. This new principal had previously served in a different administrative position within the district.

When looking at this data alongside the professional learning participation rates, we note that all 12 of the learning facilitators who participated in Grant Year 1 professional learning returned in Grant Year 2, and only four of the 20 who participated in Grant Year 2 did not remain in the learning community (three of four left the district). While Lincoln may have experienced learning facilitator turn-over during the three years of the grant, they did not lose much of the knowledge potentially gained through professional learning.

Table 7: Lincoln Learner and Learning Facilitator Characteristics

		Grant Year 1	Grant Year 2	Grant Year 3
Learner Characteristics	**Total Number of Learners**	433	424	416
	English Learners	50%	43%	41%
	Free or Reduced-Price Meals	95%	92%	89%
	Housing Characteristics	7% Unhoused 19% Migrant 1.4% Foster Care	8% Unhoused 21% Migrant 1.4% Foster Care	10% Unhoused 25% Migrant 0.2% Foster Care
Learning Facilitator Characteristics	**Total Number of Learning Facilitators**	19	20	23
	Retention Rate	100%	75%	83%
	Participation Rate in Professional Learning	63%	100%	57%

Reagan

The smallest of the elementary learning communities, Reagan consists of the fewest learners and learning facilitators. Similar to Kennedy and Roosevelt, between 36-46% of the learners in Regan can be classified as English Learners, and the percentages decreased during the three years of the grant. However, particularly during Grant Year 1, Reagan had the highest percentage of learners receiving free or reduced-price meals.

To begin the three-year TSL professional learning program, a new principal assumed leadership. This person had over 16 years of experience as a principal and replaced a less-experienced individual who had led the learning community for the previous three years. While 88% of the learning facilitators from the previous year remained in the learning community for Grant Year 1, 28% did not return in Grant Year 2. By Grant Year 3, the retention rate had risen to 95%.

When compared to the other elementary learning communities, Reagan had the lowest participation rates in professional learning. For example, only 78% of the learning facilitators participated during Grant Year 2. On the contrary, the other elementary learning communities had 90-100% participation. It is critical to note that 100% of the learning facilitators who participated in professional learning during Grant Year 1 remained in Reagan the following year, and only one of the learning facilitators who participated in the second year did not return in Grant Year 3.

Table 8: Reagan Learner and Learning Facilitator Characteristics

		Grant Year 1	Grant Year 2	Grant Year 3
Learner Characteristics	**Total Number of Learners**	385	392	398
	English Learners	46%	40%	36%
	Free or Reduced-Price Meals	98%	95%	93%
	Housing Characteristics	14% Unhoused 21% Migrant 2.1% Foster Care	13% Unhoused 22% Migrant 3.3% Foster Care	7% Unhoused 27% Migrant 0% Foster Care
Learning Facilitator Characteristics	**Total Number of Learning Facilitators**	17	18	20
	Retention Rate	88%	72%	95%
	Participation Rate in Professional Learning	65%	78%	57%

Roosevelt

Across the three years of the grant, Roosevelt had the lowest percentages of learners receiving free or reduced-price meals and the lowest rates of learners characterized as unhoused or migrant. The learning community also saw a 10% drop in the percentage of English Learners over the three years. As discussed in a previous report, and verified by the California School Dashboard, this could be a result of learners becoming reclassified as Long-Term Learners based on their performance on the English Language Proficiency Assessments for California (ELPAC).

Unlike some of the other learning communities, Roosevelt experienced consistent leadership. The same principal has led the community since 2013, and Roosevelt had comparatively high retention rates amongst learning facilitators as well as relatively high participation rates in professional learning. Of note, every learning facilitator who participated in professional learning during Grant Year 1 returned to Roosevelt the following year as did all but two learning facilitators who participated in Grant Year 2.

Table 9: Roosevelt Learner and Learning Facilitator Characteristics

		Grant Year 1	Grant Year 2	Grant Year 3
Learner Characteristics	**Total Number of Learners**	499	488	503
	English Learners	46%	41%	36%
	Free or Reduced-Price Meals	92%	84%	83%
	Housing Characteristics	9% Unhoused 10% Migrant 0.8% Foster Care	8% Unhoused 9% Migrant 0.8% Foster Care	4% Unhoused 10% Migrant 0.4% Foster Care
Learning Facilitator Characteristics	**Total Number of Learning Facilitators**	22	22	28
	Retention Rate	86%	91%	82%
	Participation Rate in Professional Learning	77%	100%	71%

Washington

The largest elementary learning community, Washington consistently had approximately 10 more learning facilitators and 200 more learners than the others. While there was a slight decrease in the percentages of learners who received free or reduced-price meals during each year of the grant, 90-95% of the learners required that assistance. In addition, Washington had the second largest percentage of English Learners and the highest percentage of learners who identified as migrant. Interestingly, Washington had the largest learner-to-learning facilitator ratios in Grant Years 2 and 3, implying that learners might also experience larger class sizes.

Beyond those learner characteristics, three learning facilitator traits further distinguish Washington from the other elementary learning communities. First, it had the highest learning facilitator retention rates across all three years and the longest serving principal – she had been in her leadership position for eight years before the grant even started. As such Washington experienced both consistent leadership and a consistent faculty. Second, learning facilitators in Washington had extremely high participation rates in professional learning. Finally, as will be discussed in later modules, learning facilitators in Washington tended to cluster together in terms of the combinations of professional learning that they completed. This brought an added layer of consistency to their professional learning experience.

Table 10: Washington Learner and Learning Facilitator Characteristics

		Grant Year 1	Grant Year 2	Grant Year 3
Learner Characteristics	**Total Number of Learners**	699	729	720
	English Learners	58%	52%	51%
	Free or Reduced-Price Meals	95%	91%	90%
	Housing Characteristics	8% Unhoused 34% Migrant 0.3% Foster Care	9% Unhoused 33% Migrant 0.1% Foster Care	8% Unhoused 34% Migrant 0.1% Foster Care
Learning Facilitator Characteristics	**Total Number of Learning Facilitators**	31	31	35
	Retention Rate	90%	94%	95%
	Participation Rate in Professional Learning	87%	100%	71%

Lindsay High School

In LUSD, the majority of TK-8 learners transition into Lindsay High School. As such, it is the largest learning community with a learner population ranging from 1062 to 1088 across the grant years. Lindsay High School also has substantially more learning facilitators. Unlike in the TK-8 learning communities, 9-12 learners do not organize into self-contained learning environments. Instead, they have different learning facilitators for each content area and often change courses each semester.

When considering the demographics of learners in the high school, comparable percentages qualify for free or reduced-price meals and face housing insecurity. However, a smaller percentage identifies as English Learner (19%). This is a reflection of the success that LUSD has had in reclassifying learners based on their ELPAC scores.

Although the retention rate of learning facilitators remained relatively stable over time, ranging from 89% to 92% during the grant, Lindsay High School experienced a principal turnover after Grant Year 1. The original principal had 11 years of experience and held her position for three years. She was replaced by a principal with comparable experience. This transition may have contributed to the increases in professional learning participation over time.

Whereas the majority of TK-8 learning facilitators participated in Grant Year 2, Lindsay High School did not achieve its highest participation rate until Grant Year 3. Even at its peak, Lindsay High School had a substantially lower participation rate than the other learning communities.

Table 11: Lindsay High School Learner and Learning Facilitator Characteristics

		Grant Year 1	Grant Year 2	Grant Year 3
Learner Characteristics	**Total Number of Learners**	1082	1088	1062
	English Learners	27%	25%	19%
	Free or Reduced-Price Meals	95%	90%	89%
	Housing Characteristics	19% Unhoused 18% Migrant 0.8% Foster Care	20% Unhoused 19% Migrant 0.9% Foster Care	11% Unhoused 20% Migrant 0.4% Foster Care
Learning Facilitator Characteristics	**Total Number of Learning Facilitators**	54	55	61
	Retention Rate	91%	89%	92%
	Participation Rate in Professional Learning	56%	63%	70%

Alternative Education

In the context of these modules, Alternative Education describes a conglomerate of three 9-12 programs all located on one campus: John J. Cairns, Loma Vista Charter, and Lindsay Community Day. Even after being combined, Alternative Education had the smallest learner population (ranging from 113 to 122 learners per year) and the fewest learning facilitators.

