Learning Found, Not Lost: Examining Learner Growth and Supports in LUSD During and Beyond the COVID-19 Crisis

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

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LINDSAY UNIFIED
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The Learning
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Executive Summary

Over the past decade, Lindsay Unified School District (LUSD) has made significant, system-wide investments in professional development, technology, and resources to support high-quality, personalized learning both face-to-face and online. Given this focus, they were poised to successfully implement and maintain remote instruction during the COVID-19 pandemic. At the same time, the district recognized that many of their learners faced immense challenges accessing and participating in distance learning during this time.

At the national level, much of the research around learning has centered on '*learning loss*' or gaps in knowledge and performance. Contrary to this deficit mindset, LUSD wanted to examine patterns of growth and deeply understand the progress that their learners made. To address this line of inquiry, the district partnered with The Learning Accelerator (TLA) to understand where these differences in progress occurred, or the degree to which learning remained '*unfinished.*'

Study Overview

TLA designed a mixed-methods study using quantitative data captured from benchmark assessments in reading and math as well as qualitative information from a focus group with school counselors to address three research questions:

> ***RQ1: How did the growth trajectories of learners vary between content-level ranges (i.e., age groups) and subpopulations (e.g., Free or Reduced-Price Meals [FRPM], English Learner, Migrant, Homeless, or Special Education)?***
> Younger learners in LUSD made substantially more progress than their older peers in reading and math. In addition, learners classified as English Learner, Migrant, Homeless, and those receiving Special Education services generally demonstrated positive growth.

> ***RQ2: What enabling systems and structures appeared to contribute to learners' growth?***
> The district emphasized that learners should feel cared for and part of a supportive community. From extended food services to additional academic resources and regular counselor check-ins, LUSD learners received substantial support.

> ***RQ3: What enabling systems might the district consider implementing in order to accelerate learner growth in the future?***
> Beyond maintaining current programs, LUSD should extend specialized services such as small-group tutoring, counseling check-ins, and in-person cohorts should distance learning be required.

The Realities of Learning During COVID-19

At the national level, the long-term impacts of the pandemic may still be unknown. Researchers predict an increase in economic and social stratification resulting from academic losses, particularly for Black and Hispanic/Latino learners in rural areas and communities in which family incomes are below the federal poverty threshold such as LUSD. A small, rural district, LUSD serves a predominantly Hispanic/Latino community of approximately 4,000 learners, roughly 90 percent of whom qualify for free or reduced-price meals.

Qualitative data from a focus group conducted with school counselors revealed that learners did their best to participate during distance learning whether logging in from home, a car, or a worksite. Particularly with younger learners, babysitters and caretakers were frequently overwhelmed. Counselors discovered that some could be taking care of up to 20 learners of varying ages in the same house. Older learners often had to care for younger siblings or work while still trying to participate.

Key Findings

The research team used reading and math assessment data to model and explore academic growth during the 2019-20 and 2020-21 school years. First, the team analyzed data by content level (K, 4-5, 6-8, 9, and 10-12) and subpopulation – learners classified as English Learner, Migrant, Homeless, receiving Special Education supports (SPED), or receiving Free or Reduced-Price Meals (FRPM). Then, the research team examined differences based on learning communities as well as by instructional model: early-return cohort, regular in-person instruction, or distance learning. Finally, they conducted a focus group with school counselors to gain additional insights and explanations.

Finding #1: LUSD Learners Grew More in Reading than Their National Peers
To understand learner progress at the national level, Curriculum Associates[8] compared historical reading data from iReady with in-school assessment data from 2020-21. The study found that districts possessing similar demographics as LUSD experienced negative growth during the 2020-21 school year when compared to historical data. When the research team repeated the methodology with LUSD learners in content levels 4-8, they found that learners demonstrated positive growth.

These differences in progress are striking and certainly a testament to the efforts of the district to ensure that learners continued to grow during distance learning.

Comparison of Reading Growth During the 2020-21 School Year - Similar National Sample vs. LUSD Learners
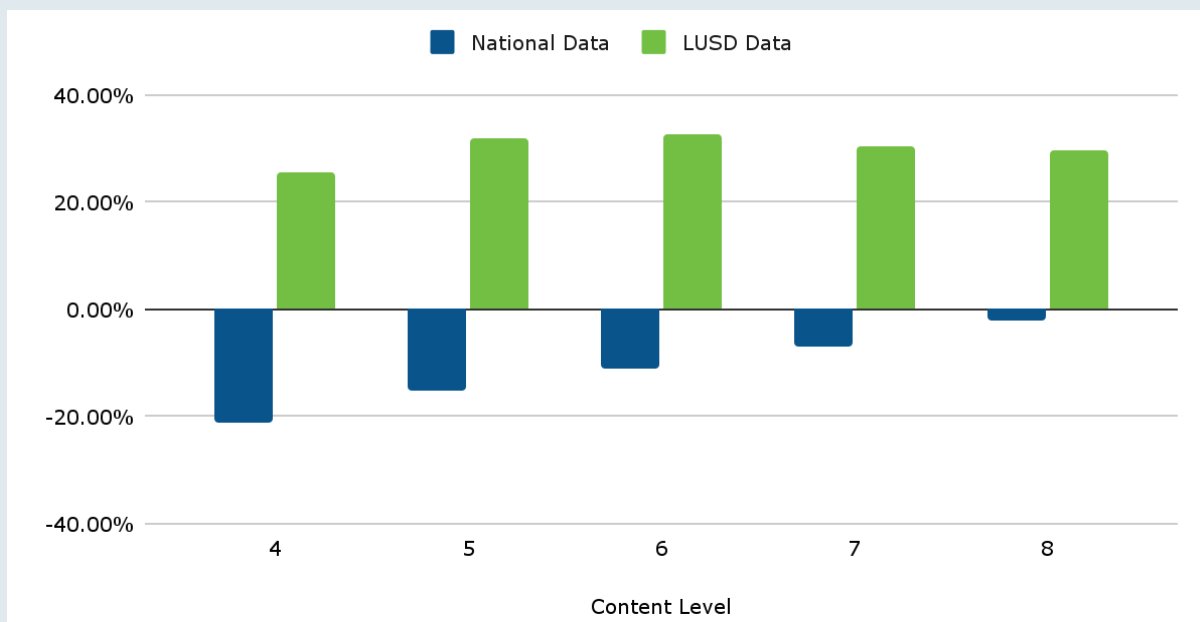
Finding #2: Younger Learners Tended to Show More Growth

Although national trends showed greater loss for younger learners, **in LUSD, elementary and middle content-level learners demonstrated more progress in both reading and math**.

Notably, despite making steady progress prior to COVID-19 closure while still in a K-8 learning environment, **learners in content level 9 experienced a drop during the subsequent school year as they entered high school.** This trend mirrored that of other secondary learners who also experienced a decline.

Percentage of Change in Math Scores Across Content Levels
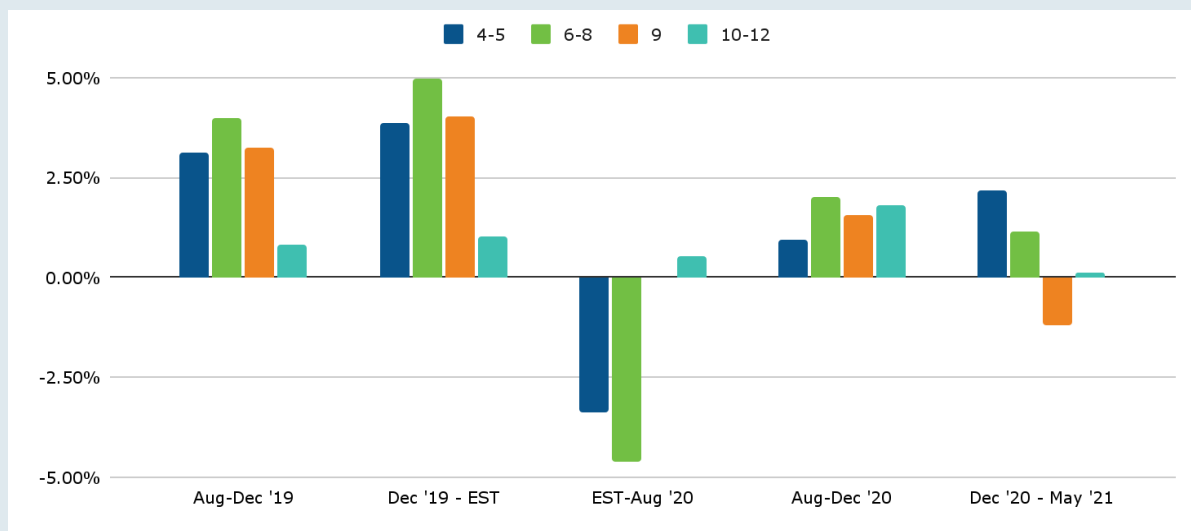
In general, the math gains were lower than reading, mirroring national data. LUSD used iReady to assess math in K-8 and NWEA MAP in 9-12. **It should be noted that the research team did not estimate a change in math scores between years for learners in content level 9 as iReady and NWEA MAP used different scales.** However, those learners did show a smaller percentage of growth than in the previous year. With the remaining secondary learners, progress stalled out as the 2020-21 school year progressed and they had zero-percent growth during the spring.

Finding #3: District Supports Benefitted Multiple Subgroups

A report from the Center for Reinventing Public Education (CRPE)[2] found that nationally, Black and Hispanic/Latino students indicated minimal contact with their teachers and few available supports. Contrary to this finding, LUSD ensured that learners received regular contact, consistent live instruction, as well as additional materials and services to meet specific needs. As a result, **while it may have been expected that learners classified as English Learner, Migrant, or Homeless would have experienced consistent decline, at LUSD, that was mostly not the case. Despite the numerous challenges to learning during a pandemic, these learners generally made progress during the 2020-21 school year.**

The district ensured that every student had a working Chromebook and internet access at the start of distance learning (Spring 2020) and also delivered paper, pencils, books, crayons, and other materials to learners at their homes. At the start of the 2020-21 school year, learners received additional materials and updated technology.

Rather than exclude the small percentage of learners who do not qualify for free or reduced-price meals, the district ensured that **ALL learners received the same benefits: meals, small-group instruction with learning facilitators, and the potential for extended learning through the early-return cohort model.** For those who may have been new to the district or did not have sufficient English Language proficiency, the district provided translation services during live virtual instruction, one-on-one check-ins, and small-group tutoring.

Finding #4: Instructional Setting Had Varying Effects on Learner Growth

During the initial COVID-19 closure, all LUSD learners participated in distance learning. Beginning in Fall 2020, LUSD offered a cohort model as an early-return option for learners who needed additional in-person support. Then, when the state opened schools in March 2021, LUSD provided all learners in the district with a choice between in-person or distance learning. When compared to national data for districts with large populations of Hispanic/Latino learners[12], LUSD had a substantially higher rate of return to in-person instruction.

At the elementary and middle levels, **those in the early-return cohort model demonstrated more growth compared to their peers who remained in distance learning or returned to regular in-person instruction**. In contrast, joining the early-return cohort did not have an effect on

secondary learners' growth, particularly in reading. This could be attributed to the small sample size or the reality that the district recruited learners with the most need. Only one exception existed: the early-return cohort for content level 9 did make some progress in reading during the latter half of the 2020-21 school year, so it could be inferred that the early support helped them to ramp up during the fall.

Whereas the national data painted a bleak picture of remote learning with minimal synchronous classes and few personal interactions with educators, it is important to note that **LUSD consistently went above and beyond to connect with their learners and make sure that they received high-quality supports to set them up for success.** In a focus group, counselors praised the "amazing" efforts that learning facilitators employed in taking a whole-child approach, ensuring regular communication with learners and families, and constantly individualizing instruction to meet their learners' needs.

Finding #5: Learner Growth Varied Across Learning Communities

Overall, LUSD has six TK-8 learning communities, one 9-12 high school, and one Alternative Education community (which consisted of three small 9-12 learning communities during the 2020-21 school year). Each learning community varied in size, learner demographics, and faculty composition.

Average Lexile Scores for Content Levels 4-5 by Learning Community.
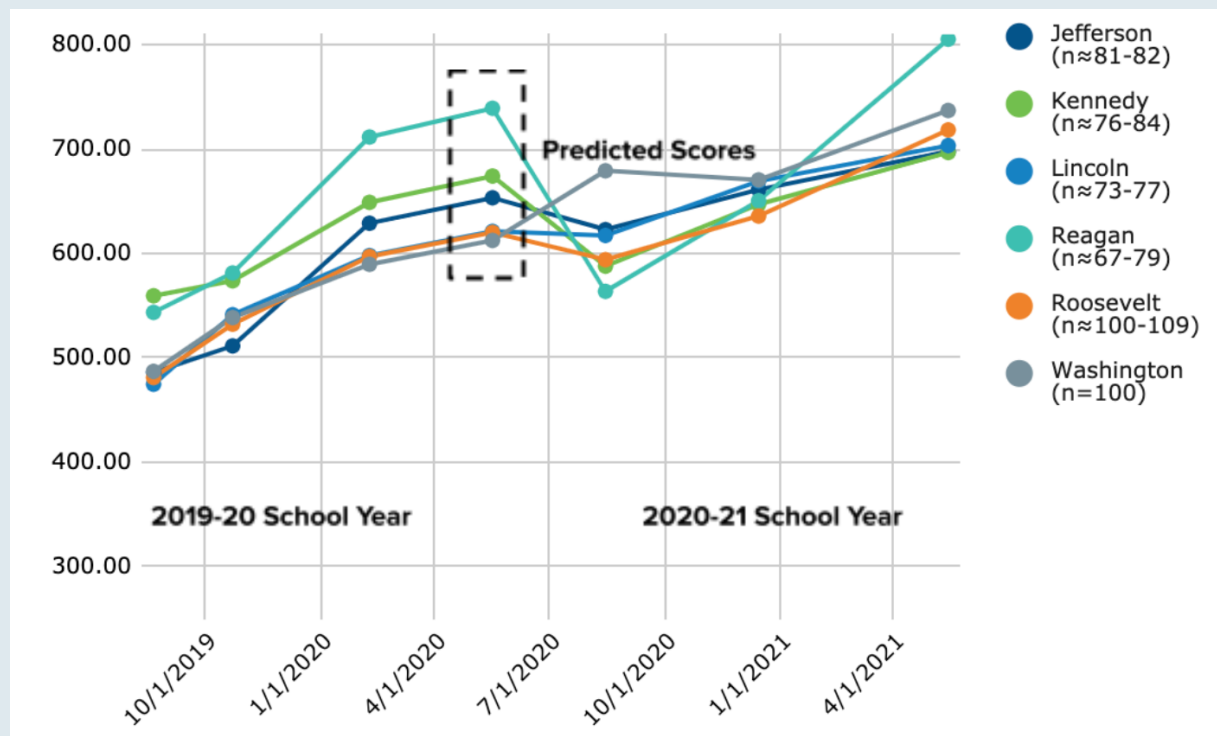
At LUSD, K-8 learners remain in self-contained environments within their learning communities. As a result, the same learning facilitator covers all of the core content areas: English Language Arts (ELA), math, history/social studies, and science. These learning communities experienced similar growth in reading and math.

Given the myriad challenges facing older learners, and despite the enabling systems and structures implemented by the district, substantially less progress could be detected at the secondary level. This could be a factor of learning during the pandemic, the expectation that older learners generally demonstrate less progress on criterion-referenced assessments, and/or reduced participation in benchmark assessments.

Over 55 percent of the secondary learners in the sample did not complete the December 2020 assessments. At the end of the year, the district was missing approximately 35 percent of the learners' reading data and 67 percent of their math data. These discrepancies in sample size could certainly have impacted the analysis.

Though there were differences in average scores, all subpopulations exhibited similar growth trajectories throughout both school years, with a decrease in average scores over time. **This negative growth trajectory was most evident in learners receiving SPED services who had the lowest average scores and exhibited negative growth as the 2020-21 school year progressed.**

In addition, **English Learners had lower average scores than the majority of their peers and demonstrated less growth.** This could be associated with the limited sample size at the high school level within LUSD (most learners are reclassified by this level, so any English Learners in content levels 9-12 are usually new to LUSD).

The average scores were consistently lower for Alternative Education when compared to Lindsay High School. However, it is important to note that these two learning communities had vastly different sample sizes and learner populations.

Recommendations

In addition to this study, the research team conducted a comprehensive literature review to better understand unfinished learning and strategies to address it. Based on that analysis as well as these findings, the district should consider continuing, extending, or implementing these six strategies:

#1: Increase access to classified support programs and services.

The district already offers all learners the same benefits as those who qualify for support services associated with free and reduced-price meals. They should continue those supports and also look to extend other classified programs and services such as one-on-one check-ins, small-group tutoring, or individual counseling.

#2: Cultivate and extend relationships with learners and their families.

During distance learning, families experienced more of the learning process than usual, allowing them to gain deeper insight into the learning experiences of their children. Counselors and learning facilitators reported having constant, regular communication with families and caregivers

through text, phone, after-hours Zoom meetings, and even in-person home visits.

By building a relationship with learners' families, they could have more transparent conversations about the importance of attending or logging into classes as well as the learners' progress. Not only did this help to build trust with families, but it also allowed learning facilitators and counselors to better understand each learner as an individual so they could provide more targeted support. Going forward, LUSD should leverage this momentum to make progress toward working with families as at-home learning partners.

#3: Continue to leverage the entire LUSD community to support learners and their families.

Throughout the pandemic, learners were supported academically and socially by counselors, learning facilitators, and other LUSD staff. Counselors worked with learning facilitators to implement mental health and social well-being programming within the learning environment, and planned events to facilitate community-building among both in-person and distance learners. They also gave referrals to additional counseling supports, mental health service providers, or other external services. In addition the district worked to ensure that learners and their families received access to formal and informal programs and services ranging from counseling and mental health, to food banks and meal delivery, to transportation access. This community support should be continued.

#4: Leverage data to improve communication about how and if learners receive the support that they need.

The counselors collaborated as a team to ensure alignment across learning communities, meeting weekly during the pandemic to brainstorm ideas and facilitate equitable access to services – particularly for those learners who may be eligible for multiple programs. However, the data revealed that not all referrals resulted in action. For example, 460 learners were recommended to the Healthy Start Family Resource Center, but only 253 of those recommended learners opened cases (a participation rate of 55 percent).

Despite its value, Healthy Start may be an underused service by the learners it intends to support. LUSD might consider collecting additional data to ensure that learners, once connected, follow through with participation. In addition, the focus group revealed that there may not be a formal way to track how learners with multiple classifications receive multiple support services. Formalizing this data collection may improve communication, effectiveness, and equity in ensuring that all learners receive the supports that best fit their needs.

#5: Expand the cohort model for K-8 learners should there be a return to distance learning.

Learners who participated in the early-return cohort model in content levels 4-8 exhibited greater growth compared to those who participated in the other instructional modalities. As such, if there is a need to return to distance learning, the district should advocate for more funding and

staffing to expand the cohort model for more learners.

#6: Specifically address the disparities in learner growth and lack of participation at the secondary level.

Older learners faced additional stressors and challenges during the pandemic, from caring for younger siblings to going to work. As a result, secondary learners made the least progress in reading and math. Many also chose not to participate in assessments, particularly during the 2020-21 school year.

The district needs to specifically address the needs of its secondary learners. Additional inquiry may be required to understand what may best benefit this group. Their performance could be related to 'pandemic fatigue' or 'Zoom fatigue.' It could be that the district needs to consider changes in scheduling, or more asynchronous work. This may also be an opportunity to consider alternative forms of assessment or different ways to encourage participation in assessment. Future research should explore the underlying causes and factors of secondary learners' experiences during the pandemic to best identify strategies that may better support their growth.

Final Takeaway

Compared to their national counterparts, learners in LUSD showed positive growth in reading and math during the pandemic and did not exhibit the same levels of 'learning loss' as detected in the national assessment data. Despite numerous academic, emotional, economic, physical, psychological, and social stressors, LUSD learners continued to make progress – particularly at the primary level. This was likely related to the existing systems and structures that supported learners academically, socially, and emotionally.

While LUSD is a unique context because of its demographics, access to supports, mission, and values, it can serve as a model for other districts looking to support learners in addressing unfinished learning. The national conversation has just begun to shift from a focus on what was lost during the pandemic to what groups of learners may have gained. LUSD not only serves as a model for how to measure growth over time but also how to design essential services and supports that meet the needs of each individual learner.

Introduction

Lindsay Unified School District (LUSD) has committed to ensuring that every learner has the best learning experience every day. Over the past decade, this dedication has manifested in significant, system-wide investments in professional development, technology, and resources to support high-quality, personalized learning both face-to-face and online. Given this focus on blended and personalized learning, LUSD was poised to successfully implement and maintain distance learning during the COVID-19 pandemic.

> **We use the following LUSD language throughout this report:**
>
> **Learner = student**
> **Learning Facilitator = teacher**
> **Learning Environment = classroom**
> **Learning Community = school**
> **Content Level = grade level**

The same narrative does not exist at the national level. Throughout the 2020-21 school year, conversations about achievement gaps and decreased performance proliferated. To examine the impact of COVID-19 school closures on their own learners, LUSD partnered with The Learning Accelerator (TLA) to design this study. While much of the national research has centered around '*learning loss,*' LUSD recognized that learning never stopped. Instead, they sought to understand where differences in progress occurred, or the degree to which learning remained '*unfinished*.'

Because TLA had previously worked in partnership with the LUSD leadership team on multiple studies, they were uniquely poised to help the district answer the following research questions:

> ***RQ1: How did the growth trajectories of learners vary between content-level ranges (i.e., age groups) and subpopulations over time?***
> Contrary to the available national data,[1] younger learners in LUSD made substantially more progress than their older peers in reading and math. In addition, many of the vulnerable subpopulations – learners classified as English Learner, Migrant, Homeless, and those receiving Special Education services – generally demonstrated positive growth. However, as will be discussed in this report, learner growth was not consistent across content levels and few predominant patterns emerged.
>
> **RQ2: What enabling systems and structures appeared to contribute to learners' growth?**
> From the start of COVID-19 closures, the district emphasized that learners should feel cared for and part of a supportive community. From extended food services to additional academic resources and regular counselor check-ins, LUSD learners received substantially more support than their national peers.[2] A focus group conducted with some of the counselors revealed that constant communication and alignment of resources ensured that every learner received the direct support that they needed.

RQ3: What enabling systems might the district consider implementing in order to accelerate learner growth in the future?

Beyond maintaining current levels of support, LUSD should look to extend specialized programs and services such as small-group tutoring, counseling check-ins, and in-person cohorts to all learners, should distance learning be required in the future. As will be discussed in the recommendations section, LUSD may also look to improve uptake on programs such as Healthy Start as well as how they document and support learners who qualify for multiple services.

The Realities of Learning During COVID-19

After the initial shift to distance learning in Spring 2020, LUSD conducted [a study to understand the learner experience from their learning facilitators' perspectives](#). Qualitative data revealed that learners faced numerous challenges, ranging from loneliness and grief to hunger to lack of education support at home. While the continuation of distance learning in the fall certainly presented academic challenges, trying to survive a pandemic created additional emotional, financial, physical, psychological, and social stressors that influenced learners and their families.

At the national level, the long-term impacts of the pandemic may still be unknown. Researchers predict an increase in economic and social stratification resulting from academic losses. **For learners, this likely means that "those who went into the pandemic with the fewest opportunities are at risk of leaving with even less (p. 51)."[3]** Most LUSD learners certainly fall into this risk category. A small, rural district, LUSD serves a predominantly Hispanic/Latino community of approximately 4,000 learners, roughly 90 percent of whom qualify for free or reduced-price meals – an indicator of family income.

In a focus group conducted with several counselors (see [Appendix A - Methodology](#)), it became apparent that learners did their best to participate during distance learning whether logging in from home, a car, or a worksite. Particularly with younger learners, babysitters and caretakers were frequently overwhelmed. Counselors discovered that some could be taking care of up to 20 learners of varying ages (from two to 14 years old) in the same house. Just the process of getting every learner logged on to their Zoom classes was a challenge, let alone having enough bandwidth and managing assignments.

Despite the challenges of the pandemic, LUSD learners wanted to attend class – either in person or online – but often moved from place to place due to work requirements, financial issues, or the need to manage caretaking responsibilities. For learners who participated in some form of in-person instruction, transportation posed another challenge. Families often lacked a vehicle or the financial means to access transportation when they could not take advantage of what the district offered.

Older learners faced even more challenges. They often had to care for younger siblings, making it difficult to attend to their own learning needs. Many secondary learners chose to go to work while still trying to participate in classes. Some decided to give up on graduating or continuing with school to better support their families.

Despite all of the massive challenges presented by the pandemic and distance learning, Lindsay learners were well supported by the district, the community, and their learning facilitators. As a result, learning continued – though it remains '*unfinished*'[4] *or* not yet completed. The district understands that given the realities of the pandemic, learners have not yet had access to material that would have normally been presented or have not yet demonstrated the intended level of mastery on certain standards. Instead of focusing on the gaps that may have emerged, LUSD leadership chose to focus on the growth learners made.

Despite the Challenges, LUSD Learners Made Gains

Across the country, researchers documented the negative effects of school closure and remote learning on predicted learner performance and growth.[5] However, not all groups of learners experienced similar gaps. Wide variations emerged between individual learners and among groups of learners based on their age, race, and socioeconomic status.[6] These differences often corresponded to multiple systemic factors such as the availability of existing resources, prior learning levels, and the quality of support implemented by the district.[7]

To understand the effects of the pandemic on learners in LUSD, the research team used reading and math assessment data to model and explore academic growth during the 2019-20 and 2020-21 school years. First, the data was analyzed by content level (K, 4-5, 6-8, 9, and 10-12) and subpopulation – learners classified as English Learner, Migrant, Homeless, receiving Special Education supports (SPED), or receiving Free or Reduced-Price Meals (FRPM; a proxy for determining family income). Then, the research team examined differences based on learning communities as well as by instructional model: early-return cohort, regular in-person instruction, or distance learning (see Appendix B - Learner Subpopulations for demographic information).