Despite its different structure, learners in Alternative Education had similar demographics as those in Lindsay High School with two exceptions. First, a much higher percentage of English Learners attended these schools than the traditional high school. Second, the highest percentages of learners in foster care attended these programs.

The same principal led all three of the Alternative Education programs throughout the three year grant, and had been in that position for the five years prior. Despite this consistency in leadership, 43% of the learning facilitators did not return between Grant Years 1 and 2. Some left the district, while others transferred to the high school. However, much in line with the trend discovered throughout this analysis, those who engaged in professional learning largely remained in the Alternative Education community. When considering percentages and participation rates with Alternative Education, it is important to recognize the size of the learning facilitator population. Only four learning facilitators participated in Grant Year 1 and five in Grant Years 2 and 3. Even though the participation rates appear to mirror that of Lindsay High School, they included substantially fewer learning facilitators.

Table 12: Alternative Education Learner and Learning Facilitator Characteristics

		Grant Year 1	Grant Year 2	Grant Year 3
Learner Characteristics	**Total Number of Learners**	113	118	122
	English Learners	41%	55%	43%
	Free or Reduced-Price Meals	94%	92%	93%
	Housing Characteristics	26% Unhoused 9% Migrant 5.3% Foster Care	20% Unhoused 19% Migrant 4.2% Foster Care	13% Unhoused 20% Migrant 1.6% Foster Care
Learning Facilitator Characteristics	**Total Number of Learning Facilitators**	7	7	7
	Retention Rate	57%	100%	100%
	Participation Rate in Professional Learning	57%	71%	71%

Professional Learning as a Retention Strategy

Retention exists as a goal of the broader Performance Based Compensation Strategies (PBCS). By investing in individual learning facilitators, the district intended to retain the human capital that they developed. While creating the individual learning community profiles, we did identify a relationship between participation in professional learning and retention (see Table 13).

Table 13. Analysis of Relationship between Professional Learning and Retention

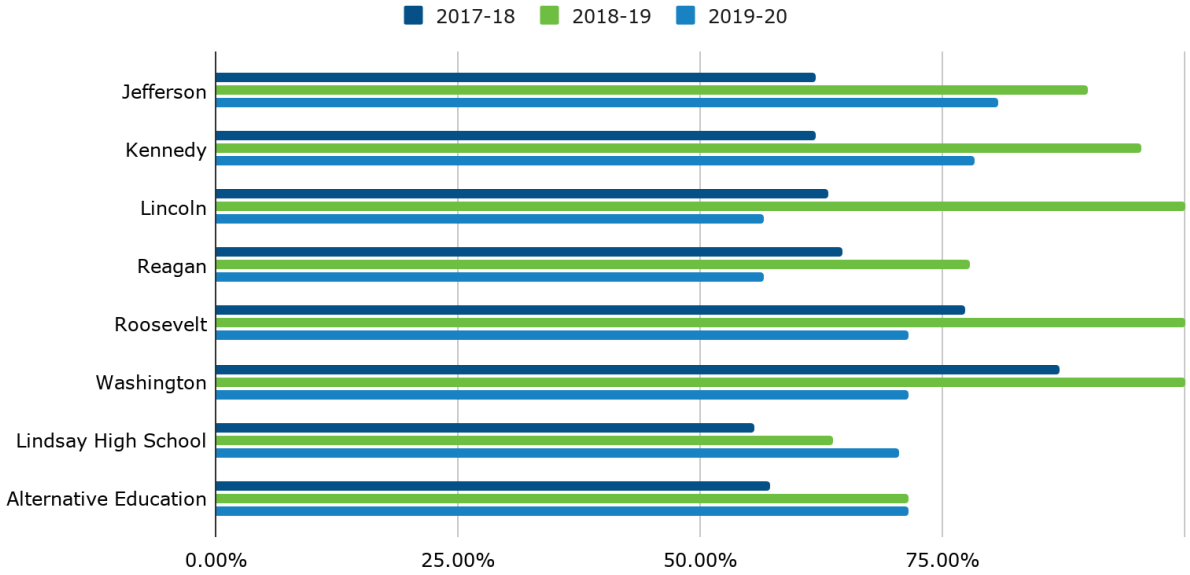
	Retained	Participation in PLOs	No Participation
Grant Year 1 to 2 Retention	Yes	123 learning facilitators (95% retained)	40 learning facilitators (63% retained)
	No	6 learning facilitators (5% left)	23 learning facilitators (37% left)
Grant Year 2 to 3 Retention	Yes	163 learning facilitators (94% retained)	10 learning facilitators (43% retained)
	No	9 learning facilitators (6% left)	13 learning facilitators (57% left)

Professional Learning Participation Across Learning Communities

Across the six TK-8 learning communities, the number of learning facilitators in each one increased slightly during the three grant years. With the exception of Washington, the largest TK-8 learning community, the others had relatively similar sizes. However, at the secondary level, Lindsay High School had almost double the number of learning facilitators, and the three communities that combined to form Alternative Education was half the size of the smallest TK-8 community. Therefore, we examined participation as a percentage of the learning facilitator population by community.

As illustrated by Figure 4, the two secondary communities had relatively low rates of participation in professional learning as compared to TK-8. Of note, Lincoln, Roosevelt, and Washington all had 100% participation during Grant Year 2, meaning that every learning facilitator in those communities completed at least one PLO. Both Roosevelt and Washington had consistently high rates of participation across all three years. Conversely, Reagan consistently had lower rates of participation when compared to other TK-8 communities, particularly during Grant Years 2 and 3.

Figure 4: Participation Rate by Learning Community



Learning Facilitator Retention Rates Across Learning Communities

Although we determined the rate of participation within each learning community for each year of the grant, it is important to recognize that some learning facilitators moved between different communities, in or out of the district, and into different positions within the district. In analyzing the retention rates, defined as the number of learning facilitators retained from the previous year, we discovered variation across learning communities (see Table 5). Three communities (Kennedy, Washington, and Alternative Education) witnessed an increase in the retention rate of their learner facilitators.

It is interesting to note that Alternative Education had the lowest retention rate (57%) in 2017-2018 and then 100% retention in the subsequent two years. Equally salient, Washington had the highest consistent retention rate across all three grant years. The retention rates in other communities in Lincoln, Roosevelt, and Lindsay High School fluctuated over the grant period. Across learning communities, Jefferson had the lowest retention rates, ranging from a low of 73% before Grant Year 3 to a high of 80%, before the start of Grant Year 2.

Table 14: Learning Facilitator Retention Rate across Learning Communities

Learning Community	Grant Year	Total LFs	# of LFs Retained	Retention Rate

			from Previous Year	
Jefferson	2017-18	21	16	76%
	2018-19	20	16	80%
	2019-20	26	19	73%
Kennedy	2017-18	21	15	71%
	2018-19	22	17	77%
	2019-20	23	21	91%
Lincoln	2017-18	19	19	100%
	2018-19	20	15	75%
	2019-20	23	19	83%
Reagan	2017-18	17	15	88%
	2018-19	18	13	72%
	2019-20	20	19	95%
Roosevelt	2017-18	22	19	86%
	2018-19	22	20	91%
	2019-20	28	23	82%
Washington	2017-18	31	28	90%
	2018-19	31	29	94%
	2019-20	35	33	95%
Lindsay High School	2017-18	54	49	91%
	2018-19	55	49	89%
	2019-20	61	56	92%
Alternative Education	2017-18	7	4	57%
	2018-19	7	7	100%
	2019-20	7	7	100%