LUSD Learners Grew More in Reading than Their National Peers

During the 2019-20 school year, the district measured learner progress in reading via the Scholastic Reading Inventory (SRI), but in 2020-21 shifted from the SRI to Curriculum Associates' iReady Assessment for K-8 learners. Although different assessments, both used the LEXILE Framework®, allowing for comparisons of pre- and during-COVID data.

To understand learner progress at the national level, Curriculum Associates[8] compared historical reading data from iReady with in-school assessment data from 2020-21. The report specifically addressed elementary and middle learners as well as those from predominantly Black and Hispanic/Latino communities. The study found that districts possessing similar demographics as LUSD experienced negative growth during the 2020-21 school year when compared to historical

data. When the research team repeated the methodology with LUSD learners in content levels 4-8, they found that learners demonstrated positive growth.

These differences in progress are striking and certainly a testament to the efforts of the district to ensure that learners continued to grow during distance learning. Though the historical data did not exist to also compare math growth, the research team can infer that LUSD would have shown a similar positive trend. As will be illustrated in the following sections, LUSD learners may have had greater success than their national peers, but their progress lagged when compared to 2019-20 district data and varied within content levels and subpopulations.

Figure 1. Comparison of Reading Growth During the 2020-21 School Year - Similar National Sample vs. LUSD Learners
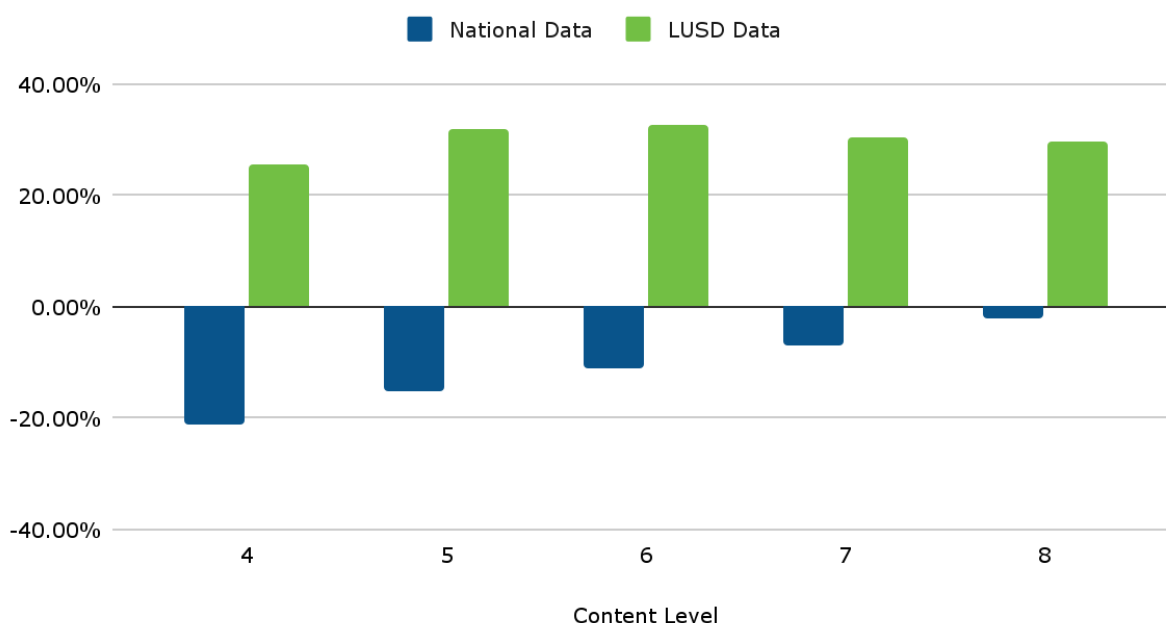
Younger Learners Tended to Show More Growth

LUSD changed assessments between the 2019-20 and 2020-21 school years across content levels. All learners completed the SRI assessments four times per year from 2016 to 2019. However, due to COVID-19 closures, an end-of-year score did not exist for Spring 2020, so the research team used data from the three previous school years to calculate an average historical growth rate for each content-level range. Those growth rates were then used to determine a predicted end-of-year score to indicate progress had learners remained in school (see Appendix C - Data Deep Dive for more information).

For the 2020-21 school year, the district shifted from the SRI to either iReady (grades 4-8) or the NWEA MAP assessment (grades 9-12) to measure learners' progress in reading. These new assessments continued to use the LEXILE Framework®, but they occurred at three times instead of four. Because expected annual growth with these assessments is higher with younger

learners[9], and scores are based on a criterion-referenced scale, the analysis grouped data into three content-level ranges: elementary (grades 4-5), middle (grades 6-8), and secondary (grades 10-12). The district requested that kindergarten and ninth grade be examined separately.

Two trends stood out:

1. Although national trends showed greater loss for younger learners, **in LUSD, content levels 4-5 and 6-8 demonstrated more progress** – a finding consistent with the expectations of the assessments but contrary to national trends during the pandemic.

2. Despite making steady progress prior to COVID-19 closure while still in a K-8 learning environment, **learners in content level 9 experienced a drop during the subsequent school year as they entered high school.** This trend mirrored that of other secondary learners who also experienced a decline and will be further explored later in this report.

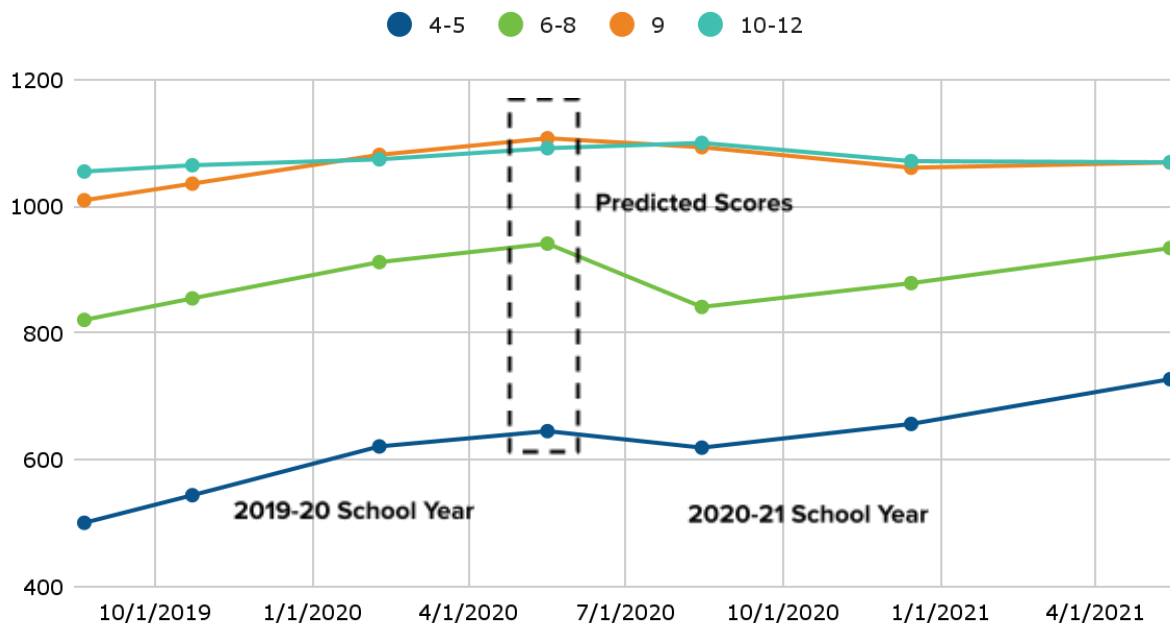Figure 2. Average Lexile Scores by Content-Level Range

Table 1. Average Lexile Scores by Content-Level Range

Date	4-5	6-8	9	10-12
8/21/2019	500.68 (255) n=559	820.67 (255.35) n=870	1009.36 (206.68) n=288	1054.66 (237.52) n=751
10/23/2019	544.2 (253.11) n=571	854.61 (245.33) n=874	1035.52 (209.70) n=287	1064.53 (235.93) n=739
2/9/2020	621.14 (246.32) n=569	911.79 (237.54) n=867	1080.97 (198.47) n=287	1073.79 (238.36) n=732
Predicted Score	*645.24*	*940.96*	*1107.12*	*1091.4*
8/15/2020	619.19 (238.69) n=591	841.09 (248.04) n=908	1093 (273.53) n=275	1099.76 (334.92) n=708
12/15/2020	656.58 (239.66) n=584	878.61 (265.40) n=905	1060.62 (285.87) n=201	1071 (333.32) n=526
5/15/2021	727.16 (237.28) n=591	933.97 (240.40) n=907	1068.87 (271.80) n=252	1069.29 (323.10) n=606

Data represented as mean (standard deviation) and sample size (n).

> **It is critical to remember that secondary learners in LUSD experienced additional hardships during the pandemic. Many sacrificed their own learning to care for younger family members or go to work. The average scores decreased for all 9-12 learners during the 2020-21 school year as did participation rates in assessments.**
>
> **At the high school level, the difference in missing assessment data from 2019-20 to 2020-21 is striking. While some high school learners chose not to complete their diploma, there were many other reasons that older learners may not have participated in assessments even if they were still attending classes (see Appendix C - Secondary (Content Levels 10-12) and Appendix C - Content Level 9 for more details.)**

To measure growth in math, the district used iReady with K-8 learners and NWEA MAP with 9-12. Because of COVID-19 closures, the district only collected two of three possible data points during the 2019-20 school year. The research team assumed linear growth to predict a third point since historical data was not available. In general, the math gains were lower than reading, mirroring national data.

Figure 3. Percentage of Change in Math Scores Across Content Levels
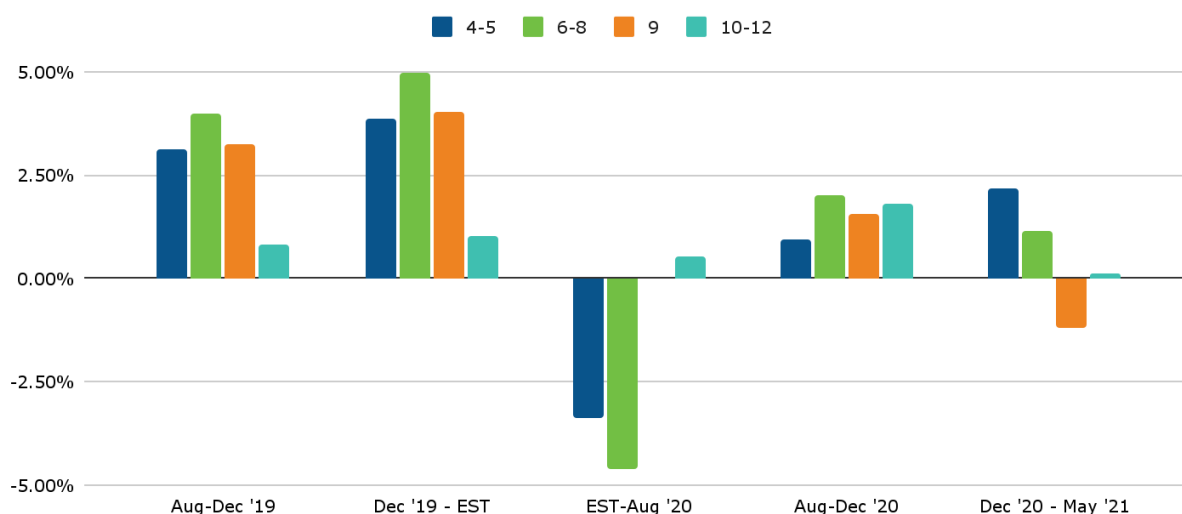
It should be noted that the research team did not estimate a change in math scores between years for learners in content level 9 as iReady and NWEA MAP used different scales. However, those learners did show a smaller percentage of growth than in the previous year. With the remaining secondary learners, progress stalled out as the 2020-21 school year progressed and they had zero-percent growth during the spring. This trend could be attributed to sample size – fewer learners completed the assessments – or additional challenges related to the pandemic.

District Supports Benefitted Multiple Subgroups

A recent report from the Center for Reinventing Public Education (CRPE)[10] found that a large percentage of learners did not feel supported by their schools. Nationally, Black and Hispanic/Latino students indicated minimal contact with their teachers and few available supports. On the contrary, LUSD ensured that learners received regular contact, consistent live instruction, as well as additional materials and services to meet specific needs. As a result, **while it may have been expected that learners classified as English Learner, Migrant, or Homeless would have experienced consistent decline, in LUSD, that was mostly not the case. Despite the numerous challenges to learning during a pandemic, these learners generally made progress during the 2020-21 school year.**

The enabling systems and structures implemented by the district functioned equally well for the learners who most needed them. For example, the district ensured that every student had a working Chromebook and internet access at the start of distance learning (Spring 2020) and also delivered paper, pencils, books, crayons, and other materials to learners at their homes. At the start of the 2020-21 school year, learners received additional materials and updated technology when they came on site to meet their learning facilitators before the first day of the 2020-21 school year.

To better understand all of the enabling systems and structures provided by the district, the research team conducted a focus group with three learning community counselors (see [Appendix A - Methodology](#) for full methodology). Their contributions provided insights into how the district directly supported their learners, explaining many of the growth patterns uncovered by the data analysis.

Additional Support Services Benefited Learners

As a district, LUSD wanted to serve all of their learners equitably. For example, rather than exclude the small percentage of learners who do not qualify for free or reduced-price meals, the district ensured that **ALL learners received the same benefits: meals, small-group instruction with learning facilitators, and the potential for extended learning through the early-return cohort model.** During distance learning, learners could pick up two days' worth of meals at a time from their learning communities, and for those in rural areas, bus drivers made deliveries.

English Learners were offered one-on-one check-ins and small-group tutoring. For those who may have been new to the district or did not have sufficient language proficiency, the district also provided translation services during live virtual instruction. A substantial proportion of learners could be classified as both English Learners and receiving Free or Reduced-Price Meals (FRPM) services or another combination of services (see [Appendix C - Demographic Information of Learner Subpopulations](#)). To account for these overlaps and prevent redundancy, the counselors described the effective communication and alignment that occurred at the district level to ensure that learners and their families received equitable access to programs and services.

Within each content-level range, the research team examined variation in growth for different subpopulations of learners. **Both English Learners and those classified as receiving FRPM generally had similar growth patterns as the overall group,** which could be attributed to the large percentage of learners who received these classifications, particularly in K-8. Although learners classified as **Homeless or Migrant represented fewer learners and may have been associated with lower average scores, they did generally demonstrate positive growth during the pandemic**. The same patterns, however, did not repeat with Special Education.

Unequal Gains for Learners Receiving Special Education Supports

The district ensured that learners classified as receiving Special Education supports received the services outlined by their Individualized Education Plans (IEPs) through both in-person and virtual formats. This stands in stark contrast to national data indicating that districts often failed to get these students the services that they required.[11] Whether by inviting learners to participate in specially designed, early-return cohorts led by Special Education aides, providing adaptive instructional materials, or incorporating closed captioning during virtual sessions, the district made a concerted effort to meet the needs of this group of learners.

At the K-8 level, these services clearly benefited learners. **In content levels 4-5 and 6-8, learners classified as receiving SPED services demonstrated positive growth in both reading and math during the pandemic.** Of note, learners classified as receiving SPED services in both

content-level ranges made the most progress of all subpopulations both before and after school closure. Unfortunately, this trend did not continue into the secondary levels.

Within content levels 10-12, the subgroup of learners receiving SPED services began the 2019-20 school year with lower average scores in reading and math than their peers. They then exhibited a general decline (negative growth) which continued through the 2020-21 school year with one exception. The data indicate positive growth from August to December 2020, but then negative growth through the end of the 2020-21 school year. This momentary spike could be attributed to a change in the number of learners who completed the assessments. Where 60 learners receiving SPED services completed the NWEA reading assessment in August 2020, only 46 did so in December 2020 and 49 in May 2021. The differences were more stark with math as almost 50 percent fewer learners completed the NWEA math assessments during the 2020-21 school year.

Figure 4. Average Lexile Scores for Content Levels 10-12 Across Subpopulations
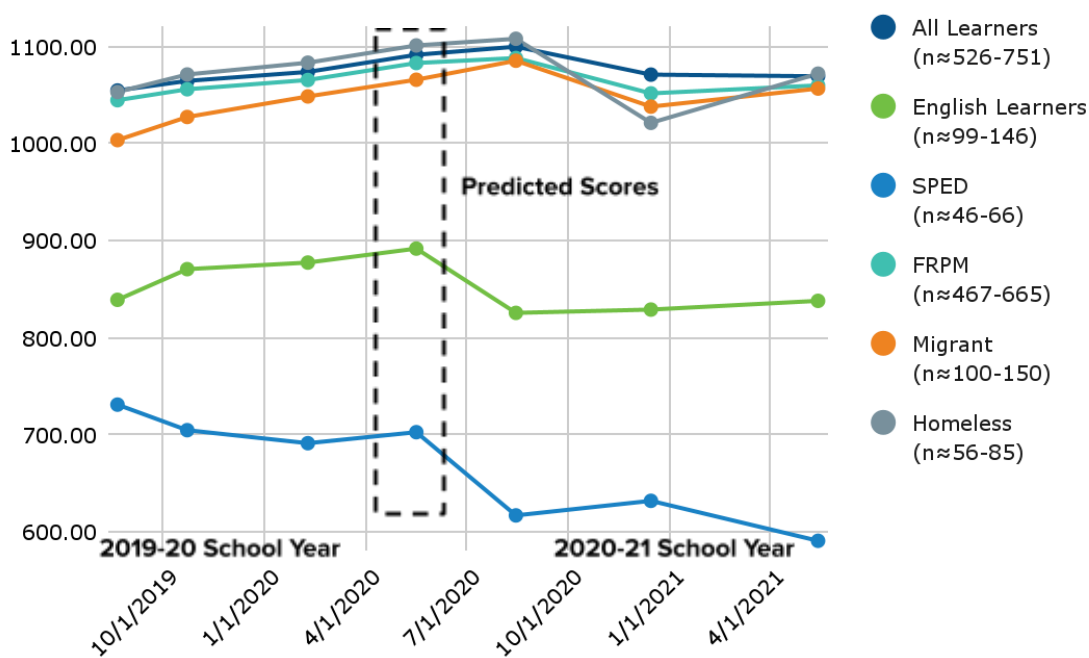
Figure 5. Average Math Scores for Content Levels 10-12 Across Subpopulations
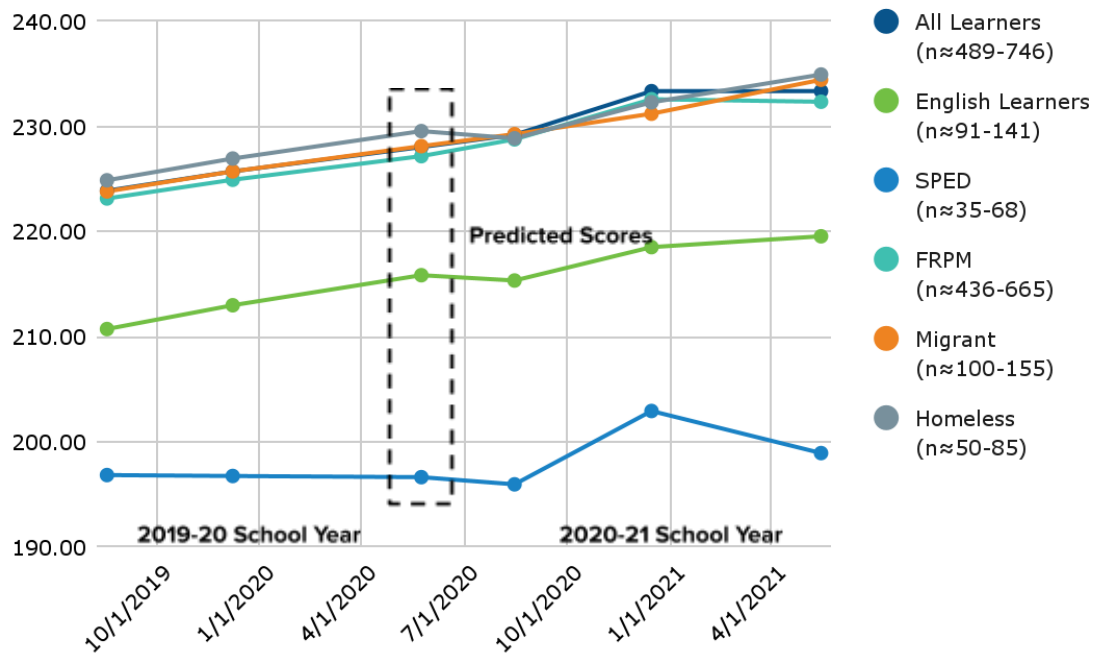
While the services provided by the district seemed to have a positive effect on younger learners, the negative trend with those at the secondary level indicates that more intervention may be required in the future.

Transitional Kindergarten Positively Affected Average Scores

With kindergarten, assessment data did not exist for the 2019-20 school year to use as a comparison. However, the district specifically wanted to know if participation in Transitional Kindergarten (TK) had an impact on learner growth. Learners who had attended TK started out the 2020-21 school year ahead of their peers in reading and math and then continued to progress at a similar rate.

Figure 6. Average Reading Scale Scores for Kindergarten Across Subpopulations in 2020-21
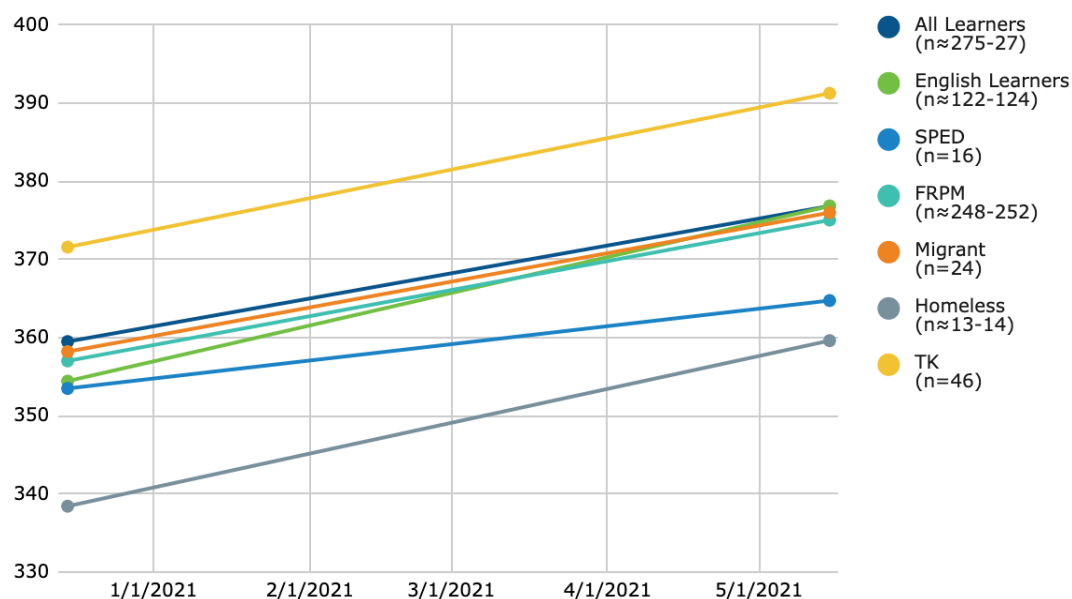
Figure 7. Average Math Scores for Kindergarten Across Subpopulations in 2020-21
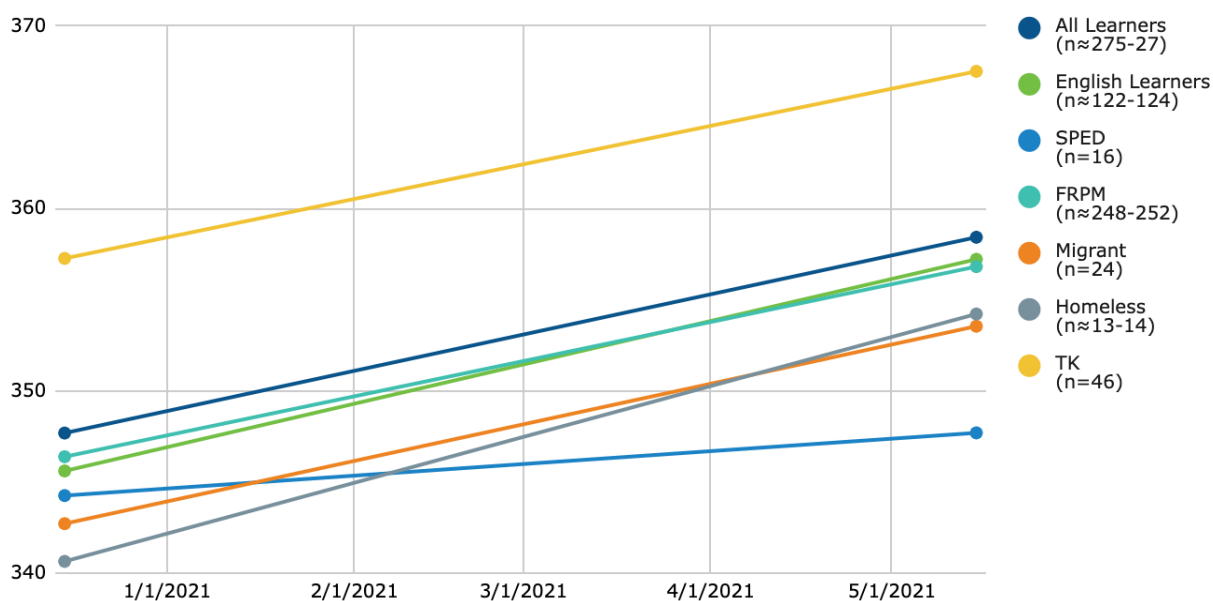
Only 16.5 percent of the kindergarteners had attended TK, so this growth is contained to a small sample of learners. In contrast, approximately 48 percent of the learners could be classified as English Learners and 90 percent received free or reduced-price meals. Both of these groups made substantially more progress than those from TK as did the relatively small population of learners classified as either homeless or migrant. Across all groups of kindergartners, learners made more progress in reading than in math (See Appendix C - Kindergarten for detailed analysis).