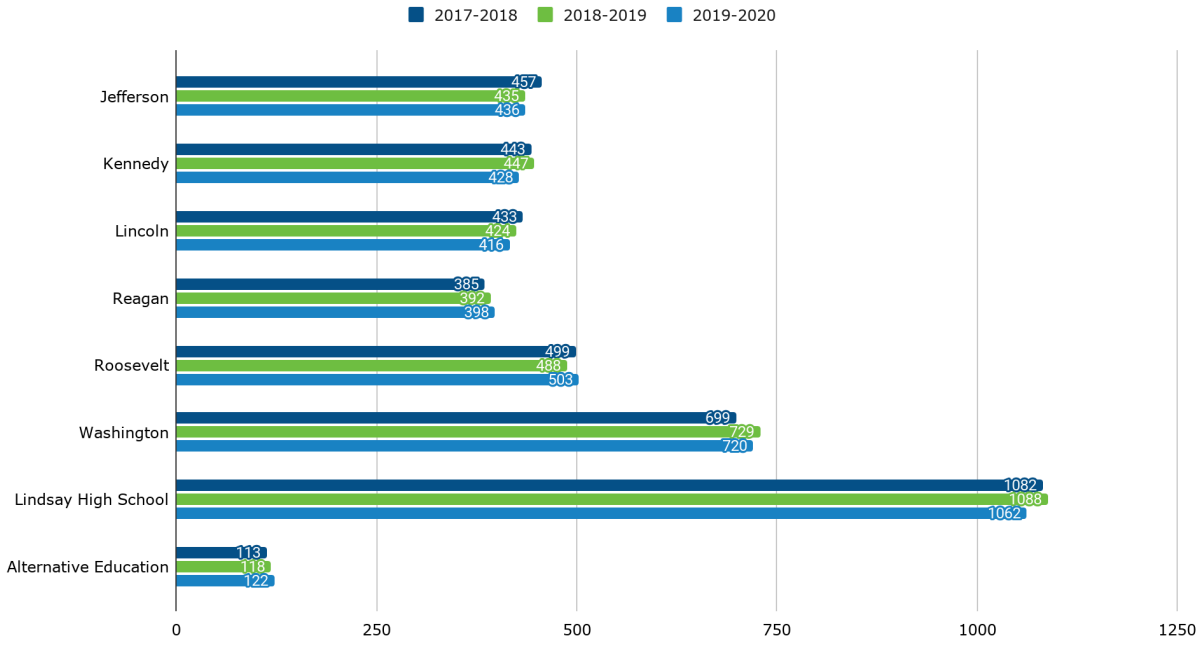
In addition to examining learning facilitator retention rates, we also looked at the retention of learning community leadership. With the exception of Lincoln and Lindsay High School, all of the learning communities had the same principal all three years of the grant. A brand-new principal started in Lincoln at the start of Grant Year 3, replacing one with almost 20 years of experience. Leadership changed in Lindsay High School after the first year of the grant.

Learner Demographics Across the Learning Communities

The total number of learners in each learning community per grant year remained relatively consistent (see Figure 5). Of the six TK-8 learning communities, Washington had the largest population with approximately 700 learners each year. The remaining five TK-8 learning communities had smaller populations of learners ranging from 385 to 503. However, Lindsay High School had a substantially larger population, and the three learning communities identified

as Alternative Education had the least number of learners. These discrepancies in sizes will factor into future analyses.

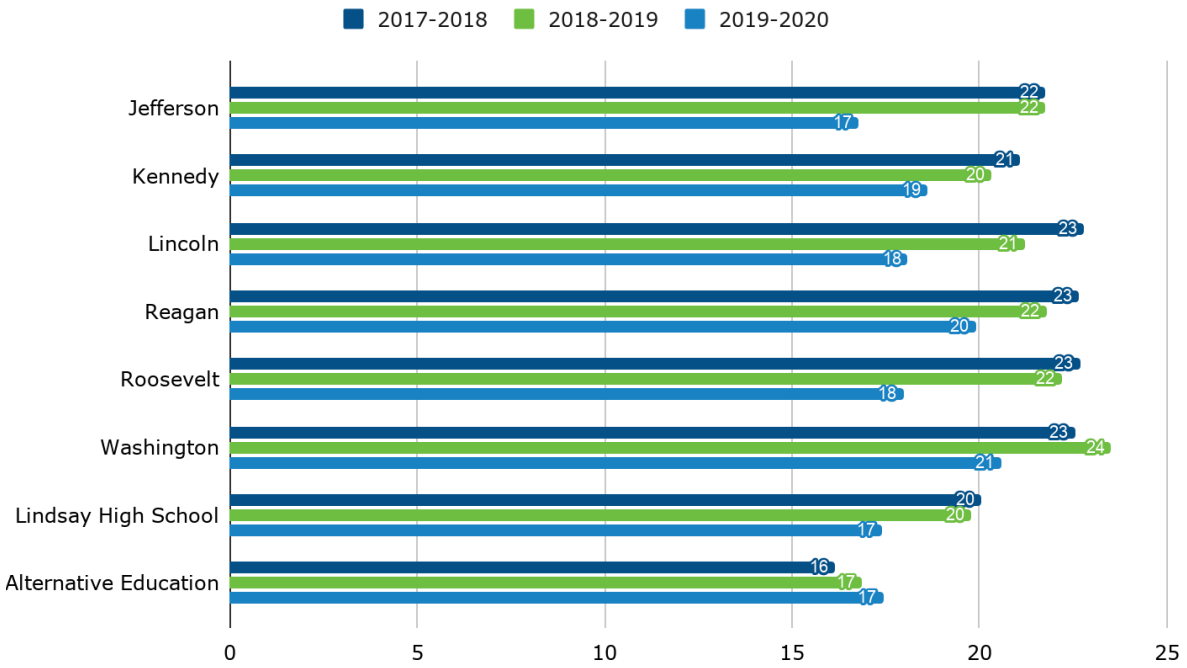
Figure 5: Number of Learners per Learning Community by Grant Year



Another component of size that may influence future analyses is the learner-to-learning facilitator ratios. Although the literature around the effects of class size on student achievement is mixed, educators often perceive positive benefits to smaller class sizes such as increased ability to foster a sense of community and the capacity to build stronger relationships with learners[6]. During the three years of the grant, with the exception of the Alternative Education communities, the learner-to-learning facilitator ratio decreased, meaning that learners may have experienced smaller class sizes which could imply increased access to support from learning facilitators. These decreases can possibly be attributed to various district and site leadership decisions, including agreements with the bargaining unit, master scheduling decisions at the site, and increased staffing. Across communities, the learner-to-learning facilitator ratios ranged from a low of 16-to-1 in Alternative Education to a high of 24-to-1 at Washington (see Figure 6).

Figure 6: Learner-to-Learning Facilitators Ratios by Learning Community and Grant Year

[6] Hoxby, C. M. (2000). The effects of class size on student achievement: New evidence from population variation. *The Quarterly Journal of Economics, 115*(4), 1239-1285.
Li, W., & Konstantopoulos, S. (2017). Does class-size reduction close the achievement gap? Evidence from TIMSS 2011. *School Effectiveness and School Improvement, 28*(2), 292-313.
Mathis, W. J. (2017). The effectiveness of class size reduction. *Psychosociological Issues in Human Resource Management, 5*(1), 176-183.
Robinson, G. E. (1990). Synthesis of Research on the Effects of Class Size. *Educational Leadership, 47*(7), 80–90.



As a district, LUSD serves a largely Hispanic/Latino learner population located in a low-income, rural community. And yet, the demographics of the learners varies between each learning community (see Table 6).