Instructional Setting Had Varying Effects on Learner Growth

Substantial dialogue has occurred nationally about the effects of remote versus face-to-face instruction. During the initial COVID-19 closure, all LUSD learners participated in distance learning. Beginning in Fall 2020, LUSD offered a cohort model as an early return option for learners who needed additional in-person support. Then, when the state opened schools in March 2021, LUSD provided all learners in the district with a choice between in-person or distance learning.

Early-Return Cohort Model Benefited Younger Learners

Following guidelines provided by the state, LUSD created an early-return cohort model to start the 2020-21 school year. Although the learners continued to participate in distance learning and met virtually with their learning facilitator, the cohort grouped 13 learners on site at their learning community with at least one support person – often an aide or education specialist.

Due to staffing limitations, not all learners who desired to be part of a cohort could participate in the early return model. The district prioritized invitations first to learners with connectivity issues and then to learners who struggled with home distractions. Finally, it opened any remaining spots to any learners who wanted to return to in-person instruction.

Given the space limitations imposed by the state, only a small percentage of learners could take advantage of this model:

- **Content Levels 4-5:** 18.67%
- **Content Levels 6-8:** 11%
- **Content Level 9:** 22.3%
- **Content Levels 10-12:** 12.5%

All of the learners who participated in the early-return cohort model continued in-person learning once it became available to all learners in the spring. At the elementary and middle levels, **those in the early-return cohort model demonstrated more growth compared to their peers who remained in distance learning or returned to regular in-person instruction** (See Appendix C - Instructional Modalities for details). Of note, the early-return cohort made substantially more progress in reading than in math.

In contrast, joining the early-return cohort did not have an effect on secondary learners' growth, particularly in reading. This could be attributed to the small sample size or the reality that the district recruited learners with the most need. Only one exception existed: the early-return cohort for content level 9 did make some progress in reading during the latter half of the 2020-21 school year, so it could be inferred that the early support helped them to ramp up during the fall.

Older Learners Made Progress When Remote and In-Person

Once in-person learning became available in the spring, K-8 in-person learners received three hours of live, in-person instruction each day, and remote learners logged onto Zoom to access three hours of live, virtual instruction. Both groups also completed asynchronous learning activities at home. In 9-12, learners participated in a hybrid model where both in-person and remote learners participated in their typical six- or seven-period schedule with learning facilitators broadcasting concurrently to both groups.

When compared to national data for districts with large populations of Hispanic/Latino learners, LUSD had a substantially higher rate of return to in-person instruction. According to the national data, only 27 percent of Hispanic/Latino learners and 29 percent of learners of all races participated in in-person or hybrid instruction, while approximately 55 percent of LUSD learners participated in in-person instruction.[12] Learners' families could choose between in-person and distance learning experiences, and the district was transparent in providing families with information about what each instructional modality would look like so that they could make informed decisions.

In analyzing the effects of context on learner growth, it is important to remember that **all learners participated in distance learning until March 2021.** Although the early-return cohort was physically on campus, their primary instruction remained online. In addition, the district never returned to the same pre-pandemic level of in-person instruction. Despite these caveats, the research team made the following observations:

- **Learners who chose to return to in-person instruction did not make as much progress in either reading or math during the first half of the school year** when compared to those who participated in distance learning all year. This lack of progress could have influenced their decision to return for in-person instruction.

- **Younger learners (content levels 4-8) who returned in-person made more growth** during the latter part of the school year.

- **At the secondary level (content levels 9-12), learners who remained remote demonstrated more growth in math.** With content levels 10-12, the regular return group was the only one to demonstrate positive growth in reading.

Both Online and In-Person, LUSD Worked to Provide High-Quality Supports to All Learners

Whereas the national data painted a bleak picture of remote learning with minimal synchronous classes and few personal interactions with educators, it is important to note that **LUSD consistently went above and beyond to connect with their learners and make sure that they received high-quality supports to set them up for success.** In a focus group, counselors reported that learning facilitators were "amazing" in how they took a whole-child approach,

ensured regular communication with learners and families, and constantly individualized instruction to meet their learners' needs.

Throughout the year, learning facilitators provided both academic and non-academic support through one-on-one check-ins as well as one-on-one and small-group tutoring; conducting home visits to deliver books or instructional materials, drop off awards and certificates, and check-in on learners; as well as frequent and regular communication with both the learners and their families to ensure that learners' academic, physical, emotional, and social-emotional needs were being met.

At the same time, the **counselors in each learning community had frequent and regular communication with learners and their families through whatever methods worked best: email, phone calls, and text messages.** Counselors also established one-on-one check-ins and routine meeting times for learners who needed it and conducted home visits when they were otherwise unable to reach learners. As one counselor noted, she had "a daily and weekly pulse of our kids and the parents," which helped build relationships with learners and their families. If learners were not attending classes or logging into distance learning, the counselors would reach out to their parents or caregivers and have a transparent conversation about the importance of education. Building relationships and frequent, regular communication also allowed counselors to connect learners and their families with the appropriate services that they needed.

The district enlisted every possible member of the community to assist learners. Bus drivers who delivered meals to learners' homes notified counselors of any concerns and prompted home visits when necessary. School resource officers helped with attendance and kept track of learners who were not logging in. Beyond academic support, learning community members also donated clothes, toys, and other items to benefit learners.

It was beyond the scope of this study to ascertain a direct correlation between all of these forms of non-academic support and learner growth. However, because unmet needs in non-academic areas can stymie learning opportunities,[13] the research team assumes that the quality of support contributed to the overall success of LUSD learners when compared to similar, national samples.

Learner Growth Varied Across Learning Communities

Overall, LUSD has six TK-8 learning communities, one 9-12 high school, and one Alternative Education community (which consisted of three small 9-12 learning communities during the 2020-21 school year). Each learning community varied in size, learner demographics, and faculty composition (see Appendix B - Learning Community Composition), and they demonstrated very different growth patterns in reading and math.

At LUSD, learners remain in self-contained environments within their K-8 learning communities. As a result, the same learning facilitator covers all of the core content areas: English Language Arts (ELA), math, history/social studies, and science. After reviewing the reading and math growth

data for content levels K, 4-5, and 6-8, several trends emerged (see [Appendix C - K-8 Cross Community Observations](#)):

- In a [previous study](#), **learners from Roosevelt Elementary and Washington Elementary consistently demonstrated positive growth in reading and math**. That trend continued into the pandemic. The research team hypothesizes that the combination of prior participation in personalized professional learning – particularly in reading – along with relatively high learning facilitator retention may have contributed to this growth.
- At both the 4-5 and 6-8 levels**, learners in Reagan Elementary experienced the largest drop between the predicted scores at the end of 2019-20 and the first assessment in 2020-21. However, they then had one of the strongest recoveries,** making substantial growth during the year. It is notable that they experienced a leadership transition between the two years, which could have had a temporary effect.
- **Kindergarten learners in Jefferson Elementary and Kennedy Elementary made almost twice as much progress in reading.** During the 2019-20 school year, both of these learning communities had relatively high participation rates in professional learning which may be related to this growth. In math, they continued to make substantial progress as did kindergarten learners from Roosevelt and Washington.
- As previously mentioned, secondary learners faced extraordinary challenges during the pandemic which impacted their academic performance. However, it is notable that **learners who attended one of the Alternative Education communities ultimately made more progress in reading.** A prior analysis of [9-12 Common Core Literacy](#) indicated that learning facilitators from these communities participated in a higher rate of personalized professional learning and were associated with learners who demonstrated more growth in ELA. This could have been a factor in their learners' positive progress.

Figure 8. Percentage of Change in Lexile Scores - Lindsay High School vs Alternative Education
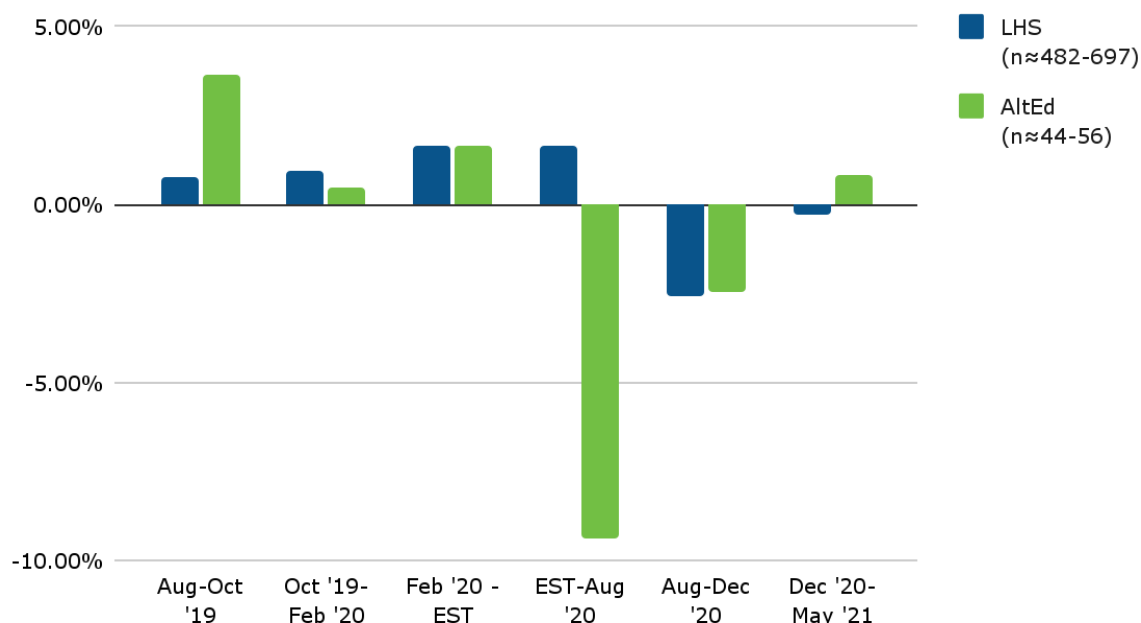
Recommendations: Strategies to Address Unfinished Learning

In addition to this study, the research team conducted a comprehensive literature review to better understand unfinished learning and the strategies that address it. Based on that analysis as well as these findings, the district should consider continuing, extending, or implementing these six strategies:

#1: Increase access to formal programs and services for more learners.

The district already offers all learners the same benefits as those who qualify for support services associated with free and reduced-price meals. They should continue those supports and also look to extend other classified programs and services such as one-on-one check-ins, small-group tutoring, or individual counseling. During the pandemic, these efforts with learners classified as English Learner, Migrant, or Homeless correlated with positive growth at all levels. Learners receiving Special Education supports also had access to special services and individualized support, and they demonstrated positive growth at the K-8 level. Based on these observations, the district may want to expand access to these programs and services for more learners.

#2: Cultivate and extend relationships with learners and their families.

During distance learning, families experienced more of the learning process than usual, allowing them to gain deeper insight and understanding into the learning experiences of their children. As a result, at a national level, parents reported increased confidence and comfort in being involved in their children's education.[14] At LUSD, counselors and learning facilitators reported having constant, regular communication with families and caregivers through a multitude of methods – text messages, phone calls, after-hours Zoom meetings, and even in-person home visits.

By building a relationship with learners' families, counselors and learning facilitators could have more transparent conversations about the importance of attending or logging into classes as well as the learners' progress. Not only did this help to build trust with families, but it also allowed learning facilitators and counselors to better understand each learner as an individual so that they could provide more targeted support. Going forward, the LUSD community should leverage this momentum to make progress toward working with families as at-home learning partners.[15]

The following strategies from the Education Endowment Foundation[16] can support accelerating learning at-home and facilitate working with parents and families:

- Give families books and other at-home learning activities in conjunction with supplemental advice and resources to promote an at-home culture for learning.

- Support families in helping their children to establish routines, manage time and effort, set goals, and self-regulate. **This emerged as a need in the [earlier personalized, remote learning study](#) conducted by the district and may be a strategy to address more immediately.**

- Maintain positive, personalized, two-way communication channels to encourage involvement and ensure that families feel valued.

- Provide evidence-based, structured programs for families with struggling learners or those who need additional support.

#3: Continue to leverage the entire LUSD community to support learners and their families.

Throughout the pandemic, learners were supported academically and socially by counselors, learning facilitators, and other LUSD staff. Counselors worked with learning facilitators to implement mental health and social well-being programming within the learning environment, and planned events to facilitate community-building among both in-person and distance learners. When needed, counselors also gave referrals to additional counseling, mental health service providers, or other external services within the community such as youth services.

Across the district, the entire LUSD community worked to ensure that learners and their families received access to formal and informal programs and services ranging from counseling and

mental health, to food banks and meal delivery, to transportation access. Other community providers helped learners access resources such as clothing, food, hygienic supplies, and masks. At the secondary level, learners received exposure to postsecondary opportunities through personal outreach and virtual sessions.

#4: Leverage data to improve communication about how and if learners receive the support that they need.

The counselors collaborated as a team to ensure alignment across learning communities, meeting weekly during the pandemic to brainstorm ideas and facilitate equitable access to services – particularly for those learners who may be eligible for multiple programs. As one counselor noted:

> *"If I had a learner who was, for example, an English Learner, Migrant, and Homeless, I was working directly with those providers to ensure we had streamlined communication and common messaging, so it wasn't three different messages, three different calls."*

While the counselors and other LUSD staff worked tirelessly to connect learners with the right programs and services, data revealed that not all referrals resulted in action. For example, 460 learners were recommended to the Healthy Start Family Resource Center, but only 253 of those recommended learners opened cases (a participation rate of 55%). The counselors repeatedly mentioned the Healthy Start family liaisons as valuable resources, particularly for learners classified as Homeless or Migrant. This program could provide food, housing, clothing, and even bus tickets or tokens to assist learners with transportation; and yet, many families did not appear to take advantage of these services.

Despite its value, Healthy Start may be an underutilized service by the learners that it intends to support. LUSD might consider collecting additional data to ensure that learners, once connected, follow through with participation in programs and services. While the Healthy Start program tracked participation, that data may also be of benefit to the counselors to help them with their follow-up to ensure that learners actually receive the services that have been recommended – and to investigate any potential barriers (e.g., transportation, scheduling, language) to program and service access that the district could help to rectify.

In addition, the focus group revealed that there may not be a formal way to track how learners with multiple classifications receive multiple support services. Formalizing this data collection may improve communication, effectiveness, and equity in ensuring that all learners receive the supports that best fit their needs. Because, as one counselor commented, "*We share families, we share parents, and we share siblings.*"

#5: Expand the cohort model for K-8 learners should there be a return to distance learning.

Learners who participated in the early-return cohort model in content levels 4-8 exhibited greater growth compared to those who participated in the other instructional modalities. As such, if there

is a need to return to distance learning, the district should advocate for more funding and staffing to expand the cohort model for more learners.

Even though learners in the early-return cohort received the same online instruction as their distance-learning peers, they did benefit from the structure and support provided by the adult serving as the cohort lead. According to existing research, establishing strong educator-learner relationships can improve learner outcomes and help accelerate learning.[17] When learners have a positive and supportive relationship with an educator or other adult, they are more likely to take risks and strive for success.[18] The cohort model facilitates these connections and relationships.

#6: Specifically address the disparities in learner growth and lack of participation at the secondary level.

Older learners faced additional stressors and challenges during the pandemic. From caring for younger siblings to going to work, they balanced numerous priorities in addition to their schooling. As a result, secondary learners made the least progress in reading and math. Many also chose not to participate in assessments, particularly during the 2020-21 school year.

The district needs to specifically address the needs of its secondary learners. Additional inquiry may be required to understand what may best benefit this group. Their performance could be related to 'pandemic fatigue' or 'Zoom fatigue.' It could be that the district needs to consider changes in scheduling, or more asynchronous work – particularly since distance learners *did* show more progress. This may also be an opportunity to consider alternative forms of assessment or different ways to encourage participation in assessment. Future research should explore the underlying causes and factors of secondary learners' experiences during the pandemic to best identify strategies that may better support their growth.

Final Takeaway

Compared to their national counterparts, learners in LUSD showed positive growth in reading and math during the pandemic and did not exhibit the same levels of 'learning loss' as detected in the national assessment data. Despite numerous academic, emotional, economic, physical, psychological, and social stressors, LUSD learners continued to make progress – particularly at the primary level. This was likely related to the existing systems and structures that supported learners academically, socially, and emotionally.

While LUSD is a unique context because of its demographics, access to supports, mission, and values, it can serve as a model for other districts looking to support learners in addressing unfinished learning. The national conversation has just begun to shift from a focus on what was lost to what groups of learners may have gained. LUSD not only serves as a model for how to measure growth over time but also how to design essential services and supports that meet the needs of each individual learner.

Appendix A - Methodology

To understand the entire context at LUSD, the research team designed an explanatory sequential mixed-methods research study[19] that used both quantitative and qualitative data to answer the research questions. First, the research team quantitatively analyzed the relationship between learner demographics and assessment data in reading and math from the 2019-20 and 2020-21 school years. Then, they conducted a counselor focus group to better understand the contextual factors that may have affected the data. While the quantitative data modeled learner growth and progress over time, the qualitative data offered insights into the enabling systems and structures that may have contributed to learners' growth.

Sample for the Study

Because the district wanted to compare learner growth between the 2019-20 and 2020-21 school years, the research team used data from learners who met the following criteria:

- Learners must have attended a LUSD learning community during both the 2019-20 and 2020-21 school years so that the data could be used to make matched comparisons.

- Because LUSD used multiple types of assessments, only data from groups of learners who had similar metrics could be used. This limited the sample to elementary (4-5), middle (6-8), and secondary (10-12) learners.

- A separate analysis examined kindergarten because those learners did not necessarily attend formal schooling or participate in assessments in the 2019-20 school year.

- Content level 9 was also considered separately based on district request. These learners transitioned from self-contained learning environments in 2019-20 to different learning environments for each content area in 2020-21. Also, these learners took different math assessments in 2019-20 (iReady) and 2020-21 (NWEA), with incomparable scales.

Content levels 1-3 were not analyzed because these learners took different assessments in 2019-20 and 2020-21 with incomparable scales. In 2019-20, LUSD used the Next Step Guided Reading Assessment (NSGRA) with TK-2 learners, which did not provide a Lexile score and instead indicated a learner's reading level based on an alphabetic scale.

Quantitative Data Sources

Demographic Data

Demographic data files came from Aeries, LUSD's student information system. Demographic data included learner IDs, sex, grade, language fluency, and classification status for studied subpopulations (FRPM, SPED, Migrant, Homeless). They also included whether learners participated in an early-return cohort, in-person, or distance learning during the 2020-21 school year.

Assessment Data

During the 2019-20 school year, the district measured learner progress in reading via the Scholastic Reading Inventory (SRI). A criterion-referenced test, the SRI measures reading using the Lexile Framework® for Reading.[20] Because expected annual growth in SRI reading scores is higher in elementary than middle or upper grade levels,[21] the analysis grouped learners into three content-level ranges: elementary (grades 4-5), middle (grades 6-8), and secondary (grades 10-12).

For the 2020-21 school year, the district shifted from the SRI to either Curriculum Associates' iReady Assessment (content levels 4-8) or the NWEA MAP assessment (content levels 9-12) to measure learners' progress in reading. Although different assessment measures, they both used the Lexile Framework®. However, learners take iReady and MAP assessments three times per year, rather than four, eliminating one of the data points.

To measure growth in math, the district used iReady with K-8 learners and NWEA MAP with 9-12. Both of these assessments provide a composite score at three points in time.

Assessment Dates

For the 2019-20 school year, the research team used the midpoint of testing windows as they had access to the exact calendar dates for testing. For the 2020-21 school year, the midpoint of typical assessment months was used as the research team did not have access to exact calendar dates.

2019-20 Assessment Dates
- August 18, 2019: iReady/NWEA Math 1
- August 21, 2019: SRI Lexile 1
- October 23, 2019: SRI Lexile 2
- December 8, 2019: iReady/NWEA Math 2
- February 9, 2020: SRI Lexile 3
- May 17, 2020: SRI Lexile Predicted Score
- May 24, 2020: iReady/NWEA Math 3 Predicted Score

2020-21 Assessment Dates
- August 15, 2020: iReady/NWEA Math 4, iReady/NWEA Lexile 1
- December 15, 2020: iReady/NWEA Math 5, iReady/NWEA Lexile 2
- May 15, 2021: iReady/NWEA Math 6, iReady/NWEA Lexile 3

Quantitative Data Analysis

Data Cleaning

LUSD provided separate files for assessment data and demographic data from 2019-20 and 2020-21. The research team used R to clean data files. This included merging 2019-20 and 2020-21 data files and removing any duplicates or learners who did not have data for both years. A variable for content-level range (e.g., 4-5) was also added. Due to the differences in assessments at various content levels, clean data files were separated into the following content-level ranges: kindergarten, 1-8, 9, and 10-12.

Predicted Scores

Though learners normally complete SRI assessments four times each school year and iReady/NWEA math assessments three times each school year, due to COVID-19 school closures in 2019-20, end-of-year assessments did not occur. For these assessments, the research team predicted scores to better understand the impact of COVID-related learning loss as compared to typical 'summer slide.'

To predict SRI assessment scores, the research team used historical data from the 2016-17, 2017-18, and 2018-19 school years to calculate an average historical growth rate for each content-level range. Those growth rates were then applied to determine predicted average end-of-year scores for all learners in each content-level range and subgroup.

To predict iReady and NWEA math assessment scores, the research team used linear extrapolation for projected end-of-year scores. These predicted scores were based on 2019-20 assessment data only because historical data was not available.

Data Analysis

After data cleaning and the creation of predicted scores, the research team calculated descriptive statistics and ran frequency tables for all learners and subpopulations within content-level ranges, all learners within learning communities, and by instructional modalities. The research team also calculated overlapping subpopulations by content-level ranges and made national comparisons for content levels 4-8 in reading.

After analysis, the research team used charts and graphs in Google Sheets for data visualization to identify and better understand patterns of growth. Data visualization included growth models of average scores, column charts of percentage growth, and a stacked bar chart for national comparisons. The research team also created tables to visualize overlapping subpopulations by content-level ranges as well as frequency tables to display sample sizes.

Qualitative Design and Methodologies

After completing the quantitative analysis, the research team conducted a qualitative structured focus group to better understand reality in context. The focus group included three counselors, two from K-8 learning communities and one from a 9-12 learning community. The research team asked participants to share their experiences in supporting learners during school closures, provide information about programs and services that learners and various subpopulations received, and discuss learner engagement and participation during Spring 2020 and the 2020-21 school year.

The focus group meeting was recorded and transcribed, and two members of the research team also took extensive notes. The transcript and notes were analyzed and coded to identify emergent themes. After coding, emergent themes were organized by research questions and used to supplement the quantitative data.

Appendix B: Learner Subpopulations

At the start of the study, the district specifically asked that the analysis examine the impact on specific subpopulations of learners within the district. In conducting the analysis, the research team recognized that these classifications did not exist in silos. Instead, overlapping classifications existed across content-level ranges. This appendix includes information by content-level range about the number of learners associated with each subpopulation as well as multiple subpopulations. It also includes information about the learner composition within each of the LUSD learning communities.

Learner Subpopulations for Content Levels K-8

The tables below describe the subpopulations by content-level range (4-5 and 6-8). It is important to note that **these tables describe the learners in the sample used for the study**. These samples are fairly representative of the broader LUSD population.

Table B1. Learner Subpopulations for Content Levels 4-5 (n=614) in 2020-21

	English Learner	SPED	Migrant	Homeless	FRPM	Healthy Start Referral	Healthy Start Opened	Distance Learning	Regular Return	Early Cohort
English Learner	**42.35%** **n=260**	1.14% n=7	14.98% n=92	4.89% n=30	36.81% n=226	5.70% n=35	2.93% n=18	17.10% n=105	25.24% n=155	7.17% n=44
SPED	1.14% n=7	**5.54%** **n=34**	1.63% n=10	0.49% n=3	4.72% n=29	0.98% n=6	0.33% n=2	2.44% n=15	3.09% n=19	0.81% n=5
Migrant	14.98% n=92	1.63% n=10	**24.58%** **n=151**	4.23% n=26	24.59% n=151	5.05% n=31	3.09% n=19	10.91% n=67	13.68% n=84	3.75% n=23
Homeless	4.89% n=30	0.49% n=3	4.23% n=26	**8.96%** **n=55**	8.96% n=55	2.44% n=15	1.79% n=11	2.12% n=13	6.84% n=42	2.77% n=17
FRPM	36.81% n=226	4.72% n=29	24.59% n=151	8.96% n=55	**85.18%** **n=523**	12.05% n=74	5.70% n=35	35.02% n=215	50.16% n=308	13.52% n=83
Healthy Start Referral	5.70% n=35	0.98% n=6	5.05% n=31	2.44% n=15	12.05% n=74	**12.70%** **n=78**	5.86% n=36	3.91% n=24	8.79% n=54	2.28% n=14
Healthy Start Opened	2.93% n=18	0.33% n=2	3.09% n=19	1.79% n=11	5.70% n=35	5.86% n=36	**5.86%** **n=36**	1.79% n=11	4.07% n=25	1.47% n=9
Distance Learning	17.10% n=105	2.44% n=15	10.91% n=67	2.12% n=13	35.02% n=215	3.91% n=24	1.79% n=11	**42.83%** **n=263**	0%	0%
Regular Return	18.08$ n=111	2.28% n=14	9.93% n=61	4.07% n=25	36.64% n=225	6.51% n=40	2.61% n=16	0%	**41.36%** **n=254**	0%
Early Cohort	7.17% n=44	0.81% n=5	3.75% n=23	2.77% n=17	13.52% n=83	2.28% n=14	1.47% n=9	0%	0%	**15.81%** **n=97**

These percentages represent the number of learners in the entire content level who are members of both subpopulations measured.

Table B2. Learner Subpopulations for Content Levels 6-8 (n=963) in 2020-21

	English Learner	SPED	Migrant	Homeless	FRPM	Healthy Start Referral	Healthy Start Opened	Distance Learning	Regular Return	Early Cohort
English Learner	**28.76% n=277**	1.04% n=10	9.66% n=93	4.36% n=42	25.44% n=245	4.05% n=39	1.67% n=16	10.90% n=105	17.86% n=172	2.80% n=27
SPED	1.04% n=10	**10.28% n=99**	2.08% n=20	0.83% n=8	9.24% n=89	1.56% n=15	0.83% n=8	3.43% n=33	6.85% n=66	1.25% n=12
Migrant	9.66% n=93	2.08% n=20	**21.08% n=203**	2.49% n=24	21.08% n=203	4.05% n=39	1.45% n=14	8.31% n=80	12.77% n=123	2.60% n=25
Homeless	4.36% n=42	0.83% n=8	2.49% n=24	**9.41% n=81**	8.41% n=81	1.67% n=16	0.62% n=6	2.91% n=28	5.50% n=53	1.04% n=10
FRPM	25.44% n=245	9.24% n=89	21.08% n=203	9.41% n=81	**87.12% n=839**	12.56% n=121	5.19% n=50	33.85% n=326	53.17% n=512	8.83% n=85
Healthy Start Referral	4.05% n=39	1.56% n=15	4.05% n=39	1.67% n=16	12.56% n=121	**13.19% n=127**	5.4% n=52	3.63% n=35	9.55% n=92	1.97% n=19
Healthy Start Opened	1.67% n=16	0.83% n=8	1.45% n=14	0.62% n=6	5.19% n=50	5.4% n=52	**5.40% n=52**	1.45% n=14	3.95% n=38	0.73% n=7
Distance Learning	10.90% n=105	3.43% n=33	8.31% n=80	2.91% n=28	33.85% n=326	3.63% n=35	1.45% n=14	**39.56% n=381**	0%	0%
Regular Return	17.86% n=172	6.85% n=66	12.77% n=123	5.50% n=53	53.17% n=512	9.55% n=92	3.95% n=38	0%	**50.16% n=483**	0%
Early Cohort	2.80% n=27	1.25% n=12	2.60% n=25	1.04% n=10	8.27% n=85	1.97% n=19	0.73% n=7	0%	0%	**10.18% n=98**

These percentages represent the number of learners in the entire content level who are members of both subpopulations measured.

Table B3. Learner Subpopulations for Kindergarten (n=280) in 2020-21

	English Learner	SPED	Migrant	Homeless	FRPM	Healthy Start Referrals	Healthy Start Opened	Distance Learning	Regular Return	Early Cohort
English Learner	**44.29%** **n=124**	.36% n=1	7.14% n=20	3.57% n=10	41.43% n=116	2.5% n=7	1.43% n=4	14.29% n=40	30.00% n=84	7.14% n=20
SPED	.36% n=1	**6.07%** **n=17**	0.00%	0.00%	5.36% n=15	0.00%	0.00%	2.86% n=8	3.21% n=9	0.36% n=1
Migrant	7.14% n=20	0.00%	**8.57%** **n=24**	0.71% n=2	8.57% n=24	1.07% n=3	0.36% n=1	2.86% n=8	5.71% n=16	2.14% n=6
Homeless	3.57% n=10	0.00%	0.71% n=2	**5.00%** **n=14**	4.64% n=13	0.71% n=2	0.36% n=1	2.86% n=8	4.29% n=12	1.43% n=4
FRPM	41.43% n=116	5.36% n=15	8.57% n=24	4.64% n=13	**90.36%** **n=253**	6.07% n=17	3.21% n=9	30.71% n=86	59.64% n=167	16.79% n=47
Healthy Start Referrals	2.5% n=7	0.00%	1.07% n=3	0.71% n=2	6.07% n=17	**6.43%** **n=18**	3.21% n=9	1.43% n=4	5.00% n=14	1.43% n=4
Healthy Start Opened	1.43% n=4	0.00%	0.36% n=1	0.36% n=1	3.21% n=9	3.21% n=9	**3.21%** **n=9**	0.71% n=2	3.21% n=9	0%
Distance Learning	14.29% n=40	2.86% n=8	2.86% n=8	0.71% n=2	30.71% n=86	1.43% n=4	0.71% n=2	**33.93%** **n=95**	0%	0%
Regular Return	30.00% n=84	3.21% n=9	5.71% n=16	4.29% n=12	59.64% n=167	5.00% n=14	3.21% n=9	0%	**46.78%** **n=131**	19.29% n=54
Early Cohort	7.14% n=20	0.36% n=1	2.14% n=6	1.43% n=4	16.79% n=47	1.43% n=4	0%	0%	0%	**19.29%** **n=54**

These percentages represent the number of learners in the entire content level who are members of both subpopulations measured.

Learner Subpopulations for Content Levels 9-12

The tables below describe the subpopulations of learners in content levels 10-12 and 9 to match the analysis completed in the report. **It is important to note that these tables describe the learners in the sample from the start of the study**. Given the level of learner attrition throughout the pandemic, the demographics of the sample may have shifted by the end of the 2020-21 school year. For more information about the sample-size changes at the high school content levels, see Appendix C - Secondary (Content Levels 10-12) and Appendix C - Content Level 9.

Table B4. Learner Subpopulations for Content Levels 10-12 (n=841) in 2020-21

	English Learner	SPED	Migrant	Homeless	FRPM	Healthy Start Referral	Healthy Start Opened	Distance Learning	Regular Return	Early Cohort
English Learner	**20.21% n=170**	1.19% n=10	5.71% n=48	2.50% n=21	18.43 n=155	2.14% n=18	0.59% n=5	10.23% n=86	9.99% n=84	3.21% n=27
SPED	1.19% n=10	**9.63% n=81**	1.43% n=12	0.83% n=7	9.16% n=77	1.55% n=13	0.83% n=7	5.11% n=43	4.52% n=38	1.78% n=15
Migrant	5.71% n=48	1.43% n=12	**19.50% n=164**	3.21% n=27	19.50% n=164	2.26% n=19	0.72% n=6	11.53% n=97	7.97% n=67	2.02% n=17
Homeless	2.50% n=21	0.83% n=7	3.21% n=27	**10.94% n=92**	10.82% n=91	0.95% n=8	0.59% n=5	5.71% n=48	5.11% n=43	1.55% n=13
FRPM	18.43 n=155	9.16% n=77	19.50% n=164	10.82% n=91	**88.70% n=746**	9.39% n=79	3.80% n=32	54.46% n=458	52.31% n=283	10.34% n=87
Healthy Start Referral	2.14% n=18	1.55% n=13	2.26% n=19	0.95% n=8	9.39% n=79	**9.87% n=83**	3.92% n=33	4.99% n=42	4.76% n=40	0.95% n=8
Healthy Start Opened	0.59% n=5	0.83% n=7	0.72% n=6	0.59% n=5	3.80% n=32	3.92% n=33	**3.92% n=33**	2.02% n=17	1.90% n=16	2.14% n=18
Distance Learning	10.23% n=86	5.11% n=43	11.53% n=97	5.71% n=48	54.46% n=458	4.99% n=42	2.02% n=17	**61.24% n=515**	0%	0%
Regular Return	9.99% n=84	4.52% n=38	7.97% n=67	5.23% n=44	53.42% n=289	4.86% n=41	1.90% n=16	0%	**27.00% n=227**	0%
Early Cohort	2.85% n=27	1.78% n=15	2.02% n=17	1.55% n=13	10.34% n=87	2.14% n=18	0.95! n=8	0%	0%	**1.77% n=99**

These percentages represent the number of learners in the entire content level who are members of both subpopulations measured.

Table B5. Learner Subpopulations for Content Level 9 (n=315) in 2020-21

	English Learner	SPED	Migrant	Homeless	FRPM	Healthy Start Referral	Healthy Start Opened	Distance Learning	Regular Return	Early Cohort
English Learner	**16.19% n=51**	0.32% n=1	0.95% n=3	2.54% n=8	14.92% n=47	1.90% n=6	0.95% n=3	6.98% n=22	9.21% n=29	3.49% n=11
SPED	0.32% n=1	**8.57% n=27**	0% n=0	1.59% n=5	7.62% n=24	0.32% n=1	0% n=0	4.13% n=13	4.44% n=14	1.59% n=5
Migrant	0.95% n=3	0% n=0	**3.49% n=11**	0.63% n=2	3.49% n=11	0.63% n=2	0.32% n=1	1.90% n=6	1.59% n=5	0.32% n=1
Homeless	2.54% n=8	1.59% n=5	0.63% n=2	**11.75% n=37**	11.11% n=35	1.90% n=6	0.95% n=3	3.81% n=12	7.94% n=25	3.49% n=11
FRPM	14.92% n=47	7.62% n=24	3.49% n=11	11.11% n=35	**9.21% n=29**	8.57% n=27	3.81% n=12	45.08% n=142	45.08% n=142	21.59% n=68
Healthy Start Referral	1.90% n=6	0.32% n=1	0.63% n=2	1.90% n=6	8.57% n=27	**8.57% n=27**	3.81% n=12	4.76% n=15	3.81% n=12	0.32% n=1
Healthy Start Opened	0.95% n=3	0% n=0	0.32% n=1	0.95% n=3	3.81% n=12	3.81% n=12	**3.81% n=12**	2.22% n=7	1.59% n=5	1.27% n=4
Distance Learning	6.98% n=22	4.13% n=13	1.90% n=6	3.81% n=12	45.08% n=142	4.76% n=15	2.22% n=7	**48.57% n=153**	0%	0%
Regular Return	9.21% n=29	4.44% n=14	1.59% n=5	7.94% n=25	45.71% n=144	3.81% n=12	1.59% n=5	0%	**27.30% n=86**	0%
Early Cohort	3.49% n=11	1.59% n=5	0.32% n=1	3.49% n=11	21.59% n=68	1.27% n=4	0.32% n=1	0%	0%	**24.13% n=76**

These percentages represent the number of learners in the entire content level who are members of both subpopulations measured.

Learning Community Composition

Overall, LUSD has six TK-8 learning communities, one 9-12 learning community, and one Alternative Education community (which, at the time of the study, consisted of three small 9-12 learning communities). For the analysis in this report, all three of the Alternative Education communities (JJ Cairns, Loma Vista, and Community Day) were combined due to limited sample size. This section includes information about the learner subpopulations, principal leadership, and learning facilitator retention rates by learning community.

The following table describes the total enrollment and percentage of subpopulations within each learning community. **It is important to note that this table includes data from the entire learning**

community and is not limited to the study sample. From the 2019-20 to 2020-21 school year, all learning communities experienced an increase in learners classified as Homeless and a decrease in learners classified as Migrant. All learning communities also experienced an increase in the number of learners classified as receiving SPED services, with the exception of Alternative Education. Across K-8 learning communities, Washington Elementary remained the largest with almost twice as many learners as the others. It also had the highest percentage of English Learners. Kennedy had the highest percentage of learners classified as Homeless and also experienced the greatest increase in learners receiving that classification. At the secondary level, Lindsay High School saw a slight increase in enrollment while Alternative Education experienced a substantial decline.

Table B6. Total Enrollment and Percentage of Subpopulations by Learning Community

Learning Community		Total # Enrollment	English Learner	SPED	FRPM	Migrant	Homeless
Jefferson Elementary	2019-20	436	48% n=209	3.90% n=17	92% n=401	21.6% n=94	4.13% n=18
	2020-21	418	44.26% n=185	5.26% n=22	84.93% n=355	19.86% n=83	5.26% n=22
Kennedy Elementary	2019-20	428	41% n=175	6.78% n=29	89% n=381	27.1% n=116	9.35% n=40
	2020-21	404	43.81% n=177	8.17% n=33	88.37% n=357	21.04% n=85	13.86% n=56
Lincoln Elementary	2019-20	416	41% n=171	7.22% n=30	89% n=370	24.5% n=102	3.37% n=14
	2020-21	408	41.42% n=169	10.78% n=44	86.03% n=351	21.32% n=87	7.60% n=31
Reagan Elementary	2019-20	398	36% n=143	7.79% n=31	93% n=370	26.9% n=107	7% n=28
	2020-21	401	33.17% n=133	9.73% n=39	91.02% n=351	23.44% n=94	8.73% n=23
Roosevelt Elementary	2019-20	503	36% n=181	7.55% n=38	83% n=417	9.7% n=49	1.99% n=10
	2020-21	502	31.08% n=156	9.56% n=48	82.27% n=413	8.37% n=42	4.58% n=23
Washington Elementary	2019-20	720	51% n=367	4.31% n=31	90% n=648	34.2% n=246	2.5% n=18
	2020-21	735	50.34% n=370	4.76% n=35	86.94% n=639	31.02% n=228	2.99% n=22
Lindsay High School	2019-20	1062	19% n=202	9.70% n=103	89% n=945	20.2% n=215	8.47% n=90
	2020-21	1092	19.23% n=210	10.53% n=115	89.19% n=974	15.57% n=170	11% n=121
Alternative Education	2019-20	418	43% n=180	0.48% n=2	93% n=389	19.7% n=82	0.96% n=4
	2020-21	107	43.93% n=47	0.00%	93.46% n=100	14.02% n=15	5.61% n=6

Substantial change occurred across learning communities during the 2020-21 school year with regards to the faculty composition of each learning community. First, after experiencing consistent leadership for several years, new principals took the lead in Reagan Elementary and Roosevelt Elementary. Second, learning facilitator retention rates declined more than in previous years across communities. At the same time, the number of adults associated with each site

dramatically increased to support the early-return cohorts, after-school programs, and the increased personnel required to ensure small enough groups of learners for social distancing.

Table B7. Leadership and Faculty Retention Rates by Learning Community

Learning Community	Total # Faculty 2019-20*	Total # Faculty 2020-21*	Retention Rate from 2019-20 to 2020-21	Principal Years of Service 2019-20	Principal Years of Service 2020-21
Jefferson Elementary	22	40	68.18%	5	6
Kennedy Elementary	21	32	80.95%	3	4
Lincoln Elementary	20	33	45%	1	2
Reagan Elementary	18	34	72.22%	18	1
Roosevelt Elementary	23	54	73.91%	6	1
Washington Elementary	34	51	82.35%	11	12
Lindsay High School	53	85	90.57%	11	3
Alternative Education	5	8	80%	11	12

Faculty includes learning facilitators and specialists.

Appendix C - Data Deep Dive

This appendix provides detailed analysis of learner growth by content-level range, subpopulation, instructional modality, and learning community. For each content-level range, it presents findings for reading and then math. During the 2019-20 school year, the district measured reading growth using the Scholastic Reading Inventory (SRI). They shifted to iReady (K-8) and NWEA MAP (9-12) for 2020-21. Both assessments used Lexile as a common measurement. Math data was collected using iReady (K-8) and NWEA (9-12) during both years.

As previously mentioned, due to COVID-19 closures, the district could not collect an end-of-year score in 2019-20. The research team modeled the predicted scores for reading and math to get a sense of how the growth trajectories may have progressed had school remained open (see Appendix A - Predicted scores for methodology).

Elementary (Content Levels 4-5)

Though there were differences in average scores, all subpopulations exhibited similar growth trajectories in both reading and math. All subpopulations experienced negative growth from 2019-20 to 2020-21 (a typical occurrence from year to year often associated with 'summer slide'), but otherwise demonstrated positive growth during the school year.

Content Levels 4-5: Reading

In examining 4-5 Lexile growth, a few observations emerged:
- Learners classified as receiving SPED services exhibited the largest positive growth both before and after school closures.
- English Learners exhibited the smallest negative growth between the 2019-20 and 2020-21 school years.
- All learners exhibited higher percentages of growth from Winter 2020 to Spring 2021 (when compared to Fall to Winter 2020), contrasting with the concept of 'pandemic fatigue' and growth trends in the 9-12 content levels.

Figure C1. Average Lexile Scores for Content Levels 4-5 Across Subpopulations
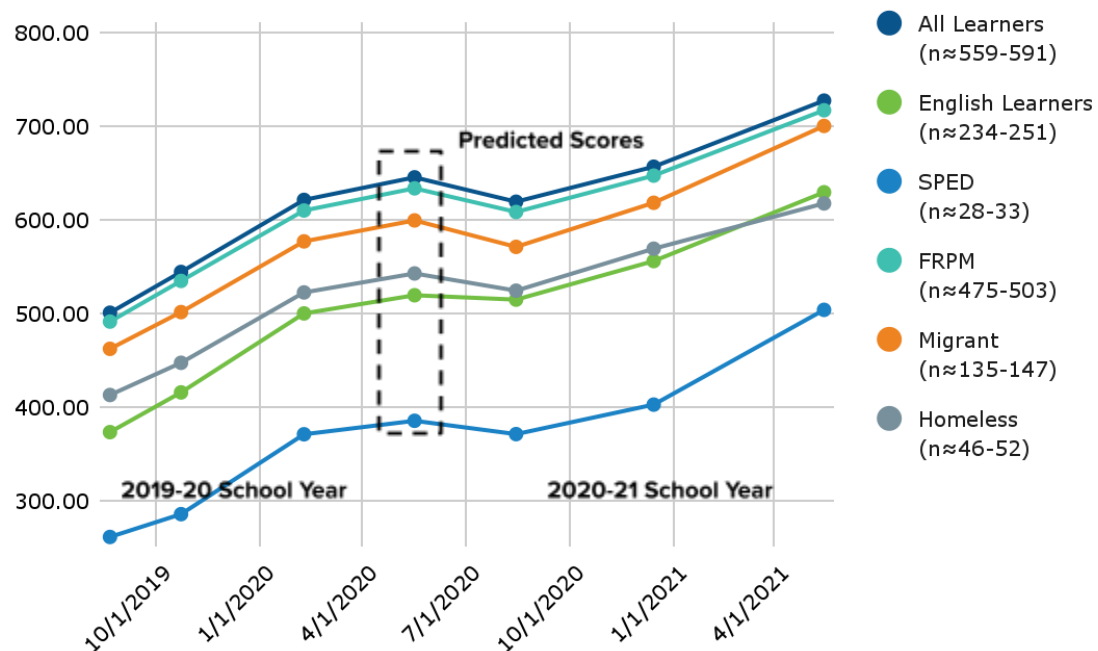
Table C1. Average Lexile Scores for Content Levels 4-5 Across Subpopulations

	SRI Lexile 1	SRI Lexile 2	SRI Lexile 3	SRI Lexile Predicted Score	iReady Lexile 1	iReady Lexile 2	iReady Lexile 3
All Learners	500.68 (255.00) n=559	544.20 (253.11) n=571	621.14 (246.32) n=569	645.24	619.19 (238.69) n=591	656.58 (239.66) n=584	727.16 (237.28) n=591
English Learner	373.18 (217.27) n=234	415.60 (213.58) n=243	499.95 (213.49) n=243	519.34	514.66 (205.63) n=250	555.86 (204.69) n=244	629.28 (209.14) n=251
SPED	261.25 (243.42) n=28	285.61 (268.39) n=31	370.9 (279.57) n=30	385.29	371.06 (244.98) n=33	402.58 (249.06) n=33	503.75 (272.29) n=32
FRPM	491.21 (255.20) n=475	534.64 (250.80) n=486	609.84 (244.67) n=483	633.50	608.26 (239.74) n=503	647.1 (241.32) n=496	716.84 (240.00) n=503
Migrant	462.13 (272.67) n=135	501.35 (268.40) n=139	576.86 (256.14) n=138	599.24	570.99 (261.87) n=147	618.09 (259.62) n=144	700.14 (266.99) n=146
Homeless	412.83 (317.20) n=47	447.22 (309.13) n=49	522.35 (307.26) n=49	542.61	524.23 (268.86) n=52	569.04 (279.67) n=52	617.4 (297.00) n=52

Data represented as mean (standard deviation) and sample size (n).

Figure C2. Percentage of Change in Lexile Scores for Content Levels 4-5 Across Subpopulations

Legend:
- All Learners (n≈559-591)
- English Learners (n≈234-251)
- SPED (n≈28-33)
- FRPM (n≈475-503)
- Migrant (n≈135-147)
- Homeless (n≈46-52)

X-axis: Aug-Oct '19, Oct '19-Feb '20, Feb-EST, EST-Aug '20, Aug-Dec '20, Dec '20-May '21
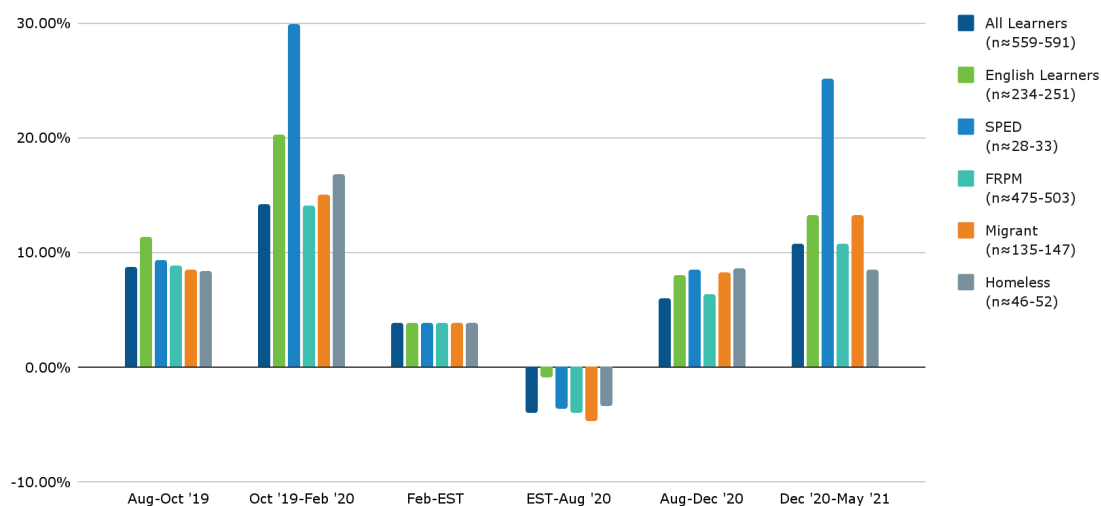
Content Levels 4-5: Math

For these elementary learners, the growth patterns mirrored those found with the Lexile scores. In alignment with national trends, learners seemed to have made less progress in math than in

reading. However, as shown in Figure C4, the percentage of growth in 2019-20 was not substantially larger than in 2020-21. In general, growth expectations in iReady are set based on previous baseline scores. Typically learners with very low baseline scores have greater growth expectations than learners with higher baseline scores. Although the percentage of math growth in 2019-20 was not substantially larger than during the 2020-21 school year, the average scale scores were higher. As such, there is then a notable difference in growth even though the actual percentage was not substantial.

Figure C3. Average Math Scores for Content Levels 4-5 Across Subpopulations
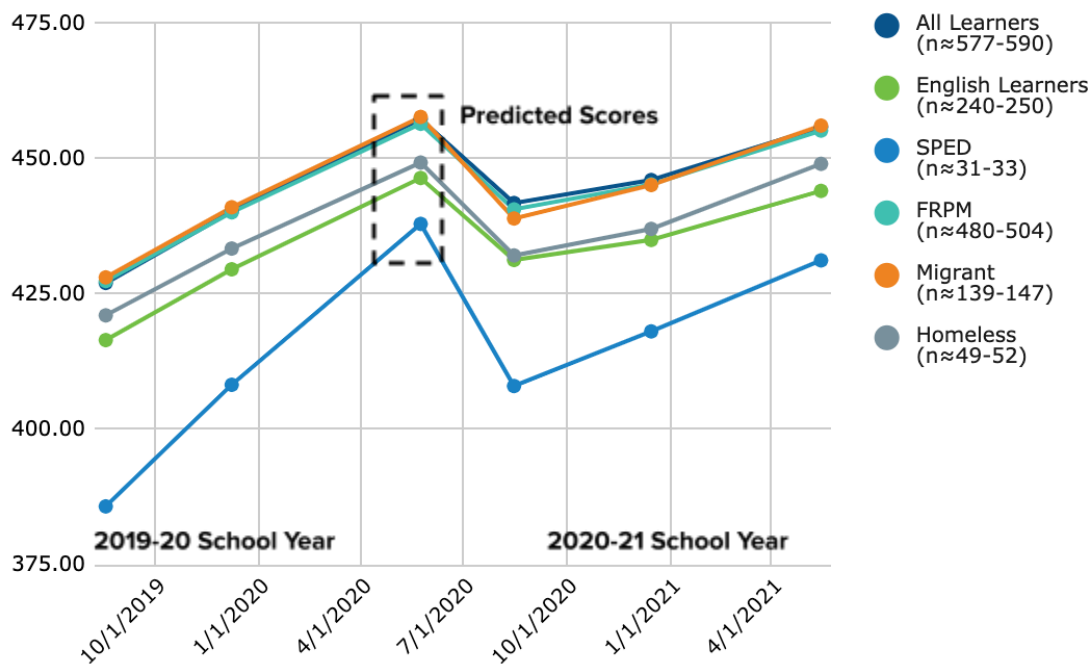
Table C2. Average Math Scores for Content Levels 4-5 Across Subpopulations

	iReady Math 1	iReady Math 2	iReady Math Predicted Score	iReady Math 4	iReady Math 5	iReady Math 6
All	427.07 (33.48) n=577	440.3 (28.11) n=567	457.35	441.84 (29.84) n=592	446.089 (30.34) n=589	455.87 (32.91) n=590
English Learner	416.51 (24.43) n=245	429.56 (22.94) n=240	446.46	431.32 (25.93) n=251	435.02 (25.96) n=248	444.08 (28.04) n=250
SPED	385.79 (81.87) n=33	408.26 (44.14) n=31	437.98	408.03 (41.84) n=33	418.12 (40.92) n=33	431.24 (49.25) n=33
FRPM	427.42 (28.30) n=489	440.13 (27.58) n=480	456.47	440.67 (30.03) n=504	445.28 (30.79) n=501	455.22 (33.00) n=503
Migrant	428.10 (30.31) n=141	441.06 (28.58) n=139	457.75	438.99 (32.94) n=147	445.16 (32.76) n=146	456.14 (35.63) n=146
Homeless	421.08 (31.92) n=49	433.43 (29.75) n=49	449.31	432.15 (31.21) n=52	437.06 (35.89) n=52	449.08 (33.55) n=52

*Data represented as mean (standard deviation) and sample size (n).