Table 15: Learner Demographics by Learning Community

Learning Community		Number of Learners	Free or Reduced-Price Meals	English Learners	Unhoused	Migrant	Foster Care
Jefferson	2017-18	457	96%	60%+	14%	21%	1.3%
	2018-19	435	92%	53%	13%	20%	0.5%
	2019-20	436	92%	48%	7%	22%	0.9%
Kennedy	2017-18	443	96%	48%	20%	17%	0.7%
	2018-19	447	92%	47%	25%+	21%	0.7%
	2019-20	428	89%	41%	19%	27%	0.0%
Lincoln	2017-18	433	95%	50%	7%	19%	1.4%
	2018-19	424	92%	43%	8%	21%	1.4%
	2019-20	416	89%	41%	10%	25%	0.2%
Reagan	2017-18	385	98%+	46%	14%	21%	2.1%
	2018-19	392	95%	40%	13%	22%	3.3%
	2019-20	398	93%	36%	7%	27%	0.0%
Roosevelt	2017-18	499	92%	46%	9%	10%	0.8%
	2018-19	488	84%	41%	8%	9%-	0.8%
	2019-20	503	83%-	36%	4%-	10%	0.4%
Washington	2017-18	699	95%	58%	8%	34%+	0.3%
	2018-19	729	91%	52%	9%	33%	0.1%
	2019-20	720	90%	51%	8%	34%	0.1%
Lindsay High School	2017-18	1082	95%	27%	19%	18%	0.8%
	2018-19	1088	90%	25%	20%	19%	0.9%
	2019-20	1062	89%	19%-	11%	20%	0.4%
Alternative Education	2017-18	113	94%	41%	26%	9%	5.3%+
	2018-19	118	92%	55%	20%	19%	4.2%
	2019-20	122	93%	43%	13%	20%	1.6%

+indicates the highest percentage and - indicates the lowest

- With the exception of Alternative Education, which had an increase in Grant Year 2, all learning communities witnessed a decrease in the number of learners who qualified for free or reduced-price meals across the three grant years. However, it is important to note that **Reagan consistently had the highest percentages (e.g., 98% in Grant Year 1) and Roosevelt had the lowest (e.g., 83% in Grant Year 3)**.

- The percentage of learners designated as English Learners generally decreased in all of the learning communities during the three grant years. As discussed in a previous report, this could be a result of learners becoming reclassified as Long Term Learners based on their English Language Proficiency Assessment for California (ELPAC) scores. In Grant Year 1, **Jefferson had the highest percentage of English Learners (60%)**, and by Grant Year 3, **Lindsay High School had the lowest (19%).**

- The percentage of learners identified as *unhoused* decreased in Jefferson, Reagan, Roosevelt, and Alternative Education. Consistently, **Kennedy consistently had the highest percentages of learners experiencing housing insecurity (19-25%).**

- Of the eight learning communities, five enrolled an increasing number of learners who identified as *migrant*. This number more than doubled in the Alternative Education communities from 9% to 20%. However, **Washington consistently had the highest proportions of migrant students (33-34%) and Roosevelt had the lowest (9-10%).**

- With two exceptions, the percentages of students in foster care remained relatively low. **In Reagan, 2.1% of the learners in 2017-2018 and 3.3% in 2018-2019** lived in foster care though this percentage dropped to 0.0% in 2019-2020. Additionally, **5.3% of the learners enrolled in Alternative Education lived in foster care** during Grant Year 1. This percentage dropped to 1.6% in 2019-2020.

Learner Assessment Measures

To measure the impact of professional learning on learner growth, the analysis in the modules utilizes a combination of formative assessment scores for reading as well as pacing and progress data related to the four core content areas: ELA, math, history/social studies, and science. As such, the modules rely on the following measures:

- The Developmental Reading Assessment (DRA)[7] served as a formative measure of reading growth for TK-2 learners during Grant Years 1 and 2;

- In Grant Year 3, the Next Step Guided Reading Assessment (NSGRA)[8] replaced the DRA for TK-2 learners;

[7] Pearson. (2019). *DRA Developmental Reading Assessment, Third Edition [DRA3]*. https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Academic-Learning/Developmental-Reading-Assessment-%7C-Third-Edition/p/100001913.html
[8] Scholastic Inc. (2020). *Next Step Guided Reading Assessment Program Overview*, http://teacher.scholastic.com/products/Next-Step-Guided-Reading-Assessment/program_overview.htm

- The Scholastic Reading Inventory (SRI)[9] measured reading for learners in 3-12 during all three years; and,
- Pacing & Progress data captured from Empower, the district's custom, standards-based learning management system, documented learner growth across the four main content areas (ELA, math, history/social studies, and science).

The following sections explain the purpose and scoring of each measure used in the different modules. They also present an overview of scores in LUSD beginning with the 2016-17 School Year (the last year before the start of the TSL Empower grant) to provide an overview of learner achievement across the district. These scores illustrate the comparative growth of the learners during the three grant years (note, however, that not all assessments were available in Grant Year 3 due to COVID-19 related school closures). Later analyses will then examine the effects of combinations of professional learning on that growth.

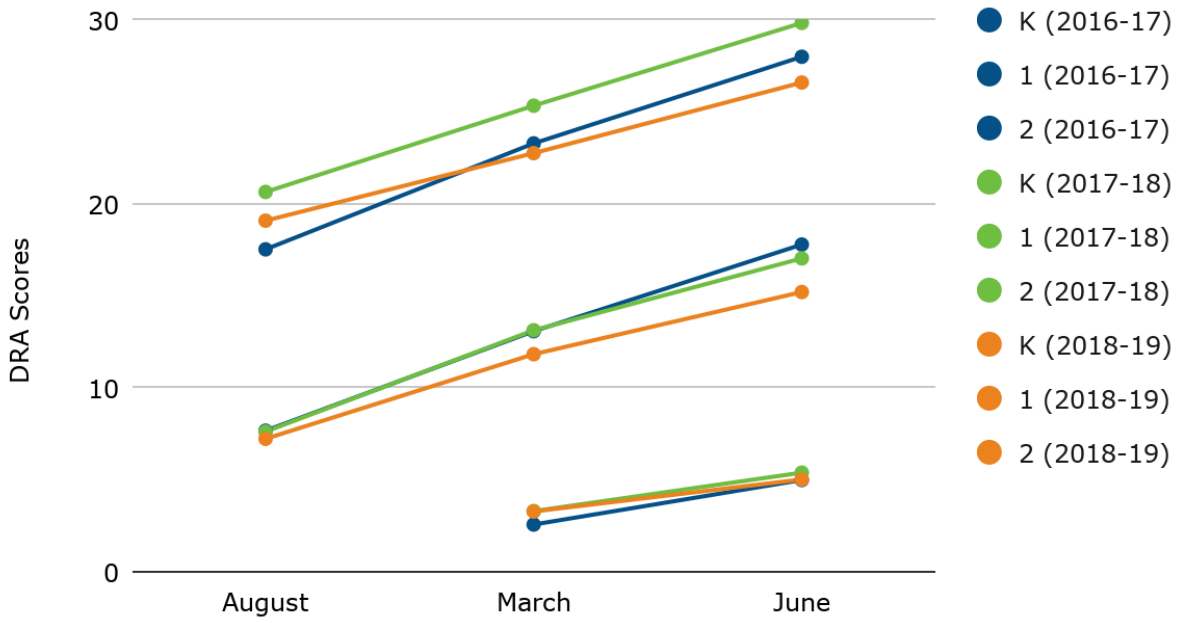
Developmental Reading Assessment (DRA)

The DRA measures reading ability in five key areas: phonemic awareness, phonics, vocabulary development, reading fluency, and reading comprehension. It is administered multiple times each year for learners in content levels TK-2 to measure growth over time and also presents an End of Year (EOY) score. As illustrated by the table below, learners in kindergarten do not take an assessment in August; therefore, their scores only include the March and June data points. A scaled assessment, the range in DRA scores increases with each content level: approximately 0-24 in kindergarten, 0-40 in content level 1, and 0-70 in content level 2.

Without taking any professional learning into account, the figure below illustrates the change in learners' scores on the DRA for each content level through the end of Grant Year 2 (see Table B1). Each year, learners demonstrated positive growth in their DRA scores. It is important to note that scores remained fairly consistent across the three years. Interestingly, Grant Year 2 (2018-19) had the lowest end of year scores.

Figure 7: Reading Growth based on DRA Scores

[9] Scholastic Inc. (2019). *Scholastic Reading Inventory research summary*. http://teacher.scholastic.com/products/product_info/pdf/SRI_Research%20Summary_Revised.pdf



Next Step Guided Reading Assessment (NSGRA)

At the start of Grant Year 3, the district shifted from the DRA to the NSGRA to better align with their Guided Reading program. The NSGRA uses a four-step process to measure reading achievement: a whole class reading-interest survey, a whole class word-knowledge survey, whole class comprehensive assessments, and individual reading assessment conferences[10]. A team of consultants who work with Dr. Jan Richardson, one of the authors of the assessment, led multiple professional learning sessions in LUSD during the first two grant years. As such, the NSGRA data will be analyzed in later modules to determine whether a correlation could be found between participation in relevant professional learning with learner reading achievement.

Scholastic Reading Inventory (SRI)

The SRI provides data on learners' reading growth and comprehension over time. Much like the DRA, it is a scaled score that increases as learners progress through content levels. A criterion-referenced test, the SRI measures reading using the LEXILE Framework® for Reading[11]. Because expected annual growth in SRI reading scores is higher in elementary than middle or upper content levels[12], the learners were grouped into three levels: elementary (content levels 3-5), middle (content levels 6-8), and secondary (content levels 9-12).

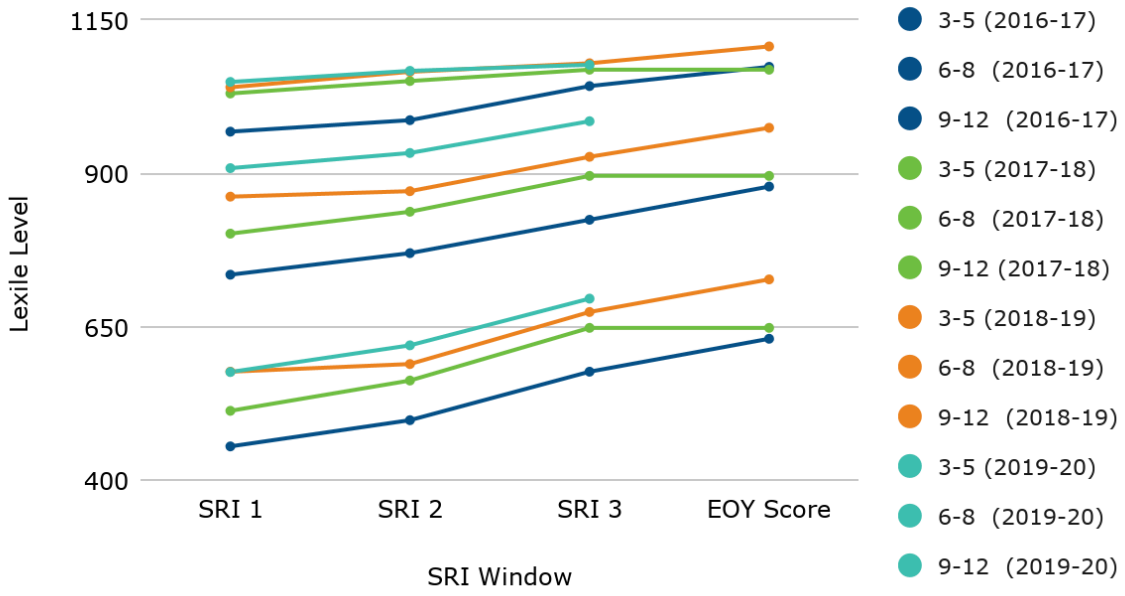
Learners in LUSD take SRI assessments four times each year. The analyses in future modules will use the first three reported SRI scores as well as the End of Year (EOY) score. To account for

[10] Scholastic. (2020). *Next Step Guided Reading Assessment Program Overview.* http://teacher.scholastic.com/products/Next-Step-Guided-Reading-Assessment/program_overview.htm
[11] Scholastic. (2020). *Reading and assessment overview.* Scholastic Reading Inventory. http://teacher.scholastic.com/products/sri_reading_assessment/programoverview.htm
[12] Scholastic Inc. (2007). *SRI technical guide.* https://www.hmhco.com/product-support/content/techsupport/sri/manuals/SRI_Tech_Guide_05_10.pdf
National Center for Education Statistics [NCES]. (2015). *The condition of education: Reading and mathematics score trends.* https://nces.ed.gov/programs/coe/indicator_cnj.asp

some students who do not have fourth window testing scores, the EOY score is the highest Lexile Level that a learner attained during the year. Over 90% of the time, the fourth SRI window represented the highest reading score. Thus, the EOY score provides a more accurate picture of learner achievement.

Again, the 2016-17 School Year served as a baseline for the analyses since none of the learning facilitators had yet engaged in any of the professional learning. Particularly in the middle and elementary content levels, the learners generally showed improvements in their reading performance over the three school years. The figure below (see Table B2 for details) illustrates learner growth from baseline to the end of Grant Year 3. Learners showed improvement within each year and scored higher than the baseline in Grant Years 1 and 2. With the exception of content levels 3-5, there appears to be a decline in scores during the start of Grant Year 3. It is important to note that due to COVID-19 school closure, an end-of-year score does not exist for the 2019-20 school year.

Figure 8: Reading Growth as measured by the SRI



Content Area Progress Data Captured by Empower

LUSD uses a performance-based progress system based on learning targets and standards rather than a traditional grading system. To capture learner performance within this system, they custom-built a learning management system called *Empower Learning* to monitor and assess learner progress. In collaboration with their learning facilitator, learners set specific progress goals at the start of each school year and semester. Each time that a learner achieves mastery of a particular standard associated with that goal, their learning facilitator indicates their progress in Empower. These score changes in their learning targets represent learning growth towards mastery. As a learner moves towards mastery within their learning targets, the Empower goal

dashboard indicates an advance in their progress as a percentage of the learning targets achieved within the desired time frame.

To analyze learner growth based on this data, we took two different approaches, one with the TK-8 learners and one with 9-12. In LUSD, all learners in TK-8 exist within self-contained classrooms, meaning that the same learning facilitator teaches all of the core content areas. Because of this, we could better understand the effects of professional learning on learner growth by content area and content level range. However, at the secondary level, learners not only have different learning facilitators for each content area but they also might have different learning facilitators each semester; and yet, according to the Common Core State Standards, all educators should address learner literacy. Therefore, we specifically analyze learner progress in English Language Arts (ELA) and reading. Later modules will describe our data analysis procedure in more detail.

Conclusion

As described by Table 1, each module will build off of the previous one. The first module will present the results of the cluster analysis and describe the characteristics of the clusters. Module 2 will then use those clusters to examine the effects of professional learning on TK-8 learner growth. We will then conduct a descriptive analysis of the TK-8 growth data in Module 3 to look for any underlying trends and whether any growth could be attributed to site-based conditions. Finally, the last module will take a deep look at Common Core Literacy within the 9-12 learner population.

Appendix A - Titles & Descriptions of PLOs

Grant Year 1 (2017-18 School Year)

Focus Institutes	
Content Literacy #1	Participants learned to engage learners with content-focused reading strategies and comprehension tools, and deepened their knowledge of how to integrate nonfiction literacy strategies into any content area to foster learners' comprehension, conceptual learning and retention, and engagement.
Content Literacy #2	Participants learned to engage learners with reading and writing strategies and deepened their knowledge of backwards design lesson planning and the integration of literacy strategies, including vocabulary, reading comprehension, and writing to learn.
Designated ELD	Participants learned explicit strategies for English Learners from the BELIEF TK-8 and HS DESIGNATED ALL CONTENTS & LEVELS framework by Stanford and CDE toolkit as well as enhanced their knowledge of lesson design, designated strategies, and alignment to ELA/ ELD claims and targets.
ELD #1	Participants learned to prepare English Learners to have in-depth conversations about content area concepts and topics as well as developed their skills in teaching learners how to have academic conversations.
ELD #2	Participants learned procedures to support English Learners in language acquisition, academic vocabulary, listening, and comprehension as well as developed lesson plans using grade level appropriate resources and improved their knowledge of lesson design.
Empower	Participants learned the key components and basic navigational features of *Empower*, including scoring functions as well as activity and playlist development.
Lifelong Learning	Participants learned the purpose and need for lifelong learning, gained a deeper understanding into the spheres of lifelong learning, and developed the skills to integrate lifelong learning content meaningfully into academic core instructional units.
Math Big 5	Participants explored the three components (Dots, What's My Place? What's My Value?, and Calendar Baits) of Head-Pollett Math. Participants improved their understanding of how to use these components to support Common Core instruction in the Math Big 5.
Word Work	Participants gained an in-depth understanding of the phonemic, phonetic, and orthographic components of literacy instruction from pre-readers to fluent readers. This hands-on workshop focused on Jan Richardson's highly engaging, efficient, and effective word study activities that increase word-level reading proficiency, automaticity with reading and writing sight words, fluency, and writing skills.