Figure C4. Percentage of Change in Math Scores for Content Levels 4-5 Across Subpopulations
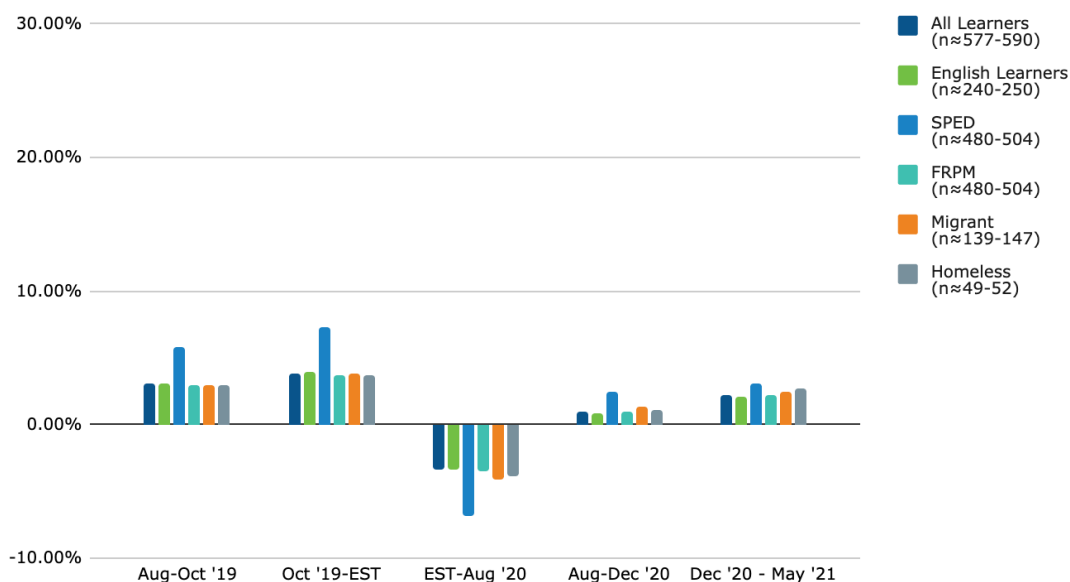
Middle (Content Levels 6-8)

Though there were differences in average scores, all subpopulations exhibited similar growth trajectories in both reading and math. All subpopulations experienced negative growth between the 2019-20 and 2020-21 school years (a typical occurrence), but otherwise made progress. As mentioned previously, it is not expected that older learners will make as much growth on these criterion-based scales.

Content Levels 6-8: Reading

In examining 6-8 Lexile growth, learners classified as receiving SPED services exhibited the largest positive growth before and after school closures – mirroring a similar trend in content levels 4-5. Initially, they exhibited the lowest positive gains from August to December 2020, but then the highest from December 2020 to May 2021. Contrary to national trends that saw a decrease in the latter half of the school year, LUSD learners made *more* progress.

When looking at the other subpopulations, learners classified as Homeless demonstrated a relatively high percentage of growth during the pandemic as did learners classified as Migrant. As mentioned in the report, this could be related to a combination of support services provided by the district to ensure their success.

Figure C5. Average Lexile Scores for Content Levels 6-8 Across Subpopulations
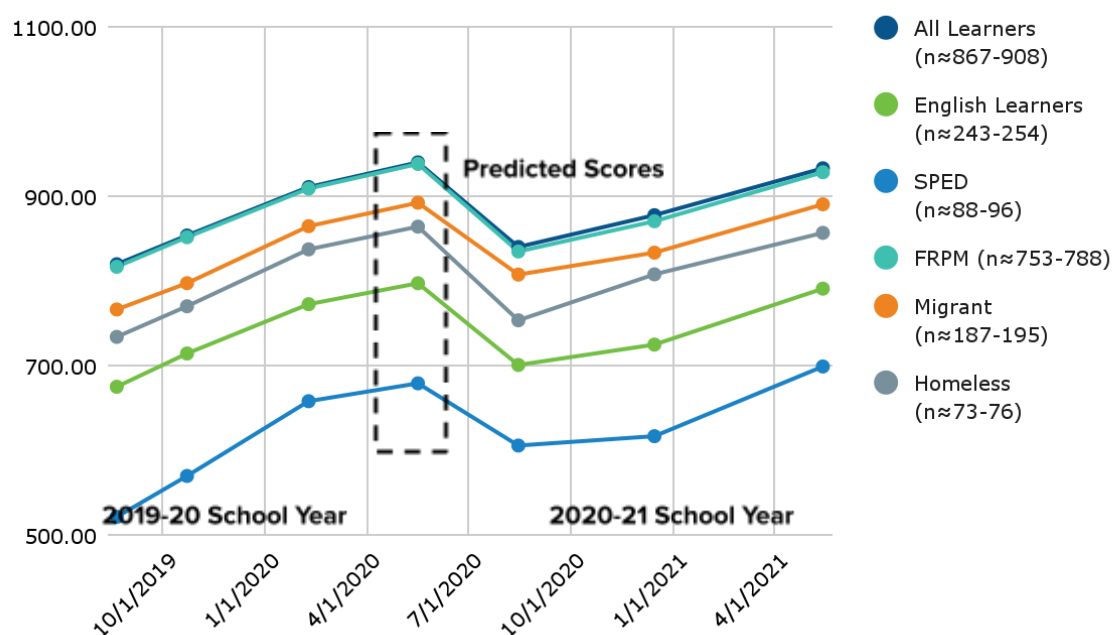
Table C3. Average Lexile Scores for Content Levels 6-8 Across Subpopulations

	SRI Lexile 1	SRI Lexile 2	SRI Lexile 3	SRI Lexile Predicted Score	iReady Lexile 1	iReady Lexile 2	iReady Lexile 3
All	820.67 (255.35) n=870	854.61 (245.33) n=874	911.79 (237.54) n=867	940.96	841.09031 (248.04) n=908	878.61 (265.40) n=905	933.97 (240.40) n=907
English Learner	676.02 (196.29) n=243	715.31 (198.96) n=244)	773.49 (200.18) n=244	798.24	701.75 (209.84) n=254	725.81 (221.49) n=252	791.87 (206.81) n=252
SPED	522.38 (297.75) n=90	570.71 (279.64) n=90	658.99 (261.89) n=88	680.08	606.61 (246.68) n=96	617.66 (267.633) n=96	699.95 (248.83) n=96
FRPM	817.69 (254.33) n=753	852.59 (245.85) n=758	910.01 (239.37) n=753	939.14	835.73 (246.79) n=789	871.44 (266.10) n=786	929.31 (244.01) n=788
Migrant	767.26 (281.86) n=187	798.31 (274.61) n=188	865.61 (267.07) n=187	893.31	808.49 (258.20) n=195	834.38 (285.79) n=195	891.44 (275.14) n=195
Homeless	734.89 (281.13) n=74	771.07 (261.53) n=74	838.26 (236.44) n=73	865.08	754.47 (248.44) n=76	808.75 (256.15) n=76	857.73 (223.53) n=75

Data represented as mean (standard deviation) and sample size (n).

Figure C6. Percentage of Change in Lexile Scores for Content Levels 6-8 Across Subpopulations
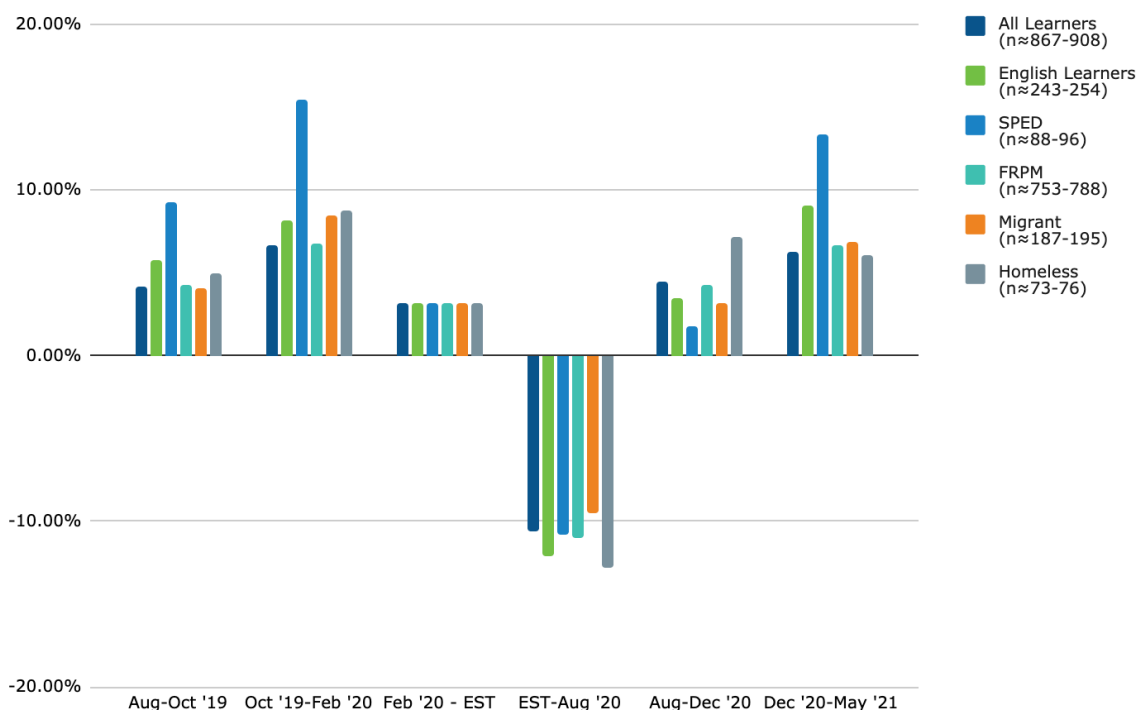
Content Levels 6-8: Math

In examining 6-8 math growth, all learner subpopulations showed similar levels of growth (under 5 percent) though they had varying average scores. While this means that not all learners achieved the same benchmark level, they did all make progress – a testament to LUSD's focus on learner growth. Of note:

- Learners classified as receiving SPED services once again exhibited the largest positive growth before and after school closures, but the largest negative growth between school years (based on the predicted scores at the end of 2019-20).
- Learners classified as Migrant exhibited the largest positive growth from Winter 2020 to Spring 2021, though their average scores remained lower than their peers.
- Given that a high percentage of learners received FRPM services, it is not surprising that their growth closely mirrors that of the overall LUSD population. However, this stands in contrast to national data that indicated substantial loss for learners receiving this classification.

Figure C7. Average Math Scores for Content Levels 6-8 Across Subpopulations
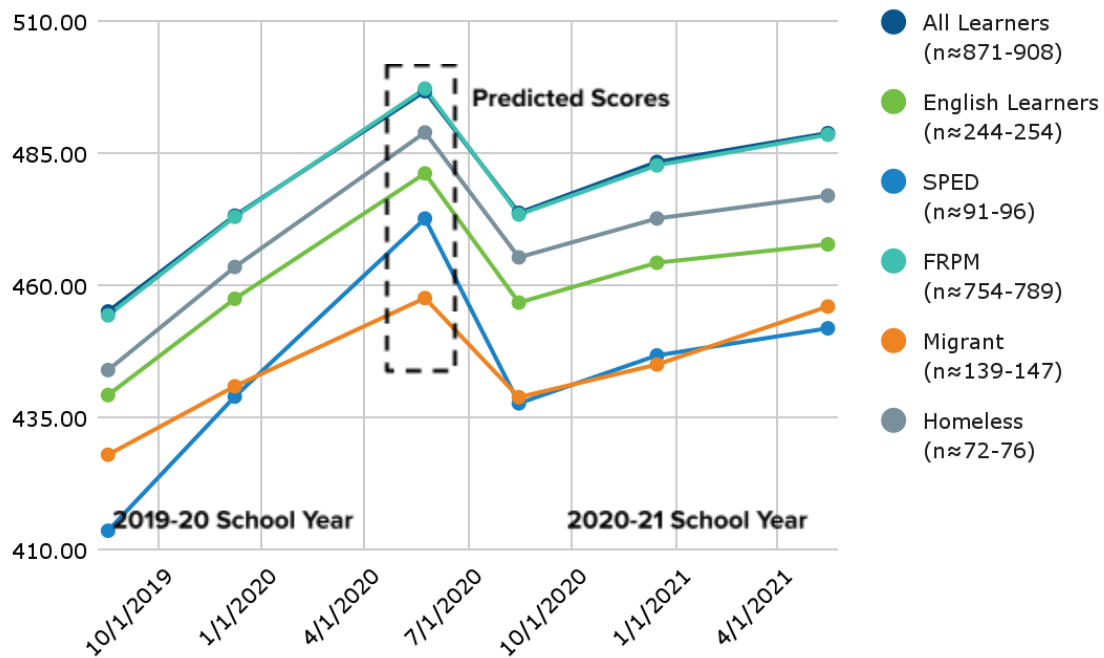
Table C4. Average Math Scores for Content Levels 6-8 Across Subpopulations

	iReady Math 1	iReady Math 2	iReady Math Predicted Score	iReady Math 4	iReady Math 5	iReady Math 6
All	455.2 (69.76) n=883	473.33 (31.89) n=871	496.88	473.87 (34.43) n=908	483.48 (37.01) n=907	488.94 (38.12) n=903
English Learner	439.39 (61.52) n=246	457.61 (23.82) n=244	481.33	456.88 (25.87) n=254	464.43 (29.67) n=252	467.91 (29.07) n=252
SPED	413.73 (82.62) n=91	439.11 (33.49) n=91	472.79	437.83 (33.71) n=96	446.89 (33.84) n=96	452.02 (32.96) n=93
FRPM	454.47 (71.81) n=766	473.11 (31.80) n=754	497.37	473.54 (34.28) n=789	482.85 (36.96) n=788	488.64 (38.08) n=784
Migrant	428.1 (30.31) n=141	441.06 (28.58) n=139	457.75	438.99 (32.94) n=147	445.16 (32.76) n=146	456.14 (35.63) n=146
Homeless	444.12 (80.57) n=74	463.63 (27.27) n=72	489.07	465.45 (31.57) n=76	472.8 (31.58) n=76	477.12 (30.30) n=74

Figure C8. Percentage of Change in Math Scores for Content Levels 6-8 Across Subpopulations

Legend:
- All Learners (n≈871-908)
- English Learners (n≈244-254)
- SPED (n≈91-96)
- FRPM (n≈754-789)
- Migrant (n≈139-147)
- Homeless (n≈72-76)
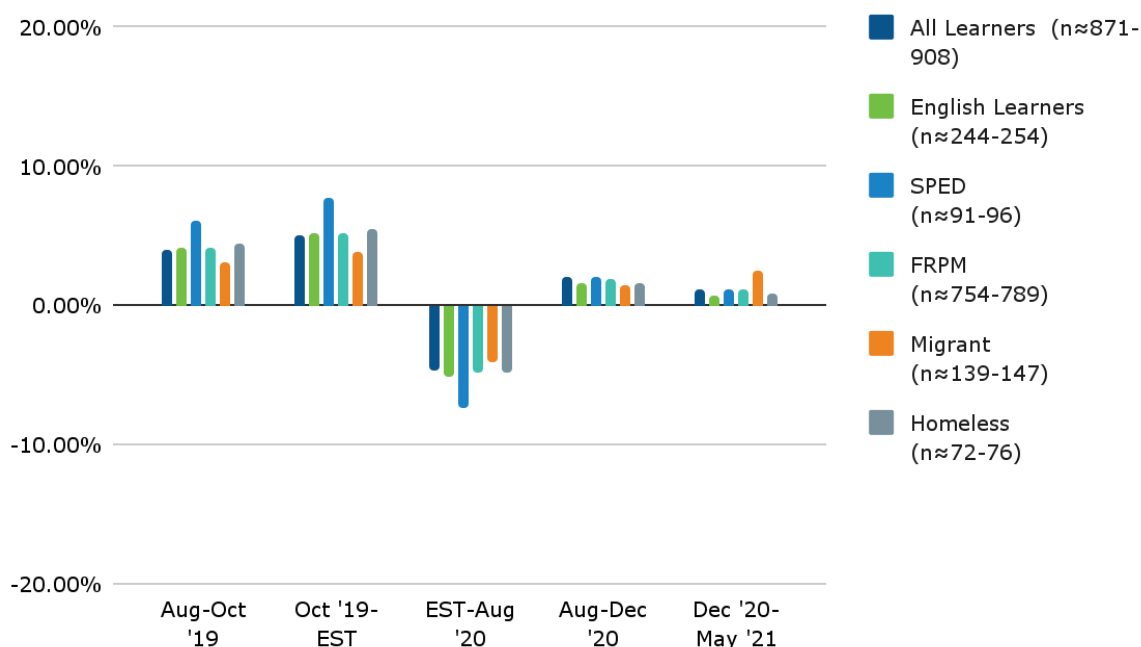
Secondary (Content Levels 10-12)

Given the myriad challenges facing older learners, and despite the enabling systems and structures implemented by the district, substantially less progress could be detected at the secondary level. This could be a factor of learning during the pandemic, the expectation that older learners generally demonstrate less progress on criterion-referenced assessments, and/or reduced participation in benchmark assessments.

As illustrated by the tables below, over 55 percent of the learners in the sample did not complete the December 2020 assessments (NWEA Lexile 2 and NWEA Math 5). At the end of the year, the district was missing approximately 35 percent of the learners' reading data and 67 percent of their math data. These discrepancies in sample size could certainly have impacted the analysis.

Table C5. Sample Size and Missing Data from Content Levels 10-12 Lexile Assessments in 2019-20 and 2020-21

10-12	SRI Lexile 1	SRI Lexile 2	SRI Lexile 3	NWEA Lexile 1	NWEA Lexile 2	NWEA Lexile 3
N	751	739	732	708	526	606
# Missing	69	81	88	112	294	214
% Missing	9.19%	10.96%	12.02%	15.82%	55.89%	35.31%

Table C6. Sample Size and Missing Data from Content Levels 10-12 Math Assessments in 2019-20 and 2020-21

10-12	NWEA Math 1	NWEA Math 2	NWEA Math 4	NWEA Math 5	NWEA Math 6
N	746	717	563	517	489
# Missing	74	103	257	303	331
% Missing	9.92%	14.37%	45.65%	58.61%	67.69%

Content Levels 10-12: Reading

Though there were differences in average scores, all subpopulations exhibited similar growth trajectories throughout both school years, with a decrease in average scores over time. **This negative growth trajectory was most evident in learners receiving SPED services who had the lowest average scores and exhibited negative growth as the 2020-21 school year progressed.**

In addition, **English Learners had lower average scores than the majority of their peers and demonstrated less growth.** This could be associated with the limited sample size at the high school level within LUSD (most learners are reclassified by this level, so any English Learners in content levels 9-12 are usually new to LUSD).

It is noteworthy that after an initial decline, learners classified as Homeless made substantially more progress during the latter half of the school year. Approximately 47 percent of these learners did return for in-person instruction, which may have contributed to their growth.

Figure C9. Average Lexile Scores for Content Levels 10-12 Across Subpopulations
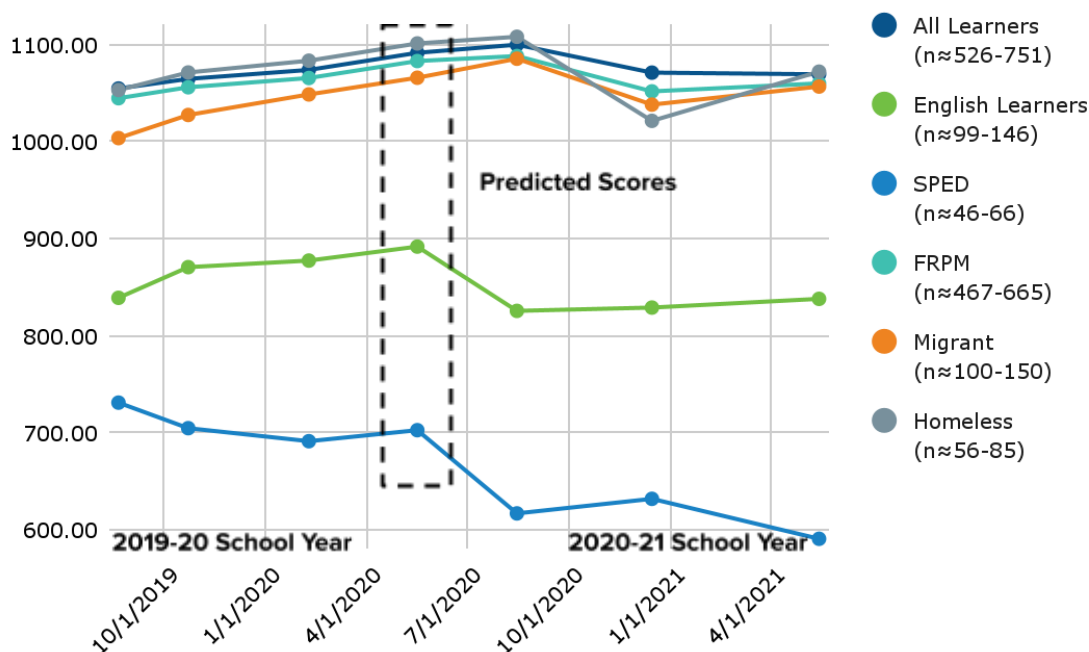
Table C7. Average Lexile Scores for Content Levels 10-12 Across Subpopulations

	SRI Lexile 1	SRI Lexile 2	SRI Lexile 3	SRI Lexile Predicted Score	NWEA Lexile 1	NWEA Lexile 2	NWEA Lexile 3
All	1054.66 (237.52) n=751	1064.53 (253.93) n=739	1073.79 (238.36) n=732	1091.4	1099.76 (334.92) n=708	1071 (333.32) n=526	1069.29 (323.10) n=606
English Learner	839.13 (219.19) n=146)	870.71 (212.12) n=141	877.49 (219.50) n=138	891.88	825.69 (318.50) n=145	829.09 (250.41) n=99	838.07 (309.95) n=122
SPED	731.22 (273.57) n=60	704.92 (274.59) n=66	691.52 (288.55) n=62	702.86	617.17 (348.42) n=60	632.17 (367.81) n=46	591.02 (358.72) n=49
FRPM	1044.65 (239. 24) n=665	1055.92 (236.77) n=656	1065.46 (240.16) n=647	1082.93	1088.09 (337.08) n=632	1051.68 (332.86) n=457	1059.91 (321.42) n=539
Migrant	1003.58 (261.96) n=150	1027.39 (247.66) n=145	1048.54 (246.88) n=144	1065.74	1085.33 (346.36) n=138	1038.05 (315.29) n=100	1056.65 (330.02) n=115
Homeless	1053.11 (230.57) n=85	1071.14 (228.63) n=84	1083.28 (225.01) n=79	1101.04	1107.91 (277.52) n=79	1021.34 (300.20) n=56	1071.98 (267.81) n=63

Data represented as mean (standard deviation) and sample size (n).

Figure C10. Percentage of Change in Lexile Scores for Content Levels 10-12 Across Subpopulations

Legend:
- All Learners (n≈526-751)
- English Learners (n≈99-146)
- SPED (n≈46-66)
- FRPM (n≈467-665)
- Migrant (n≈100-150)
- Homeless (n≈56-85)
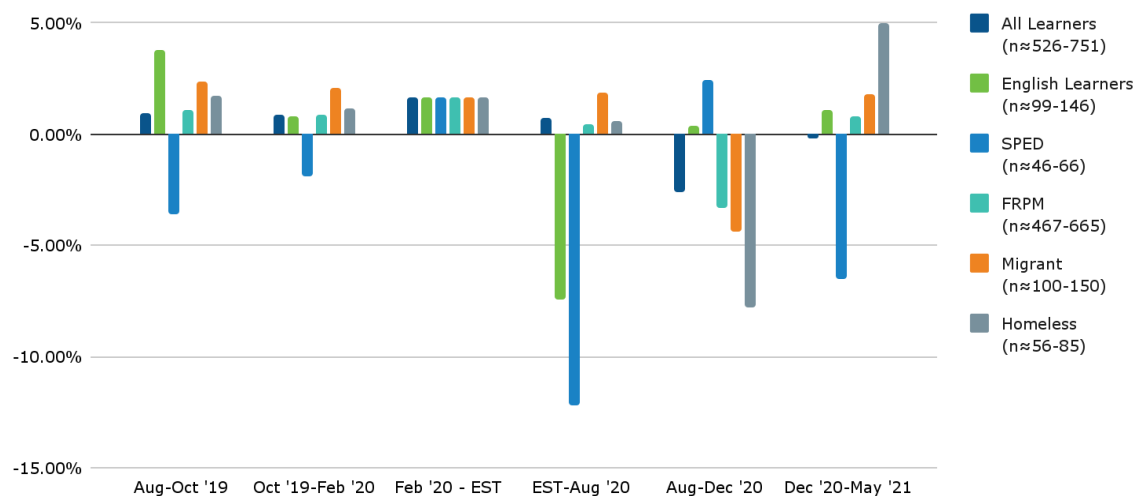
Content Levels 10-12: Math

As with reading, there were substantial differences in the average scores for each subpopulation over the two years. In examining 10-12 math growth, all subpopulations exhibited similar growth rates before school closures, once again with the exception of learners classified as receiving SPED services. Although those learners exhibited a large jump in average scores during the first half of the 2020-21 school year, they experienced a sharp decline in the latter portion. This could be attributed to the decreased sample size or the challenges associated with the pandemic.