Learning Academies

Blended Learning	Participants learned and applied the basics of blended learning, how to motivate learners through blended learning models, and a plan establishing the culture and instructional approach of technology-rich instruction.
Content Literacy	Participants learned to “kick the habit” of hovering, over-explaining, and rescuing learners rather than guiding them to be more self-reliant for content area literacy. Participants expanded their knowledge and application of how to integrate content-based literacy tasks, strategies for learning coaching, and scaffolding approaches to meet learners at all levels.
Designated ELD	Participants gained explicit strategies for designing and implementing designated ELD. Participants improved their knowledge and application of language acquisition strategies, the particular needs of Long Term English Learners, and formative assessment design.
Digital Skills for Customized Learning	Participants developed the technical and cognitive skills necessary to search, evaluate, and curate information in order to solve problems digitally. Participants learned to utilize these skills and processes to collaborate and share solutions to real-world issues as well as familiarize themselves with the concept of a digital identity.
Fast Runners: Extended Understanding	Participants designed an environment that supports the unique needs of learners with exceptional skills and abilities that may be considered “fast runners,” including curriculum and instructional strategies as well as application of professional practices for Creativity, Motivation and Guidance.
Guided Reading	Participants learned how to plan powerful, systematic guided reading lessons. They learned each of Jan Richardson's five guided reading routines from Pre-A through Fluent. These routines are appropriate for pre-readers through Fluent readers as well as across all elementary content levels.
Project-Based Learning 101	Participants gained an understanding of the Gold Standard design principles of Project Based Learning and applied this learning through the design or adaptation of a project for their learning environment. Participants also learned and applied strategies to facilitate the project, build classroom culture, and assess learning.

Micro Credentials	
Project-Based Learning 101	Participants gained a deeper understanding of the Gold Standard design principles of Project Based Learning and applied this learning through the design or adaptation of a project for their learning environment to build classroom culture and assess learning.
Customized Learning	Participants learned and applied open educational resources to support the creation of flexible classroom curriculum materials. By employing backward mapping strategies, participants developed various learning pathways for learners that aligned with assessments and created opportunities for more complex understanding.
First Quality Instruction	Through virtual support from a Better Lesson Coach, participants worked to impact learner growth. Together with their Coach, learning facilitators identified specific learner needs and selected strategies to address challenges and opportunities.
Integrated ELD	Participants learned to bring Integrated ELD to life in their environments and accelerate language acquisition for English Learners. They increased their knowledge and application of the ELD standards, key components of integrated lesson design, formative assessments, and differentiation based on learner needs.

Grant Year 2 (2018-19 School Year)

Focus Institutes - ELA/ELD	
Content Literacy for Nonfiction	Participants learned to engage learners with content-focused reading strategies as well as how to integrate nonfiction literacy strategies into any content area.
Content Literacy Tasks	Participants learned how to integrate literacy strategies, including vocabulary, reading comprehension, and writing to learn.
Interactive Reading & Writing	Participants learned the role and value of interactive reading/writing as well as how to plan, structure, and deliver an interactive reading/writing lesson.
Designated ELD	Participants learned the design of Designated ELD, including how to identify language demands of content, build language objectives, and target instruction.
ELPAC Task Types	Participants deconstructed the ELPAC's 4 Domains and learned to design ELPAC task supportive strategies as well as infuse language practices into learning experiences.
Making Meaning in ELD	Participants built awareness of responsive ELD instruction connected to close reading of complex text and strategies.
Teaching the Writing Process	Participants explored the writing process, including strategies to build learner independence, and to use mini-lessons to explicitly teach skills and strategies.

Focus Institutes - Science	
Claim Evidence -Reasoning	Participants learned how to facilitate effective Claim Evidence Reasoning using STEMscopes instructional strategies.
Hands-on Science with STEMscopes	Participants learned how to use STEMscopes instructional labs to provide learners with fun, meaningful, hands-on lab experiences.
Dual Immersion Science	Participants learned specific strategies for using STEMscopes in Dual Immersion environments to increase learner achievement.
30-Minute Science	Participants learned how to plan and use STEMscopes resources efficiently to make teaching science doable and increase learner achievement.
Supporting ELs in Science	Participants learned how to use STEMscopes resources to best support English Learners and their language development through science.
Science for High Stakes Exams	Participants learned how to use STEMscopes to support learners in mastering the NGSS learning targets through integrated instruction.
Scientific Literacy	Participants practiced using STEMscopes resources to strengthen learners' scientific literacy.

Focus Institutes - Mathematics

Progression of Mathematics	Participants learned specific strands of the Common Core State Standards and how to build on previous learning.
Growth Mindset in Math	Participants dove into the impact of learners' mindsets and learned strategies to develop learners' growth mindset in math.
Teaching Math with Technology	Participants learned how to integrate technology into their instruction, including the use of DESMOS, graphing calculators, and Geogebra.

Focus Institutes - Lindsay Learning	
Adult Learning Curriculum Look Fors	Participants dove into the principles of the Adult Learning Curriculum, including the theory, instructional strategies, and how to develop professional mastery.
Empower	Participants discovered basic navigational features of *Empower*, including newly added features, scoring functions, as well as activity and playlist development.
Lifelong Learning	Participants learned the purpose and need for Lifelong learning, gained a deeper understanding into the spheres, and developed the skills to integrate them in a meaningful way.

Focus Institutes - History/Social Science	
Literacy in History/Social Science	Participants examined and explored the new History-Social Science (HSS) framework and its framework around building literacy through interactive discovery.
Creating Engagement Using Primary Sources	Participants discovered how to foster inquiry-based and investigative learning opportunities in history and social studies content areas through primary sources.
Authentic Assessment in History/SS	Participants examined numerous alternatives for assessment, explored a variety of valuable assessment formats and rubrics, and developed fresh approaches to authentic assessment.

Focus Institutes - Customized Learning	
Customized Learning	Participants learned about open educational resources to support the creation of flexible curriculum materials and the development of learning pathways for learners.
Digital Skills	Participants learned the technical and cognitive skills necessary to search, evaluate, and curate information for instruction in the digital era.
Project-Based Learning 201	Participants increased their understanding of the Gold Standard design principles of Project Based Learning, including project design and assessment.

Learning Academies	
Guided Reading 101	Participants became familiar with the four elements of Jan Richardson's guided reading plan and how to plan powerful, targeted guided reading lessons.
Guided Writing 101	Participants learned how to plan powerful and targeted guided reading lessons using Jan Richardson's framework, with a special emphasis on guided writing.
Cognitively Guided Instruction	Participants learned the foundation of cognitively guided instruction and how to use learner knowledge to help them design and implement mathematics lessons.
Blended Learning	Participants learned and applied the basics of blended learning, discovering how to motivate learners through blended learning models and implement technology-rich instruction.

Micro Credentials	
Personalized Learning	Through virtual support from a Better Lesson Coach, participants collaborated with their coach to set goals, develop strategies, and impact learner growth.
National STEM Educator	Participants learned and applied the goals of STEM education and how to incorporate it in the learning environment.
Guided Reading 201	Participants developed their understanding of Jan Richardson's Guided Reading routines and instructional strategies, including a deep dive into Chapter 7.
Project-Based Learning 101	Participants learned and applied the Gold Standard design principles of Project Based Learning through the design and implementation of a project for their learners.

TIE Courses	
Flipped Classroom	Now that more schools are embracing the use of technology, the Flipped Classroom has become a great first step towards customized learning. It can be done in any grade level, for any subject. This training covered the basics of Flipped Learning, tools to make videos, assessment, how to use the extra class time meaningfully, and the pros and cons of this method.
Learner Engagement	This course used the book "Eight Myths of Student Disengagement" to investigate how classroom practices influence engagement, including types of tasks assigned, quality of facilitator-learner relations, and peer dynamics. The course encouraged participants to recognize that engagement is not just on-task behavior, but also incorporates behavioral, emotional, and cognitive practices. Participants considered a variety of instructional practices and their connection to learner engagement.
Project-Based Learning	Project-Based Learning offers more meaningful and engaging lessons for learners. The traditional classroom, where learning occurs in the vacuum of separate and distinct islands, will soon be replaced by interconnected curriculum via authentic inquiry based learning experiences. One of the goals for this class was to expose participants to these resources and help them develop their own personal notion of Project-Based Lessons within the context of their own learning environment.
Online Learning	Much goes into the design of an online course. This course used many articles and videos for research and the opportunity to create an online class. The module covered defining the learning environment, active learning, real-world application, assessment, differentiation, ethics, as well as other topics.
Learner Motivation: *Teaching From Within*	The challenge of motivating learners to learn has been central to the teaching profession throughout history. Unfortunately, many motivational strategies have had the opposite of their intended effect on learners. This course is built around concepts explored in Bob Sullo's book, *The Motivated Student* and the 2012 TIE Media film, *Teaching From Within*. *Teaching From Within* is a film and a way of teaching that promotes an inside-out (intrinsic) approach to learning. Participants analyzed their own and their school's approaches to motivating learners, viewed the film itself, explored research around learner motivation, and developed goals and approaches for beginning the shift from problematic external motivational approaches to teaching and learning that comes from within.
Blended Learning	The class used the eBook *Blended-Using Disruptive Innovation to Improve Schools* as the main text, as well as some articles and videos. The course incorporated four phases to help implement a Blended Learning environment: What is Blended Learning, what could it mean for you, and how can you move to a Blended Learning environment in your classroom? A unit on how to assess in the Blended Learning classroom was also included in this course.

TIE Courses — Continued	
Culturally Responsive Classroom	What is culturally responsive teaching? In what ways does implicit bias affect teaching practice? How do I connect with learners from different racial, socio-economic, or cultural backgrounds? This course enabled facilitators to create a classroom environment that is culturally responsive in order to answer these questions.
Learner Agency	As education evolves toward customized learning, the need for self-directed learners becomes critical for the learning environment. With learners at different places in the curriculum, working on several projects and in changing physical environments, learners will need to develop a strong sense of personal responsibility. The Learner Agency work done at TIE supports educators on implementing these ideas. This course introduced participants to tools and resources to support this work.
Digital Literacy	As education evolves toward customized learning, digital literacy skills become absolutely critical — unfortunately, most learners and educators "don't know what they don't know." In this course, participants examined the importance of learners acquiring vital digital literacy skills for better problem solving as well as implications for using digital tools in a customized environment.
Flexible Curriculum	Flexible Curriculum used videos, articles, and websites to develop a deeper understanding of designing, using, and sharing flexible curriculum. Participants explored a variety of sites to help consider pace, place, path, and time for learners.

Site Based Learning Academies	
Jefferson (Thinking Maps for 21st Century learning)	Participants will learn how to use the Thinking Maps in all levels of instruction through consistent visual patterns linked directly to eight specific thought processes. These patterns ensure all learners reach higher levels of critical and creative thinking — essential components of 21st Century learning.
Kennedy (Designated and Integrated ELD instruction, Akhavan)	Participants will learn instructional strategies to support English Learners in both Designated and Integrated ELD instruction, including the use of language objectives, scaffolded strategies, and lesson design for language acquisition.
Lincoln (SOAR Teaching Frames for Literacy and Math)	Participants will learn how to design instruction with the SOAR Teaching Frames for Literacy and Math to drive improvements in disciplinary literacy teaching, academic discourse, and language acquisition for English Learners.
Roosevelt (Balanced Literacy, Akhavan)	Participants will learn instructional strategies for Balanced LIteracy, including shared and whole group reading, writing, and supports for English Learners.
Washington (English Learner Language Acquisition, Akhavan)	Participants will learn instructional strategies to support English Learners in both language acquisition and writing through mini-lesson development, scaffolded strategies, and authentic writing products.

Grant Year 3 (2019-20 School Year)

Focus Institutes - Motivating Learning in Lindsay's Performance Based System	
Empower for LFs	Participants will explore the basics of Empower 3.0 and learn about: core functions to ensure transparency and feedback with learners; how to leverage playlists and curriculum features to design high quality learning experiences; and how to analyze and leverage learner data using features such as the gradebook, goal meter, and PLP dashboard.
Lifelong Learning	These stand-alone sessions will focus on the spheres of Lifelong Learning including how to unpack them, design instruction that foster them, and bring social emotional competencies to life in your learning environment.
Supporting the Needs of All Learners	This session will focus on tools for classroom management and how to serve special needs learners within a general education learning environment.
Differentiated Instruction: Tools, Tips, and Techniques	Participants will develop an understanding of differentiated instruction and how it can increase learner engagement as well as collaboration by exploring technology tools plus how to differentiate based on content, process, and product.
Creating Engagement Using Primary Sources	This two-day Focus Institute will explore inquiry-based and investigative learning opportunities to support literacy as well as motivating learning opportunities in history/social science.
eSpark Lifelong Learning	Each half-day session will help participants learn to explore the design of eSpark playlists, leverage them for lifelong learning instruction, and formulate ideas for customization to motivate learners.
Getting Things Done	Getting Things Done (GTD) Training teaches individuals the skills to focus their attention on the things that matter most, to prioritize commitments, to increase productivity, and to create more mental space for innovation at work and at home.

Focus Institutes - Guided Reading and Literacy	
Rime Magic: Content Levels TK-5	Participants will learn to use Rime Magic to deliver engaging, five-minute lessons for word recognition to enhance learners' comprehension and fluency.
Socratic Seminars: Content Levels K-12	In this three-day Focus Institute, participants will develop and experience Socratic Seminars that support learners with critical thinking, dialogue, and close reading for any content area.
eSpark ELA Literature	Each half-day session helps participants learn how to explore the design of eSpark playlists, leverage them for instruction, and formulate ideas for customization to motivate learners during ELA instruction.
eSpark Designated ELD	Each half-day session helps participants learn how to explore the design of eSpark playlists, leverage them for instruction, and formulate ideas for customization to motivate English Learners.

Focus Institutes - Motivating Learning Experiences For Learners in Science & Math	
Always Time for Science	Participants will develop strategies to integrate science into language learning and history/social studies without sacrificing other content areas.
Making the Most of STEMScopes	Learn best-practices for implementing STEMscopes in a way that will have your learners doing, knowing, and thinking science the NGSS way. From basic navigation to advanced tools like the planner and CAST-prep assessments, participants will learn to effectively maximize opportunities for your learners.
Cooperative Learning Routines that Work!	Participants will learn and practice five proven cooperative learning routines for supporting ALL learners through intentional facilitation of social and emotional learning (SEL) as well as sustained inquiry as defined by the NGSS.
The CAST and Science Learning in Lindsay	Participants will experience the CAST, analyze sample test items, consider the latest state-wide analytics related to this still-evolving high stakes test, and explore strategies to ensure that learners are assessment ready without teaching to the test.
Talk Science: Elevation Thinking with Claims, Evidence, and Reasoning	Participants will develop their skills in facilitating the cross-curricular Claim-Evidence- Reasoning process with learners and leave with tools that can be implemented immediately to support language, humanities, and science learning as well as help learners write and talk like scientists.
Motivate Learners: Environmental Science in the San Joaquin Valley	This session introduces the Environmental 5E approach to facilitating place-based environmental learning that motivates learners and connects to their lives. Participants will explore relevant regional environmental issues, use remote sensing tools to make regional/global connections, and learn strategies for supporting learners as they examine controversial local issues.
eSpark Mathematics	Each half-day session will help participants learn how to explore the design of eSpark playlists, leverage them for instruction, and formulate ideas for customization to motivate learners during math instruction.

Learning Academies	
Blended Learning	Participants will learn and apply the basics of blended learning, including how to motivate learners through blended learning models and develop a plan to establish the culture and instructional approach of technology-rich instruction.