Figure C11. Average Math Scores for Content Levels 10-12 Across Subpopulations

Legend:
- All Learners (n≈489-746)
- English Learners (n≈91-141)
- SPED (n≈35-68)
- FRPM (n≈436-665)
- Migrant (n≈100-155)
- Homeless (n≈50-85)

Predicted Scores

2019-20 School Year   2020-21 School Year
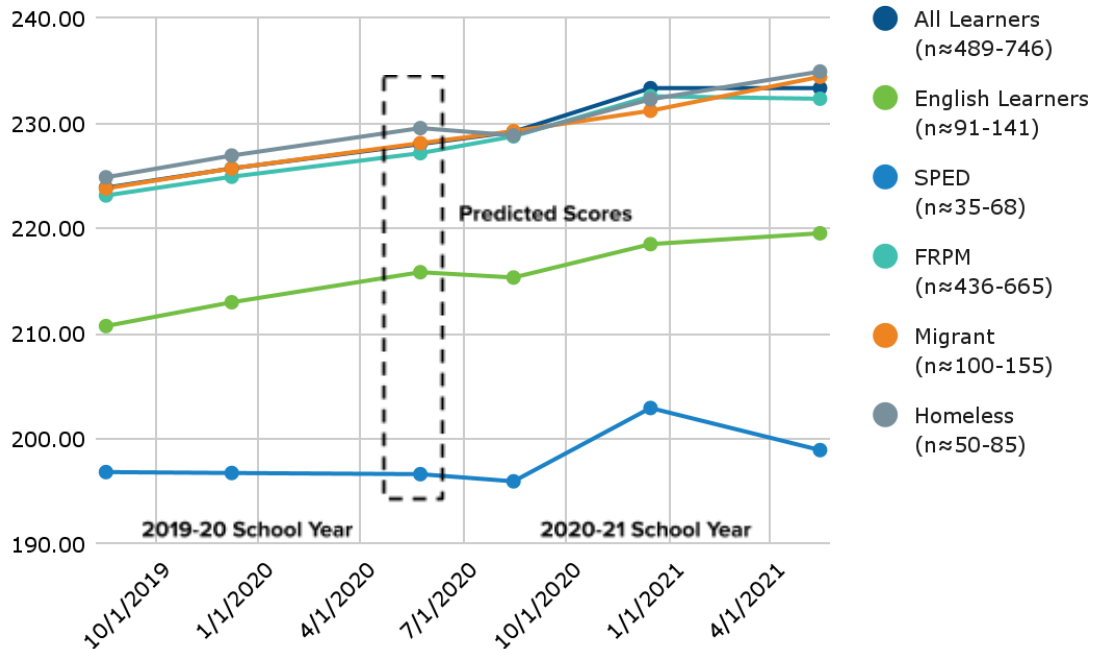
Table C8. Average Math Scores for Content Levels 10-12 Across Subpopulations

	NWEA Math 1	NWEA Math 2	NWEA Math Predicted Score	NWEA Math 4	NWEA Math 5	NWEA Math 6
All	223.89 (18.92) n=746	225.73 (19.47) n=717	228.04	229.21 (19.66) n=563	233.36 (21.68) n=517	233.37 (23.15) n=489
English Learner	210.74 (13.14) n=141	213 (13.76) n=131	215.86	215.35 (15.91) n=108	218.53 (18.55) n=91	219.56 (17.60) n=102
SPED	196.85 (12.91) n=68	196.76 (14.70) n=68	196.65	195.97 (19.13) n=36	202.95 (17.75) n=37	198.94 (20.43) n=35
FRPM	223.15 (18.97) n=665	224.93 (19.36) n=637	227.18	228.78 (19.81) n=499	232.59 (21.75) n=458	232.35 (23.16) n=436
Migrant	223.82 (18.72) n=154	225.73 (17.57) n=144	228.13	229.27 (20.55) n=155	231.21 (22.22) n=113	234.44 (22.10) n=100
Homeless	224.88 (16.84) n=85	226.95 (16.65) n=81	229.56	228.87 (16.89) n=55	232.3 (18.61) n=54	234.94 (19.68) n=50

Data represented as mean (standard deviation) and sample size (n).

Figure C12. Percentage of Change in Math Scores for Content Levels 10-12 Across Subpopulations
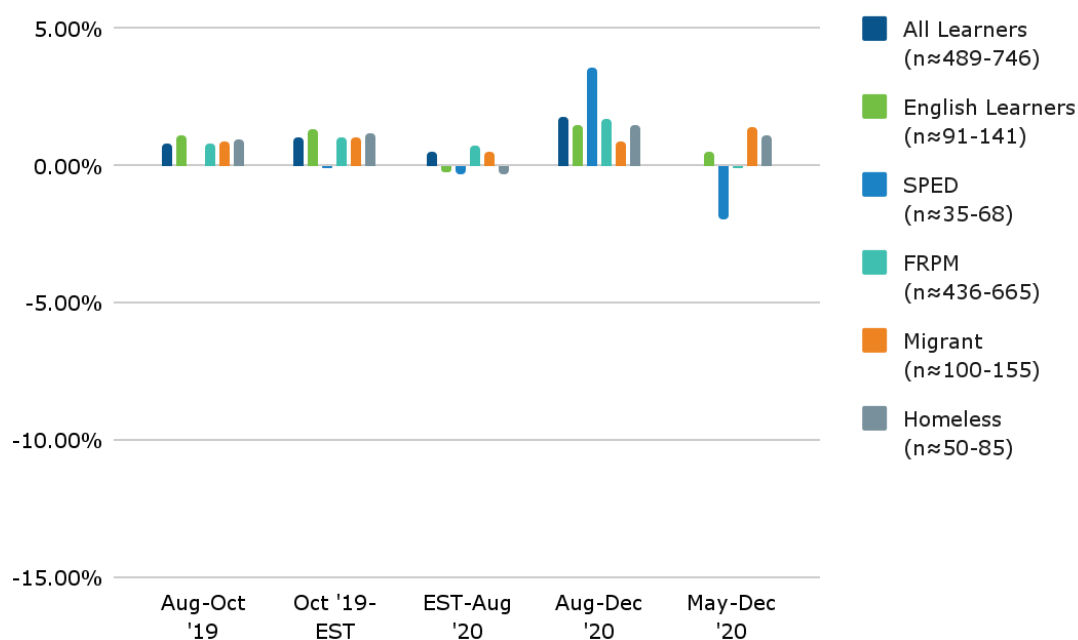
Special Levels (K, 9)

The district requested a separate analysis for two groups of students: kindergarten learners and learners in content level 9.

Kindergarten

The assessment data for kindergarten learners only includes December 2020 and May 2021, because these learners do not participate in beginning-of-year assessments. Overall, kindergarten learners who participated in TK had higher average scores in both reading and math to begin the year and then made similar progress as their peers. For all subpopulations, kindergarten learners made more growth in reading (3-6 percent positive growth) than in math (1-4 percent positive growth).

In reading, LUSD used scale scores within iReady instead of Lexile scores for kindergarten learners because their general Lexile level tends to be lower than that which the assessment can accurately determine. This is expected with younger learners. At the start of the year, those classified as Homeless and those receiving SPED services had the lowest average scores. However, learners classified as Homeless exhibited the largest positive growth (along with English Learners), while learners classified as receiving SPED services exhibited the lowest positive growth.

In math, the growth trajectories were similar across subpopulations with the exception of learners classified as receiving SPED services. Of note, though learners who participated in TK once again began the school year with higher average scores than their peers, they progressed at a pace similar to the overall LUSD population. English Learners and learners classified as Homeless made substantially more progress.

Figure C13. Average Reading Scale Scores for Kindergarten Across Subpopulations in 2020-21
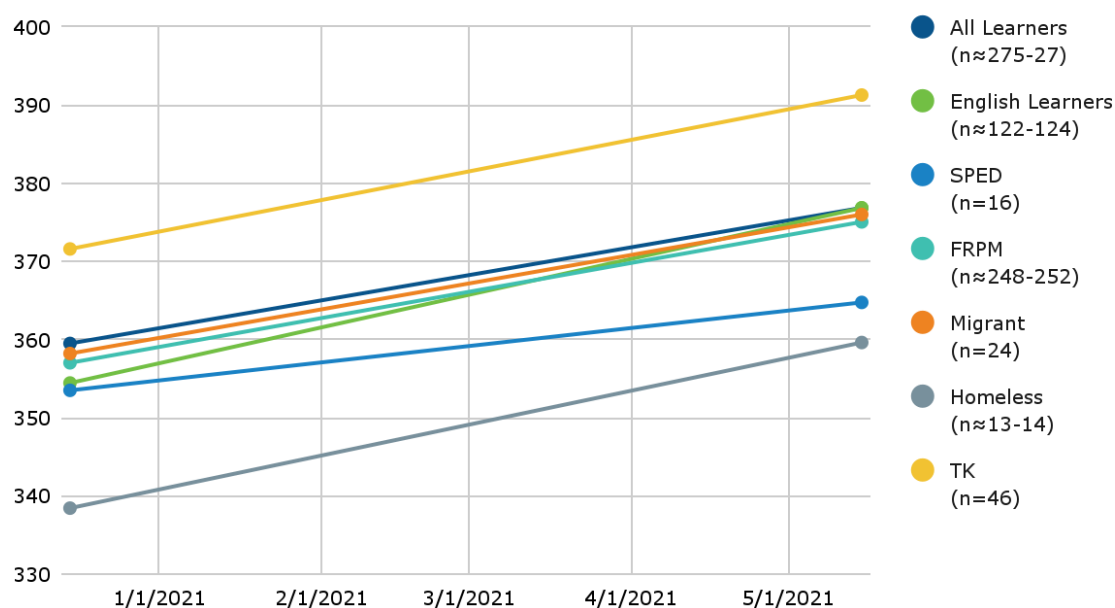
Table C9. Average Reading Scale Scores for Kindergarten Across Subpopulations in 2020-21

	Reading Scale Score December 2020	Reading Scale Score May 2021
All Learners	359.50 (38.44) n=279	376.85(32.97) n=275
English Learner	354.44 (35.84) n=124	376.84 (30.99) n=122
SPED	353.50 (35.42) n=16	364.75 (45.26) n=16
FRPM	357.02 (35.82) n=252	375.05 (32.04) n=248
Migrant	358.21 (48.01) n=24	376 (36.67) n=24
Homeless	338.43 (26.34) n=14	359.62 (30.29) n=13
TK	371.59 (33.61) n=46	391.28 (26.86) n=46

Data represented as mean (standard deviation) and sample size (n).

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Figure C14. Percentage of Change in Reading Scale Scores for Kindergarten Across Subpopulations in 2020-21
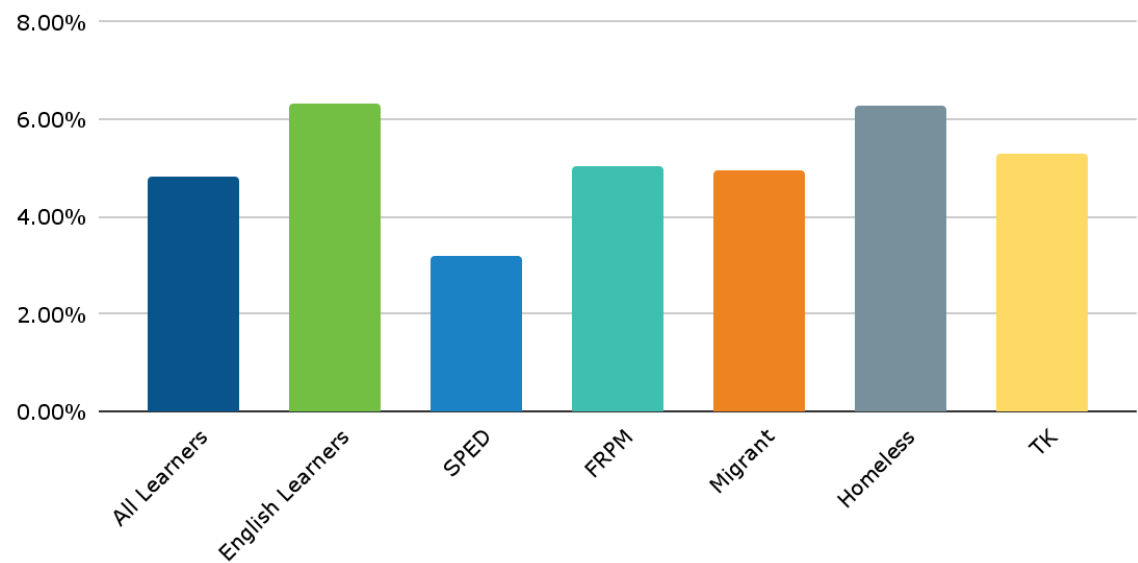
Figure C15. Average Math Scores for Kindergarten Across Subpopulations in 2020-21
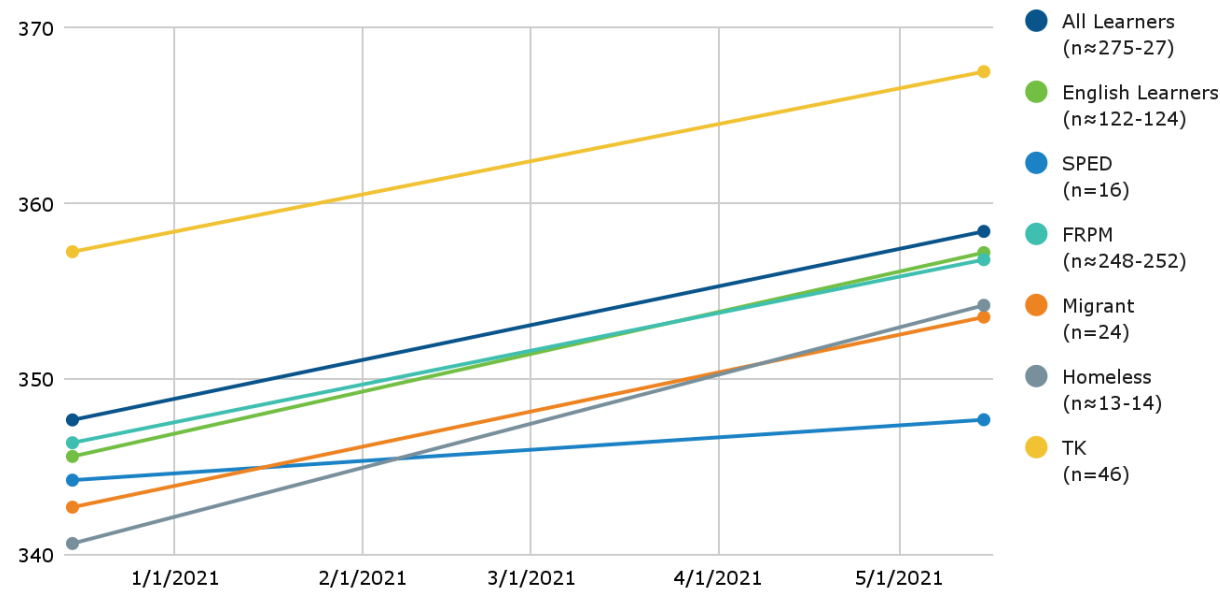
Table C10. Average Math Scores for Kindergarten Across Subpopulations in 2020-21

	iReady Math December 2020	iReady Math May 2021
All Learners	347.68 (24.70) n=279	358.42 (24.04) n=279
English Learner	345.60 (23.83) n=124	357.21 (24.71) n=124
SPED	344.25 (26.00) n=16	347.69 (26.74) n=16
FRPM	346.38 (24.86) n=252	356.81 (24.07) n=252
Migrant	342.71 (21.17) n=24	353.54 (27.65) n=24
Homeless	340.64 (10.12) n=14	354.21 (28.26) n=14
TK	357.26 (16.76) n=46	367.52 (20.63) n=46

Data represented as mean (standard deviation) and sample size (n).

Figure C16. Percentage of Change in Math Scores for Kindergarten Across Subpopulations in 2020-21
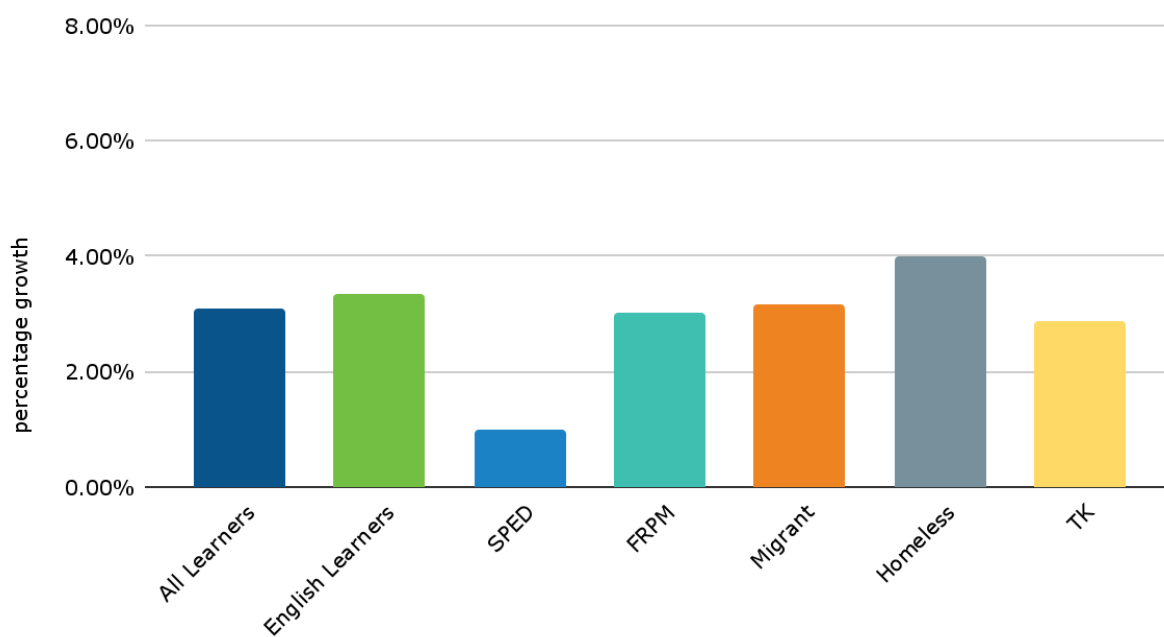
Content Level 9

As previously discussed, older learners faced a number of challenges to learning during the pandemic despite the enabling systems and structures implemented by the district. As such, secondary learners generally demonstrated less progress. For learners in content level 9, the additional factor of transitioning from self-contained learning environments in K-8 to having different learning facilitators for each content area at the secondary level may have also created a barrier. Additionally, learners in content level 9 took different math assessments in 2019-20 and 2020-21, making it difficult to compare learner progress from year to year.

As illustrated in the tables below, in December 2020, over 45 percent of the learners in the sample did not complete the Lexile assessment (NWEA Lexile 2) and over 20 percent of the learners in the sample did not complete the math assessment (NWEA Math 5). At the end of the year, the district was missing approximately 17 percent of the learners' reading data (NWEA Lexile 3) and 15 percent of their math data (NWEA Math 6). These discrepancies in sample size could certainly have impacted the analysis.

Table C11. Sample Size and Missing Data from Content Level 9 Lexile Assessments in 2019-20 and 2020-21

9	SRI Lexile 1	SRI Lexile 2	SRI Lexile 3	NWEA Lexile 1	NWEA Lexile 2	NWEA Lexile 3
N	288	287	287	275	201	252
# Missing	7	8	8	20	94	43
% Missing	2.43%	2.79%	2.79%	7.27%	46.77%	17.06%

Table C12. Sample Size and Missing Data from Content Level 9 Math Assessments in 2019-20 and 2020-21

9	iReady Math 1	iReady Math 2	NWEA Math 4	NWEA Math 5	NWEA Math 6
N	290	281	266	242	257
# Missing	5	14	29	53	38
% Missing	1.72%	4.98%	10.90%	21.90%	14.79%

Regardless, when looking at the growth of specific subpopulations, a few trends emerged:

- Learners classified as Migrant had the highest average scores in both reading and math throughout 2019-20 and 2020-21. They also exhibited positive growth from year to year.
- Although learners classified as Homeless exhibited a drop in average scores during the first part of the 2020-21 school year, they made substantial progress in the second half.
- Similar to the earlier analysis of learners in content levels 10-12, those receiving SPED services and English Learners had relatively low average scores in reading and math. However, the subpopulation of learners receiving SPED services made substantial gains during the Spring 2021. This could be a function of sample size or increased access to support services.

Figure C17. Average Lexile Scores for Content Level 9 Across Subpopulations
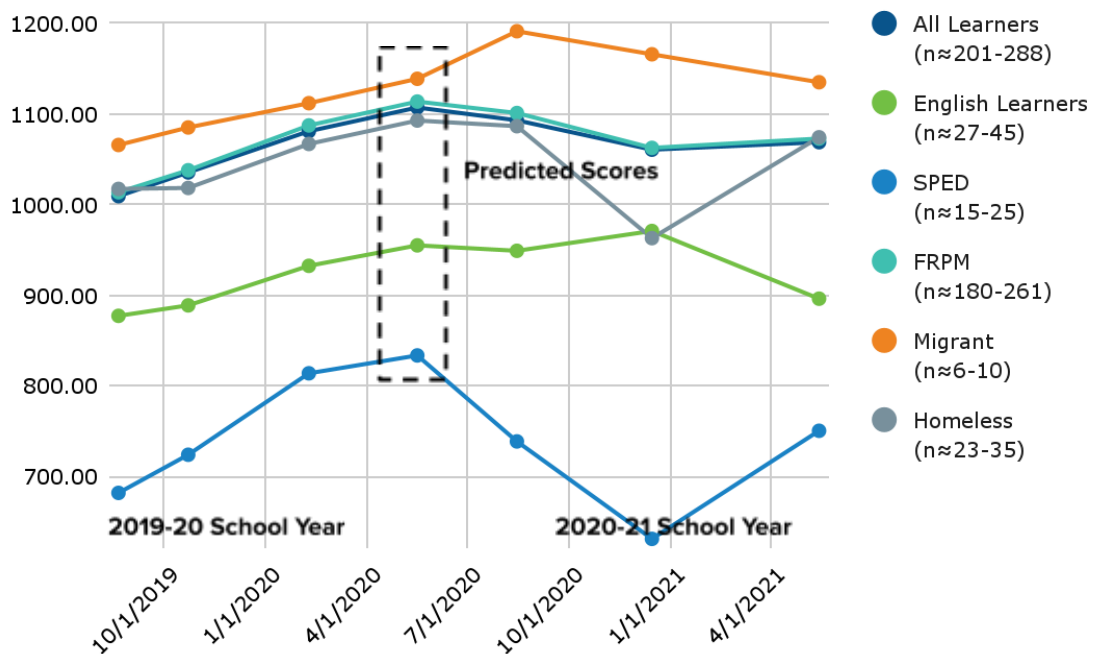
Table C13. Average Lexile Scores for Content Level 9 Across Subpopulations

	SRI Lexile 1	SRI Lexile 2	SRI Lexile 3	SRI Lexile Predicted Score	NWEA Lexile 1	NWEA Lexile 2	NWEA Lexile 3
All	1009.36 (206.68) N=288	1035.52 (209.70) n=287	1080.97 (198.47) n=287	1107.12	1093 (273.53) n=275	1060.62 (285.87) n=201	1068.87 (271.80) n=252
English Learner	877.33 (154.42) n=45	888.89 (145.04) n=44	932.51 (150.28) n=45	955	949.07 (223.75) n=43	970.93 (195.70) n=27	896.25 (221.74) n=40
SPED	682.04 (278.34) n=25	724.12 (279.90) n=25	813.96 (290.37) n=24	833.66	738.81 (292.60) n=21	631.33 (226.83) n=15	750.56 (300.26) n=18
FRPM	1013.63 (207.02) n=261	1037.93 (209.64) n=260	1087.36 (196.33) n=260	1113.68	1101.04 (266.18) n=249	1062.58 (289.73) n=180	1072.86 (272.90) n=229
Migrant	1065.8 (164.46) n=10	1085.11 (195.83) n=9	1111.9 (166.32) n=10	1138.81	1191.25 (202.41) n=8	1165.83 (313.90) n=6	1135 (215.00) n=9
Homeless	1017.34 (212.10) n=35	1018.40 (200.85) n=35	1066.94 (191.29) n=35	1092.76	1086.52 (261.39) n=33	963.04 (273.10) n=23	1074.29 (267.49) n=28

Data represented as mean (standard deviation) and sample size (n).

Figure C18. Percentage of Change in Lexile Scores for Content Level 9 Across Subpopulations
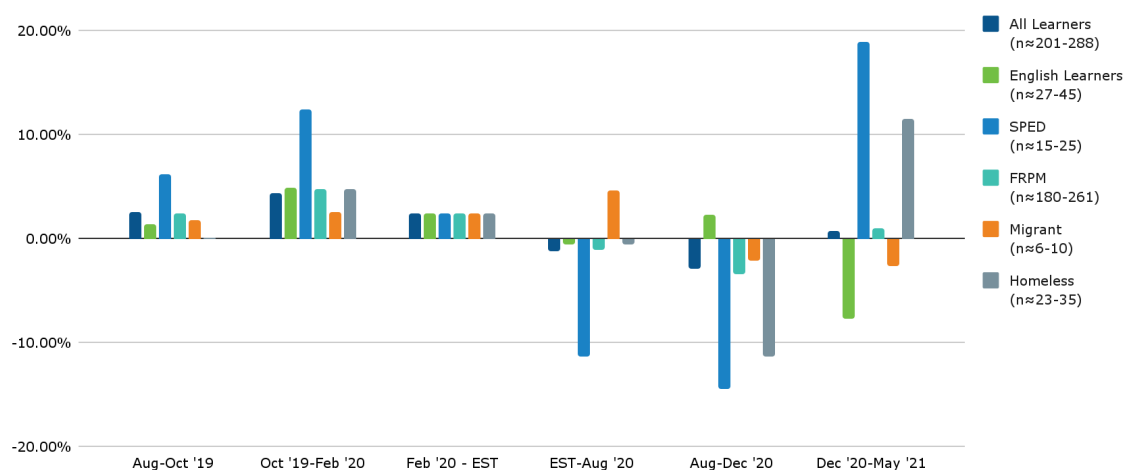
Due to a difference in assessments from 2019-20 to 2020-21, math scores could not be compared from year to year for content level 9. In 2020-21, though there were differences in average scores, all subpopulations exhibited similar growth trajectories with slight negative growth from Winter 2020 to Spring 2021. Of note:

- Learners classified as Migrant exhibited the greatest positive growth from Fall to Winter 2020 and were the only subpopulation that exhibited positive growth from Winter 2020 to Spring 2021.
- Learners classified as Homeless exhibited the second-highest level of positive growth from Fall to Winter 2020, but then the largest negative growth from Winter 2020 to Spring 2021.

Figure C19. Average Math Scores for Content Level 9 Across Subpopulations in 2020-21
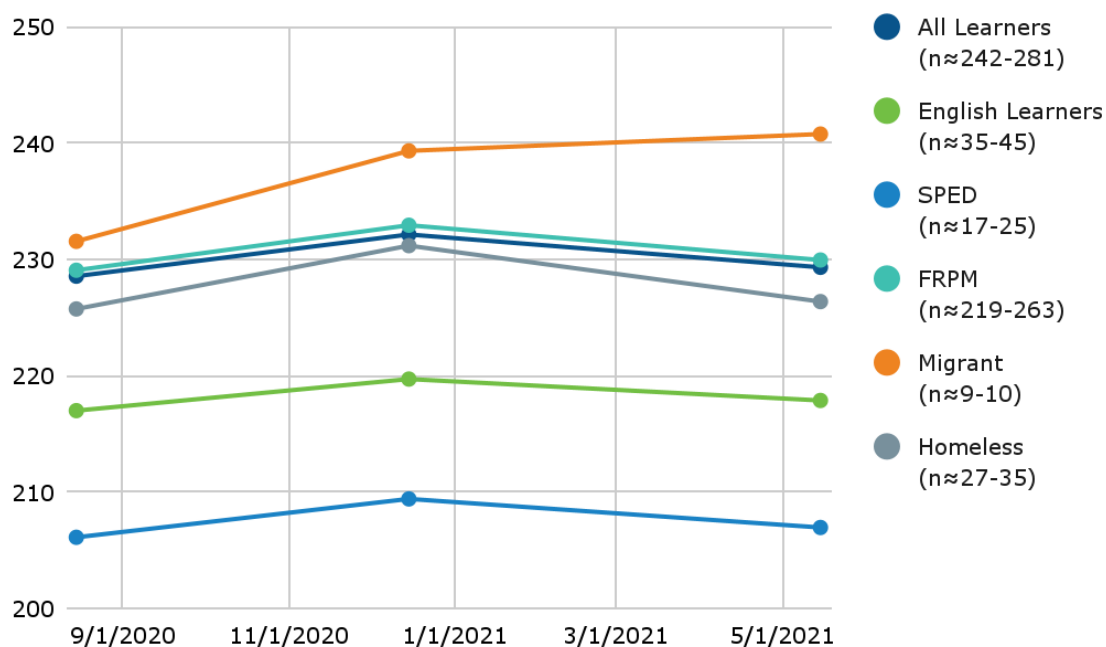
Table C14. Average Math Scores for Content Level 9 Across Subpopulations

	iReady Math1	iReady Math2	iReady Predicted Score	NWEA Math4	NWEA Math5	NWEA Math6
All	486.71 (57.91) n=290	502.43 (30.36) n=281	522.7	228.56 (16.40) n=266	232.14 (19.19) n=242	229.32 (17.81) n=257
English Learner	469.07 (21.76) n=45	480.48 (22.08) n=44	495.09	217 (13.62) n=41	219.71 (18.89) n=35	217.88 (17.15) n=40
SPED	454.84 (28.12) n=25	464.54 (29.01) n=24	476.93	206.11 (16.01) n=18	209.41 (17.98) n=17	206.95 (15.01) n=22
FRPM	487.35 (59.80) n=263	503.97 (29.78) n=255	525.45	229.07 (16.53) n=242	232.94 (18.60) n=219	229.95 (17.76) n=234
Migrant	502.5 (26.62) n=10	512.9 (34.17) n=10	526.17	231.56 (15.08) n=9	239.33 (17.01) n=9	240.78 (13.68) n=9
Homeless	488.71 (30.26) n=35	500.37 (30.39) n=35	515.29	225.74 (14.18) n=31	231.19 (19.35) n=27	226.38 (18.99) n=32

Data represented as mean (standard deviation) and sample size (n).

Figure C20. Percentage of Change in Math Scores for Content Level 9 Across Subpopulations in 2020-21
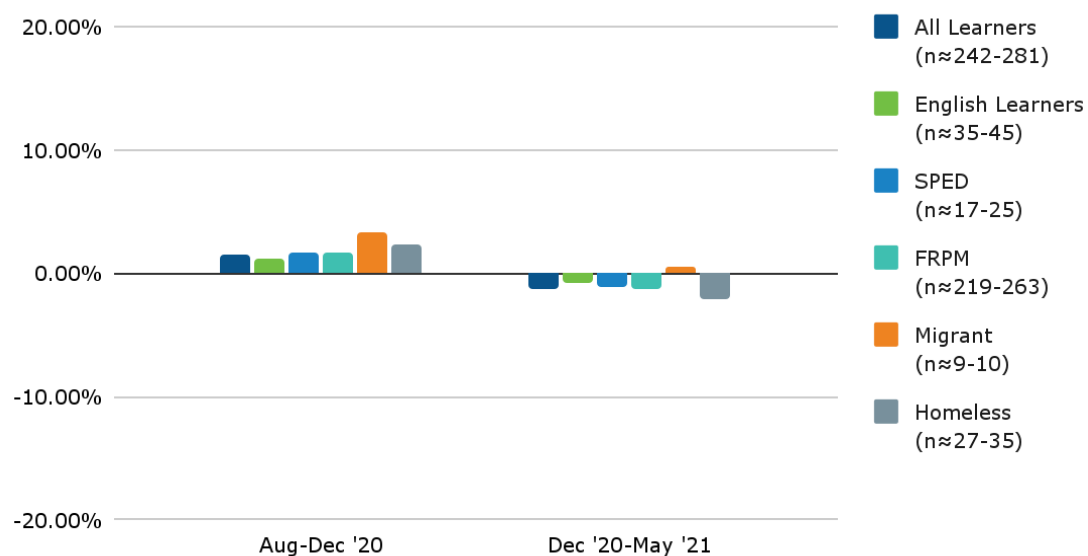
Instructional Modalities

In light of the national conversation about the effects of remote instruction on learning loss, the district wanted to understand the impact of instructional modality (early return, in-person, or distance learning) on their own learners' growth. In Spring 2020 during the initial COVID-19 closure, all learners participated in distance learning. Beginning in Fall 2020, LUSD provided a cohort model as an early-return option for learners who needed additional in-person support. In this context, the primary instruction remained online but learners came to their learning community to participate with additional support.

As the state opened schools in March 2021, LUSD provided all learners in the district with a choice between in-person and distance learning. All learners who participated in the early-return cohort model in the fall opted to continue with in-person learning once it was available to all learners in the district. However, for analysis, learners who participated in the early-return cohort were examined separately from the regular return group.

Figure C21. Number of Learners for All Content Levels by Instructional Modality in 2020-21
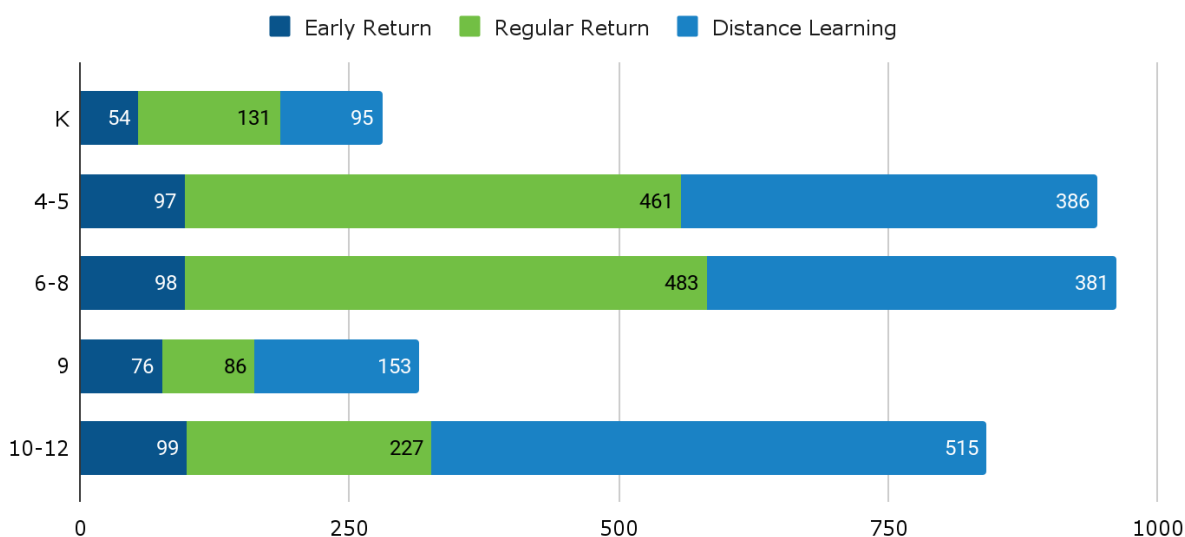
Elementary and Middle Learners (4-8)

In both reading and math, learners in content levels 4-8 who participated in the early-return cohort model exhibited greater positive growth compared to other instructional modalities. The regular-return group also made substantial progress, particularly in reading, after returning to in-person instruction. It is important to remember that the regular-return group did participate in distance learning until the state allowed learners to return in March.

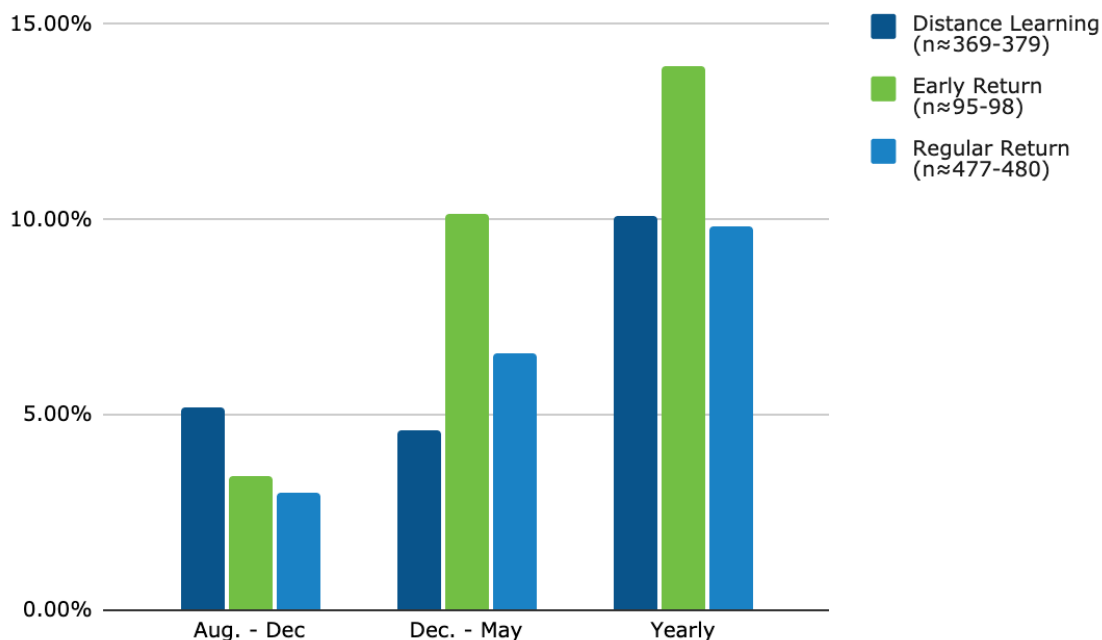Figure C22. Percentage of Change in Lexile Scores for Content Levels 4-5 by Instructional Modality in 2020-21
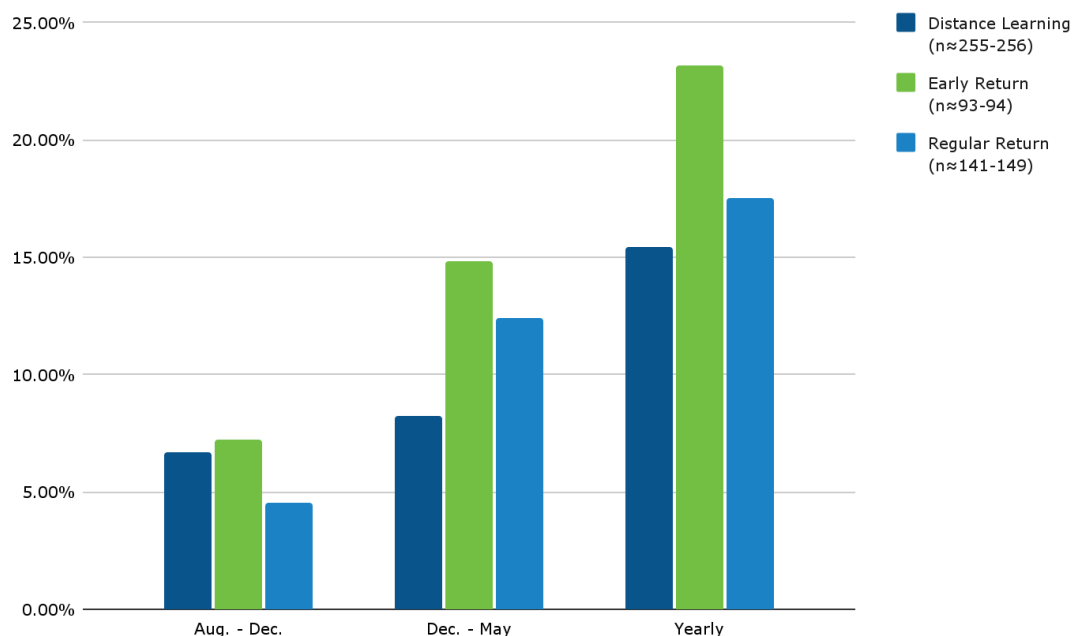
Table C15. Average Lexile Scores for Content Levels 4-5 by Instructional Modality in 2020-21

	iReadyLexile1	iReadyLexile2	iReadyLexile3
Distance Learning	646.85 (232.21) n=256	690 (232.69) n=255	746.65 (230.24) n=256
Early Return	564.19 (229.22) n=93	605.05 (226.74) n=94	694.79 (220.96) n=94
Regular Return	609.11 (245.28) n=149	636.79 (246.82) n=141	715.91 (249.19) n=147

Figure C23. Percentage of Change in Math Scores for Content Levels 4-5 by Instructional Modality in 2020-21
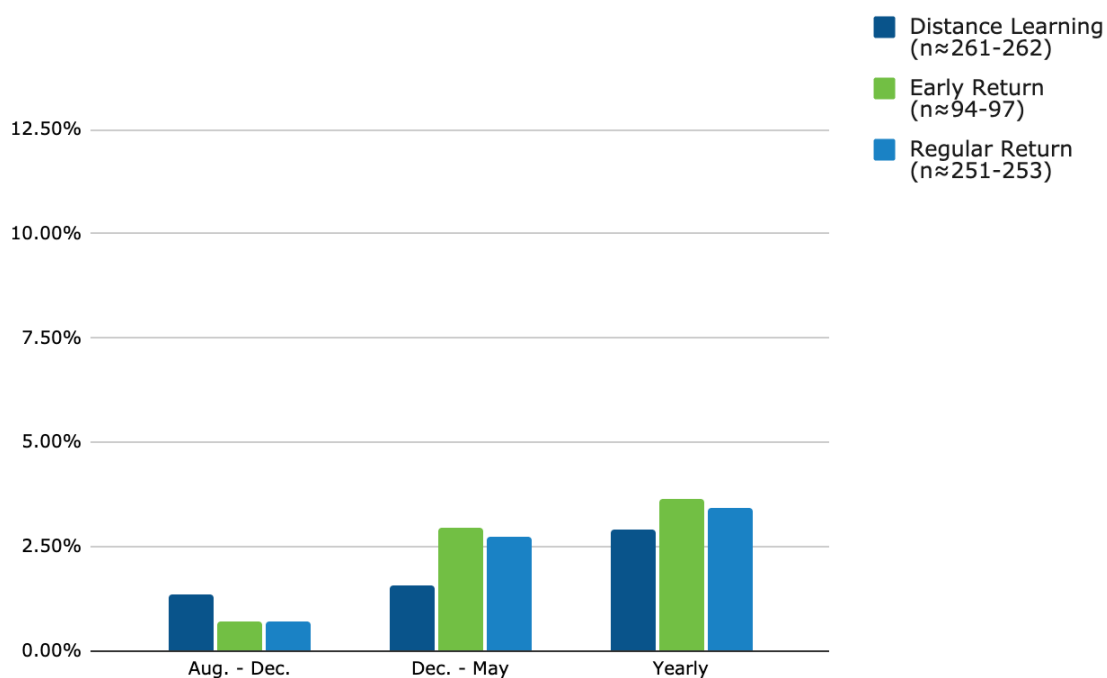
Table C16. Average Math Scores for Content Levels 4-5 by Instructional Modality in 2020-21

4-5 Math Scores	iReady Math 4	iReady Math 5	iReady Math 6
Distance Learning	445 (30.6) n=262	451 (29.5) n=262	458 (31.8) n=261
Early Return	438 (23.9) n=94	441 (26.2) n=96	454 (30.9) n=97
Regular Return	439 (31.1) n=251	442 (32.0) n=251	454 (34.5) n=253

Figure C24. Percentage of Change in Lexile Scores for Content Levels 6-8 by Instructional Modality in 2020-21

Table C17. Average Lexile Scores for Content Levels 6-8 by Instructional Modality in 2020-21

6-8 Lexile Scores	iReady Lexile 1	iReady Lexile 2	iReady Lexile 3
Distance Learning	864 (232) n=369	909 (260) n=372	951 (251) n=379
Early Return	811 (262) n=95	839 (280) n= 96	924 (240) n=98
Regular Return	824 (249) n=477	849 (274) n=477	905 (246) n=480

Figure C25. Percentage of Change in Math Scores for Content Levels 6-8 by Instructional Modality in 2020-21
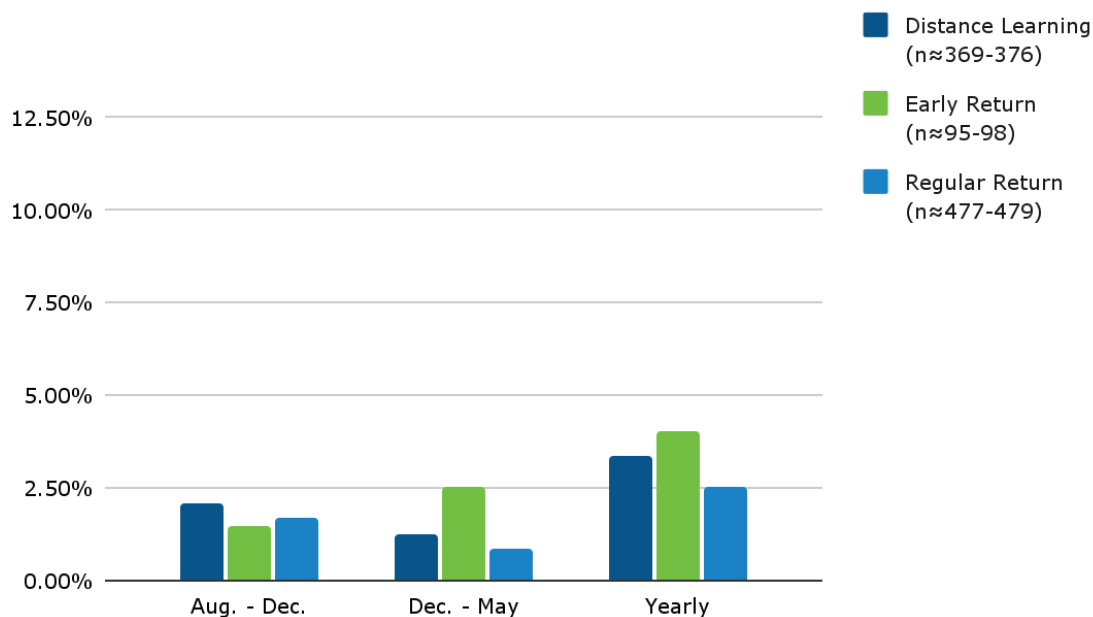
Table C18. Average Math Scores for Content Levels 6-8 by Instructional Modality in 2020-21

	iReady Math 4	iReady Math 5	iReady Math 6
Distance Learning	476 (33.1) n=369	486 (37.7) n=376	492 (41.7) n=376
Early Return	471 (34.6) n=95	478 (36.6) n=98	490 (33.5) n=98
Regular Return	472 (35.3) n=477	480 (36.9) n=479	484 (36.7) n=478

Secondary Learners (9-12)

The district intended for the early-return cohort to provide structure and support as a means to accelerate learner growth. While that was the case with the elementary and middle learners, the opposite occurred at the secondary level. Learners in content levels 10-12 who participated in the early-return cohort model averaged negative growth in reading and minimal growth in math.

A majority of secondary learners chose to remain remote in Spring 2021. In reading, this group still exhibited negative growth but to a lesser extent than the early-return cohort. On the contrary, they had positive growth in math. These trends need to be considered in conjunction with previous analysis of missing data for secondary learners, as they could be a factor of changes in the sample. Regardless, secondary learners did not appear to be negatively impacted by distance learning.

Figure C26. Percentage of Change in Lexile Scores for Content Levels 10-12 by Instructional Modality in 2020-21
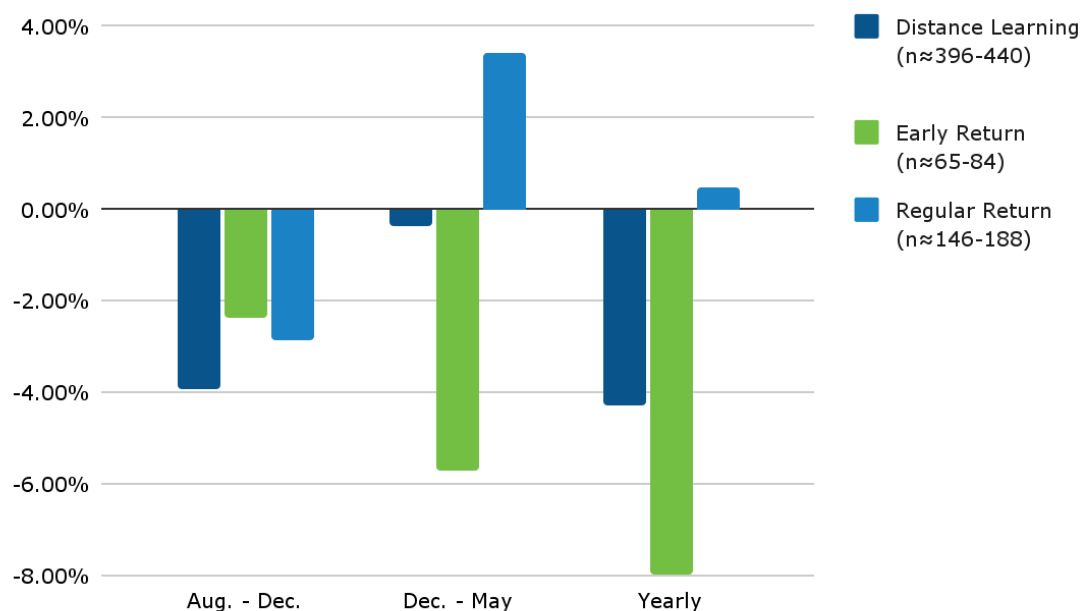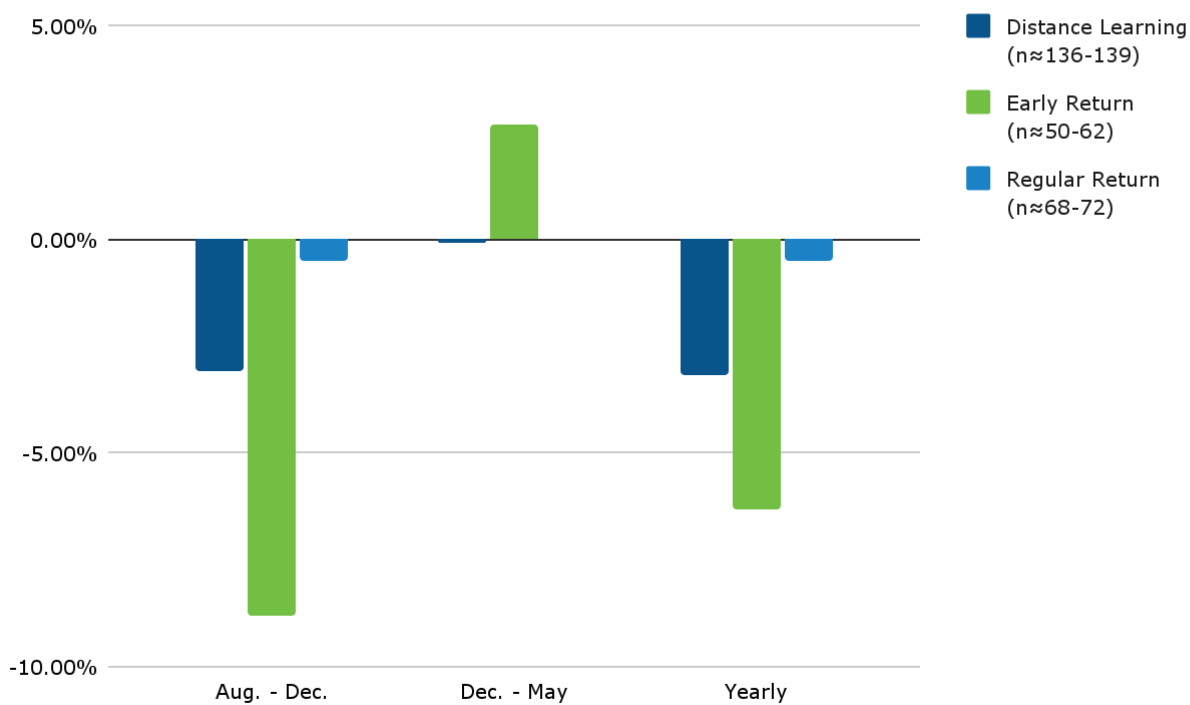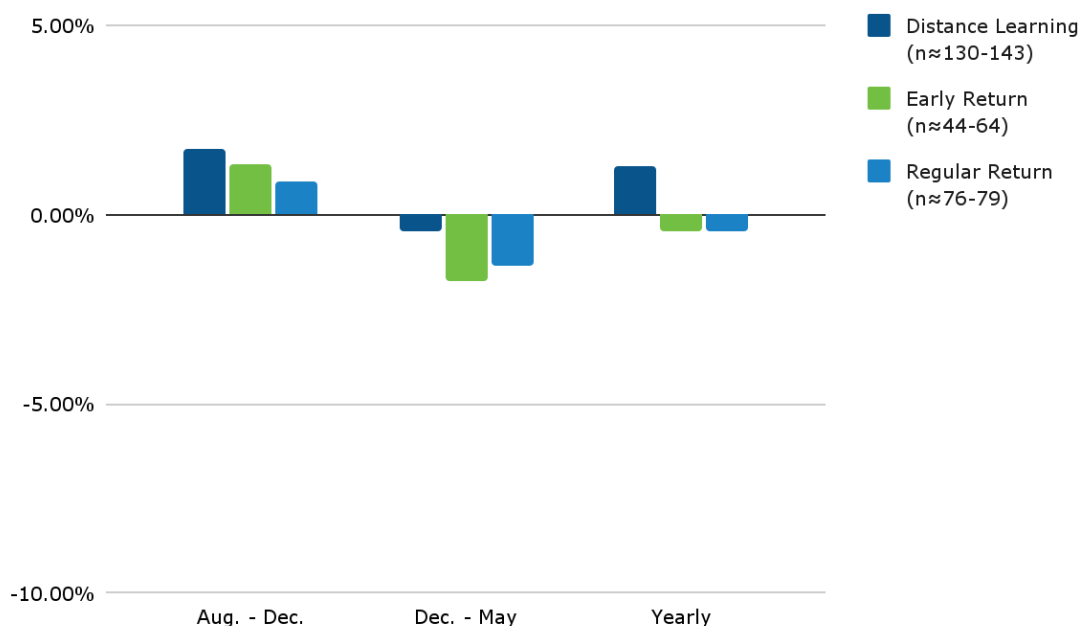