Micro Credentials	
Balanced Literacy	Participants will learn to design, integrate, and deliver Balanced Literacy instruction including four components of reading: Guided Reading, Shared Reading, Independent Reading, and Read Alouds.
Engaging with the NGSS with the 5e Model	Participants will learn to design delivery of the 5E model of the NGSS, including how to create three-dimensional science experiences with learners.
Project-Based Learning 101	Participants will learn the core tenets of the Buck Institute's model and protocols for project-based learning, including how to design and deliver a relevant, rigorous project in any content area.

Site-Based Learning Academies	
Alt. Ed. - Welty Internal Coherence Learning Academy (YEAR 1)	Participants will learn foundational internal coherence and teacher leadership strategies and practices to use with their site collaborative teaching and learning structures. This includes the knowledge, skills protocols and support needed to grow learning environment cultures characterized by effective teacher leadership, common focus, collaborative teams and dedication to teaching and learning for all.
Alt. Ed. - Welty Internal Coherence Learning Academy (YEAR 2)	Participants will apply the foundational internal coherence strategies and deepen teacher leadership strategies and practices to use with their sites. This includes leading the development of site culture, continuous improvement, staff coherence, and data-driven practices.
Alt. Ed. Project Based Learning 101 (YEAR 3)	Participants will learn the core tenets of the Buck Institute's model and protocols for project-based learning, including how to design and deliver a relevant, rigorous project in any content area.
Jefferson - TSL Math Learning Academy	Participants will learn and apply core mathematical mindsets and instructional strategies including cognitively guided instruction and standards-based design.

Site-Based Learning Academies - Continued	
Jefferson - Welty Internal Coherence Learning Academy (YEAR 1)	Participants will learn foundational internal coherence and teacher leadership strategies and practices to use with their site collaborative teaching and learning structures. This includes the knowledge, skills protocols and support needed to grow learning environment cultures characterized by effective teacher leadership, common focus, collaborative teams and dedication to teaching and learning for all.
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Kennedy - Welty Internal Coherence Learning Academy (YEAR 2)	Participants will apply the foundational internal coherence strategies and deepen teacher leadership strategies and practices to use with their sites. This includes leading the development of site culture, continuous improvement, staff coherence, and data-driven practices.
LHS - Welty Internal Coherence Learning Academy (YEAR 1)	Participants will learn foundational internal coherence and teacher leadership strategies and practices to use with their site collaborative teaching and learning structures. This includes the knowledge, skills protocols and support needed to grow learning environment cultures characterized by effective teacher leadership, common focus, collaborative teams and dedication to teaching and learning for all.
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Lincoln - Welty Internal Coherence Learning Academy (YEAR 1)	Participants will learn foundational internal coherence and teacher leadership strategies and practices to use with their site collaborative teaching and learning structures. This includes the knowledge, skills protocols and support needed to grow learning environment cultures characterized by effective teacher leadership, common focus, collaborative teams and dedication to teaching and learning for all.

Site-Based Learning Academies - Continued	
Lincoln- Welty Internal Coherence Learning Academy (YEAR 2)	Participants will apply the foundational internal coherence strategies and deepen teacher leadership strategies and practices to use with their sites. This includes leading the development of site culture, continuous improvement, staff coherence, and data-driven practices.
Reagan - Welty Internal Coherence Learning Academy (YEAR 1)	Participants will learn foundational internal coherence and teacher leadership strategies and practices to use with their site collaborative teaching and learning structures. This includes the knowledge, skills protocols and support needed to grow learning environment cultures characterized by effective teacher leadership, common focus, collaborative teams and dedication to teaching and learning for all.
Reagan- Welty Internal Coherence Learning Academy (YEAR 2)	Participants will apply the foundational internal coherence strategies and deepen teacher leadership strategies and practices to use with their sites. This includes leading the development of site culture, continuous improvement, staff coherence, and data-driven practices.
Washington - Welty Internal Coherence (YEAR 1)	Participants will learn foundational internal coherence and teacher leadership strategies and practices to use with their site collaborative teaching and learning structures. This includes the knowledge, skills protocols and support needed to grow learning environment cultures characterized by effective teacher leadership, common focus, collaborative teams and dedication to teaching and learning for all.
Washington - Welty Internal Coherence (YEAR 2)	Participants will apply the foundational internal coherence strategies and deepen teacher leadership strategies and practices to use with their sites. This includes leading the development of site culture, continuous improvement, staff coherence, and data-driven practices.

TIE Courses	
Flipped Classroom	Now that more schools are embracing the use of technology, the Flipped Classroom has become a great first step towards customized learning. It can be done in any grade level, for any subject. This training covered the basics of Flipped Learning, tools to make videos, assessment, how to use the extra class time meaningfully, and the pros and cons of this method.
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TIE Courses — Continued	
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Flexible Curriculum	Flexible Curriculum used videos, articles, and websites to develop a deeper understanding of designing, using, and sharing flexible curriculum. Participants explored a variety of sites to help consider pace, place, path, and time for learners.

Appendix B - Tables

Table B1: Descriptive Statistics of DRA Scores

Content Level	2016-17			Grant Year 1 (2017-18)			Grant Year 2 (2018-19)		
	August	March	June	August	March	June	August	March	June
K	NA	2.57 (2.79) n=274	4.99 (4.13) n=275	NA	3.30 (2.50) n=299	5.39 (3.70) n=296	NA	3.28 (2.52) n=327	5.02 (3.46) n=323
1	7.67 (5.36) n=335	13.08 (6.22) n=333	17.79 (7.02) n=334	7.62 (5.13) n=276	13.13 (6.96) n=275	17.04 (7.57) n=275	7.23 (5.39) n=309	11.83 (6.75) n=321	15.21 (7.99) n=320
2	17.53 (7.78) n=288	23.29 (8.29) n=285	28.00 (8.25) n=287	20.65 (8.19) n=317	25.34 (9.95) n=319	29.84 (10.01) n=324	19.09 (8.90) n-271	22.76 (9.80) n=279	26.60 (11.01) n=268

** All scores presented as the mean and standard deviation - M(SD) - and then sample size (n)*

Table B2: Descriptive Statistics of SRI Scores

	Content Level	SRI 1	SRI 2	SRI 3	EOY
Baseline (2016-17)	**3-5**	454.74 (276.17) n=966	497.5 (266.77) n=965	576.56 (254.20) n=961	630.27 (244.16) n=966
	6-8	734.70 (301.54) n=956	769.87 (290.94) n=956	824.28 (283.30) n=950	878.43 (275.29) n=956
	9-12	967.95 (329.42) n=1094	986.69 (331.71) n=1094	1042.29 (282.56) n=1059	1073.70 (301.13) n=1094
Grant Year One (2017-18)	**3-5**	512.74 (273.55) n=942	562.15 (253.71) n=949	648.02 (241.13) n=935	714.00 (230.41) n=918
	6-8	801.67 (268.74) n=938	837.40 (252.49) n=941	895.87 (236.41) n=928	952.19 (230.72) n=916
	9-12	997.92 (303.64) n=1164	1022.57 (290.71) n=1149	1047.62 (283.14) n=1125	1094.15 (278.07) n=1062
Grant Year Two (2018-19)	**3-5**	576.55 (256.21) n=811	589.03 (253.01) n=684	673.88 (241.31) n=823	727.0 (240.72) n=845
	6-8	862.01 (247.76) n=933	870.91 (246.36) n=714	926.95 (245.43) n=947	974.25 (239.49) n=966
	9-12	1040.28 (281.78) n=1084	1065.56 (259.86) n=1057	1079.47 (254.99) n=1029	1106.97 (275.04) n=1154
Grant Year Three (2019-20)	**3-5**	576.03 (274.50) n= 920	619.54 (274.47) n=920	695.69 (264.57) n=920	**
	6-8	908.46 (246.60) n=965	933.18 (244.42) n=965	984.97 (235.98) n=965	**
	9-12	1049.04 (258.72) n=1179	1067.15 (251.66) n=1179	1077.05 (248.16) n=1179	**

** All scores presented as the mean and standard deviation - M(SD) - and then sample size (n)*

*** No EOY scores available due to COVID closure.*



December 2020

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The Learning Accelerator