Table C19. Average Lexile Scores for Content Levels 10-12 by Instructional Modality in 2020-21

	NWEA Lexile 1	NWEA Lexile 2	NWEA Lexile 3
Distance Learning	1144 (327) n=396	1099 (317) n=417	1095 (310) n=440
Early Return	1004 (337) n=68	980 (389) n=65	924 (392) n=84
Regular Return	1049 (332) n=146	1019 (351) n=168	1054 (334) n=188

Figure C27. Percentage of Change in Math Scores for Content Levels 10-12 by Instructional Modality in 2020-21
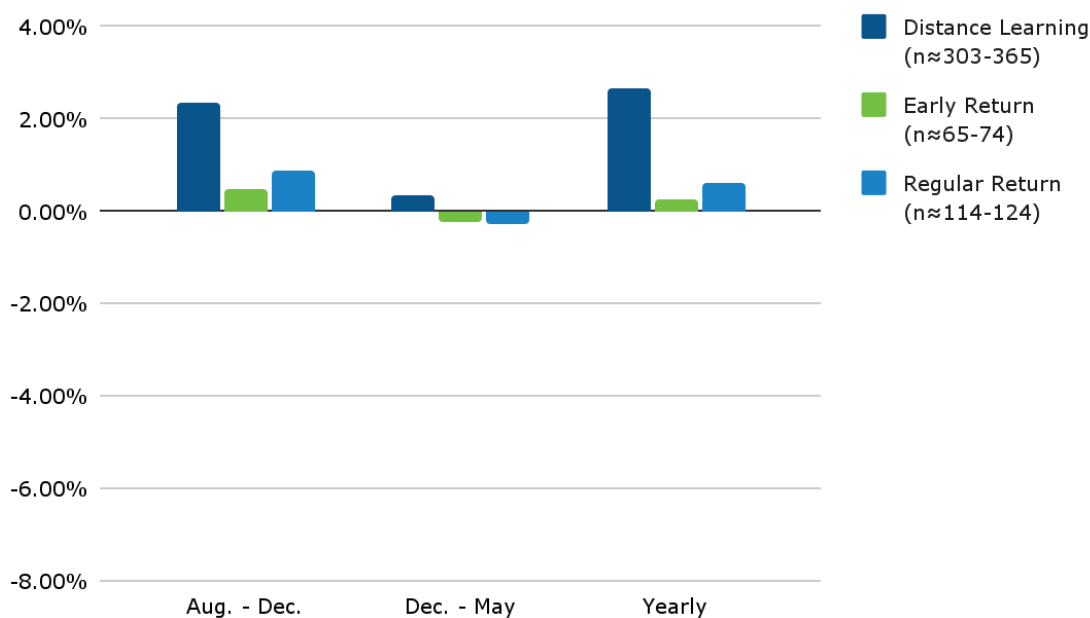
Table C20. Average Math Scores for Content Levels 10-12 by Instructional Modality in 2020-21

	NWEA Math 4	NWEA Math 5	NWEA Math 6
Distance Learning	230.70 (18.9) n=365	236.08 (20.71) n=339	236.86 (23.00) n=303
Early Return	223.38 (19.79) n=74	224.41 (21.29) n=65	223.92 (19.59) n=66
Regular Return	228.31 (21.19) n=124	230.29 (23.09) n=114	229.69 (23.54) n=119

In contrast, **learners in content level 9 who participated in the early-return cohort model exhibited the greatest positive growth in reading but not in math.** For learners transitioning to the high school model from the self-contained classrooms of the K-8 learning communities, the early-return cohort may have provided much needed structure and support. Although this trend did not carry over to the regular-return group. As with the learners in content levels 10-12, those in content level 9 who remained in distance learning continued to make progress in math.

Figure C28. Percentage of Change in Lexile Scores for Content Level 9 by Instructional Modality in 2020-21

Table C21. Average Lexile Scores for Content Level 9 by Instructional Modality in 2020-21

	NWEA Lexile 1	NWEA Lexile 2	NWEA Lexile 3
Distance Learning	1142 (303) n=139	1107 (296) n=139	1106 (272) n=136
Early Return	1092 (209) n=62	996 (314) n=50	1023 (259) n=53
Regular Return	989 (260) n=72	984 (294) n=72	984 (318) n=68

Figure C29. Percentage of Change in Math Scores for Content Level 9 by Instructional Modality in 2020-21

Table C22. Average Math Scores for Content Level 9 by Instructional Modality in 2020-21

	NWEA Math 4	NWEA Math 5	NWEA Math 6
Distance Learning	231 (15.8) n=143	235 (18.5) n=143	234 (19.5) n=130
Early Return	226 (16.1) n=61	229 (19.6) n=44	225 (15.1) n=64
Regular Return	223 (17.4) n=76	225 (19.2) n=67	222 (16.4) n=79

Learning Communities

Overall, LUSD has six TK-8 learning communities, one 9-12 high school, and one Alternative Education community (which consisted of three small 9-12 learning communities during the 2020-21 school year). Each learning community varied in size, learner demographics, and faculty composition (see Appendix B - Learning Community Composition). Learners in these different communities also demonstrated very different growth patterns in reading and math.

K-8 Cross-Community Observations

All K-8 learners reside in self-contained classrooms, meaning that learners have the same learning facilitator for each of the core content areas: English Language Arts, math, history/social studies, and science. Each community averaged positive growth during both school years in both content areas and levels.

A few notable trends emerged:

- Learners from Reagan Elementary experienced a dramatic decline between the two school years; and yet, they made the most progress in 2020-21.
- In contrast, learners from Kennedy Elementary also experienced a decline between the two years. However, they did not make as much progress during the 2020-21 school year. By Spring 2021, learners had made only slight gains over the previous year's high score.
- Roosevelt and Washington, two of the larger K-8 learning communities, consistently demonstrated positive growth across content levels and areas.
- In kindergarten, learners at Jefferson Elementary and Kennedy Elementary exhibited the highest levels of positive growth. Lincoln Elementary and Reagan Elementary demonstrated the lowest levels for both reading and math.

Figure C30. Average Lexile Scores for Content Levels 4-5 by Learning Community
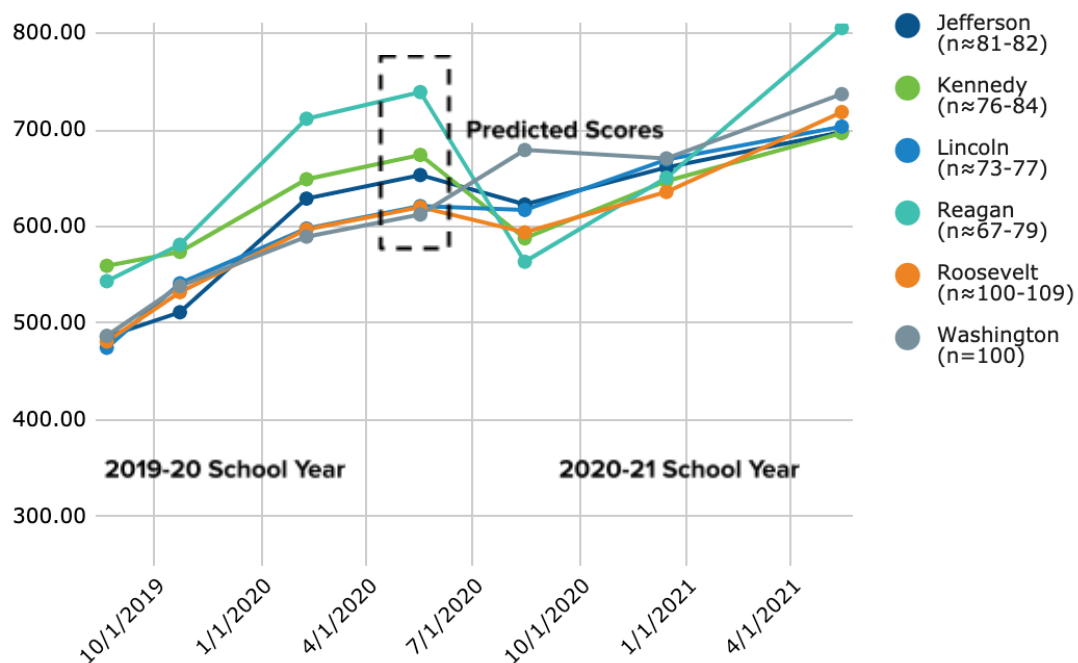
Figure C31. Percentage of Change in Lexile Scores for Content Levels 4-5 by Learning Community
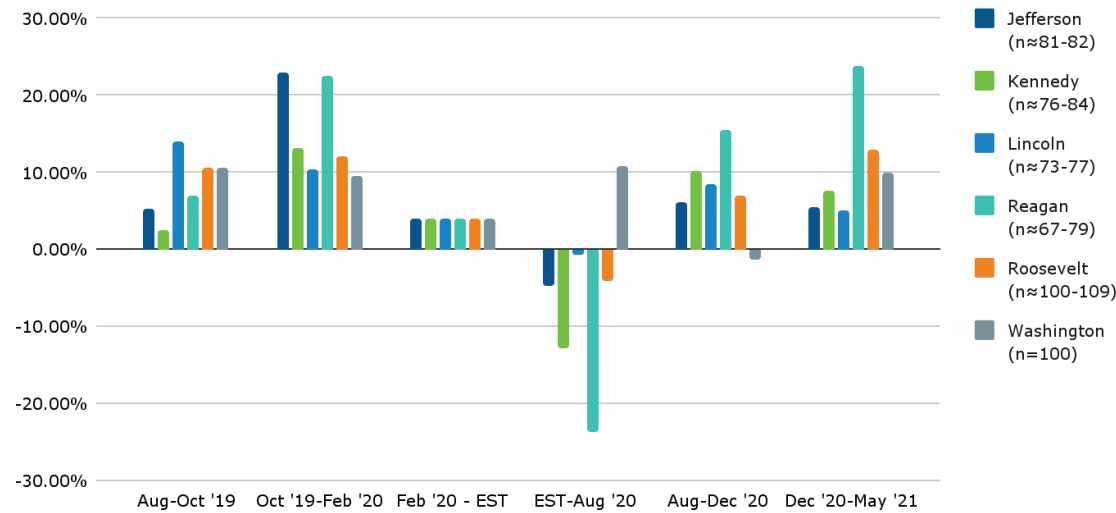
Figure C32. Average Lexile Scores for Content Levels 6-8 by Learning Community
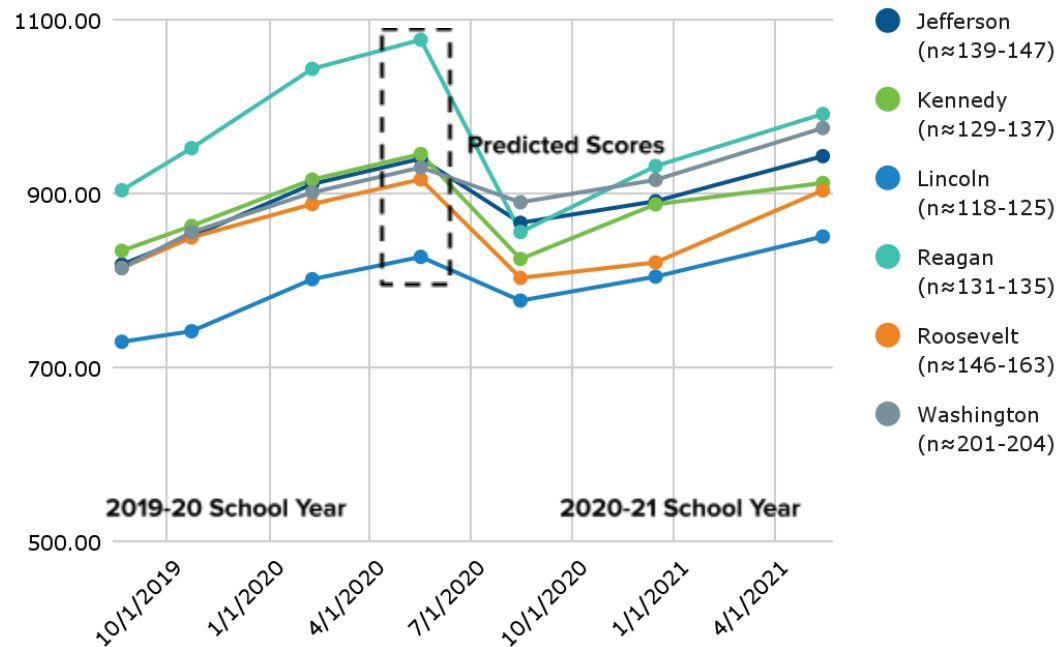
Figure C33. Percentage of Change in Lexile Scores for Content Levels 6-8 by Learning Community
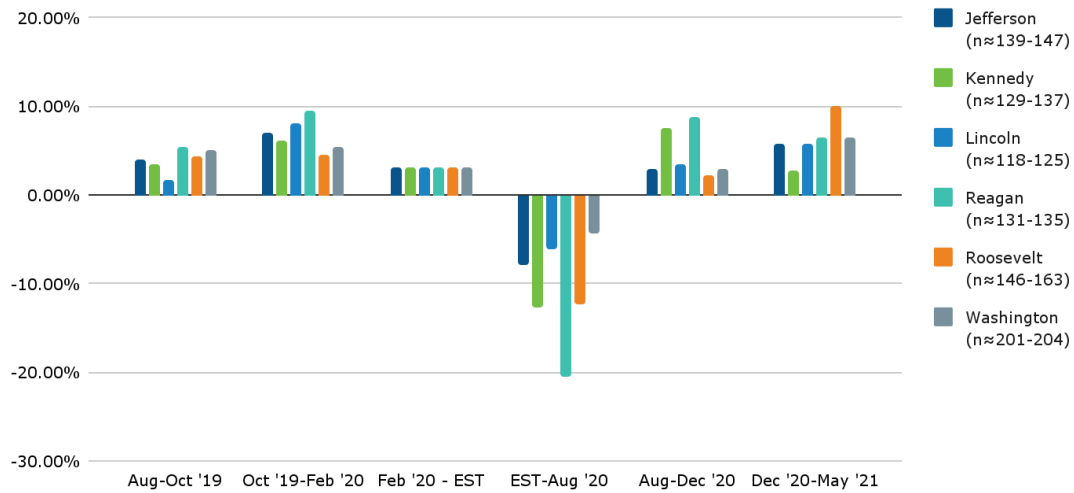
Figure C34. Average Math Scores for Content Levels 4-5 by Learning Community
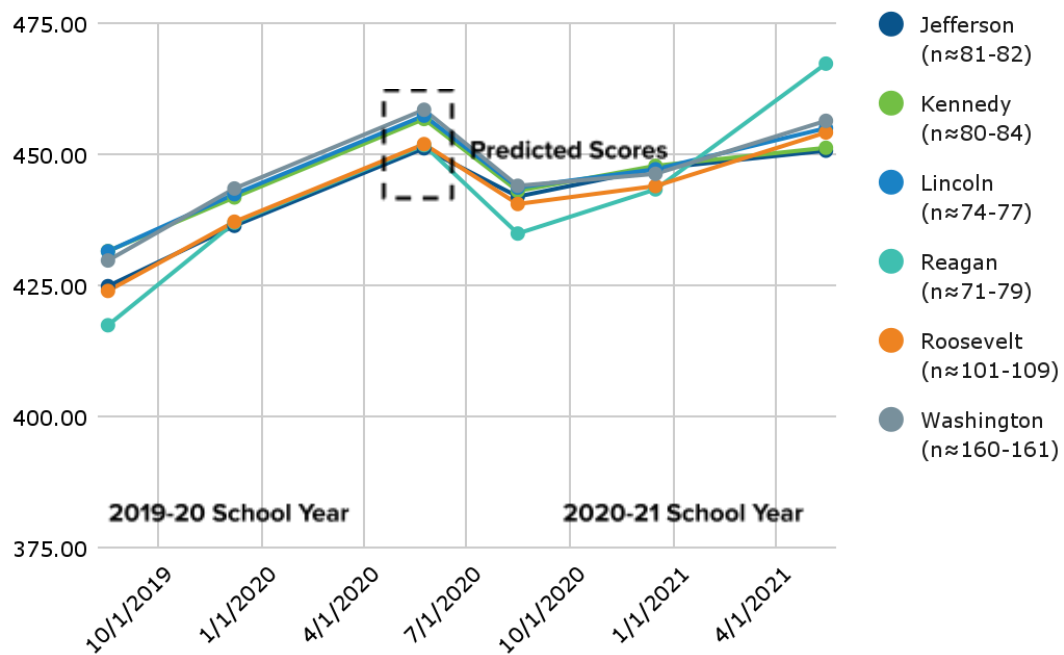
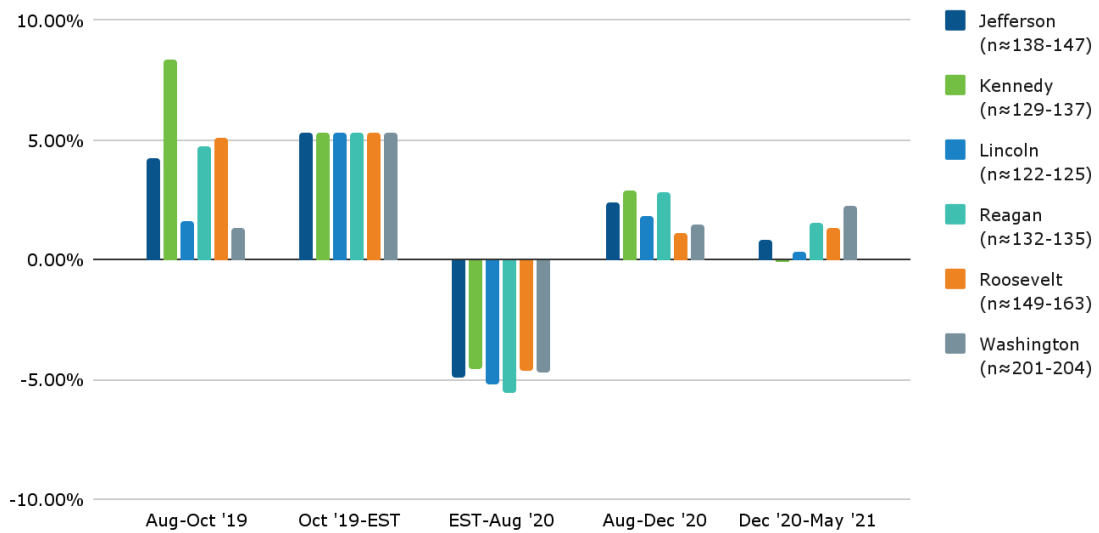Figure C35. Percentage of Change in Math Scores for Content Levels 4-5 by Learning Community
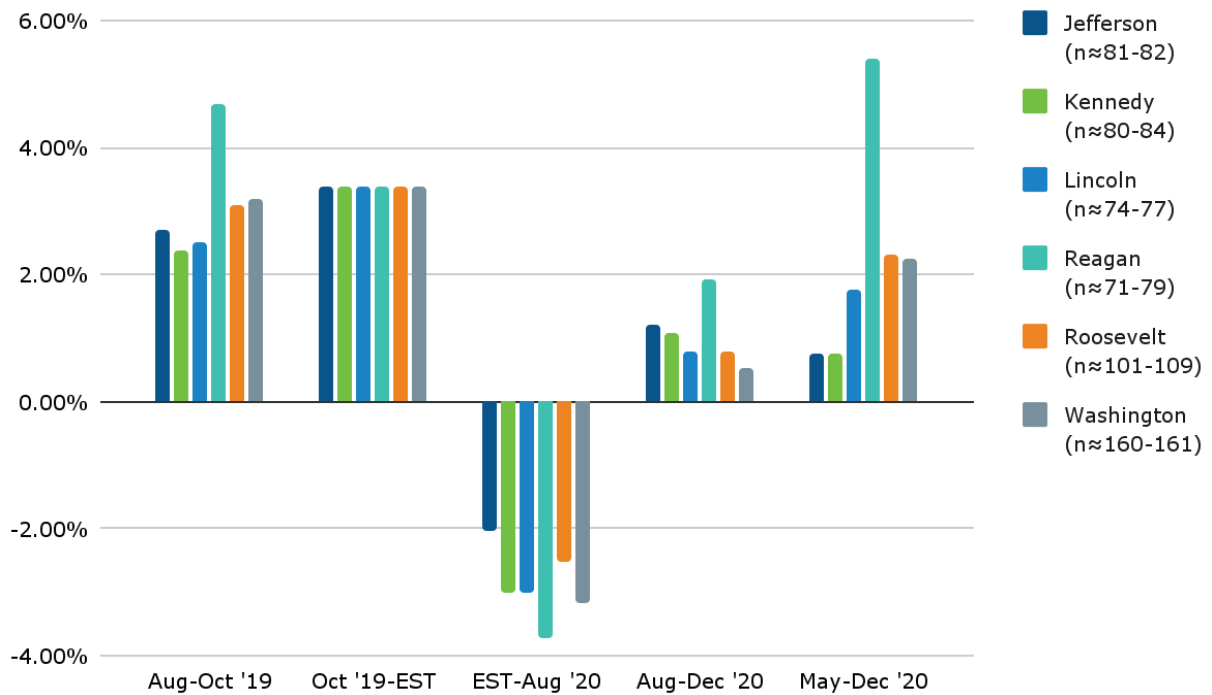
Figure C36. Average Math Scores for Content Level 6-8 by Learning Community
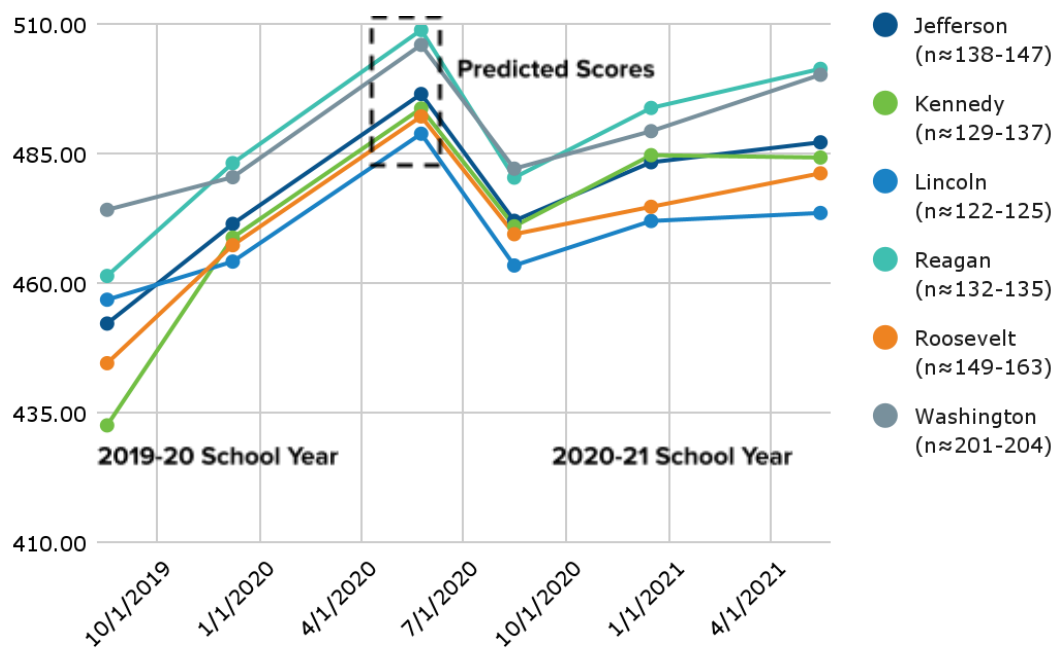
Figure C37. Percentage of Change in Math Scores for Content Levels 6-8 by Learning Community

Figure C38. Average Reading Scale Scores for Kindergarten Across Learning Communities in 2020-21
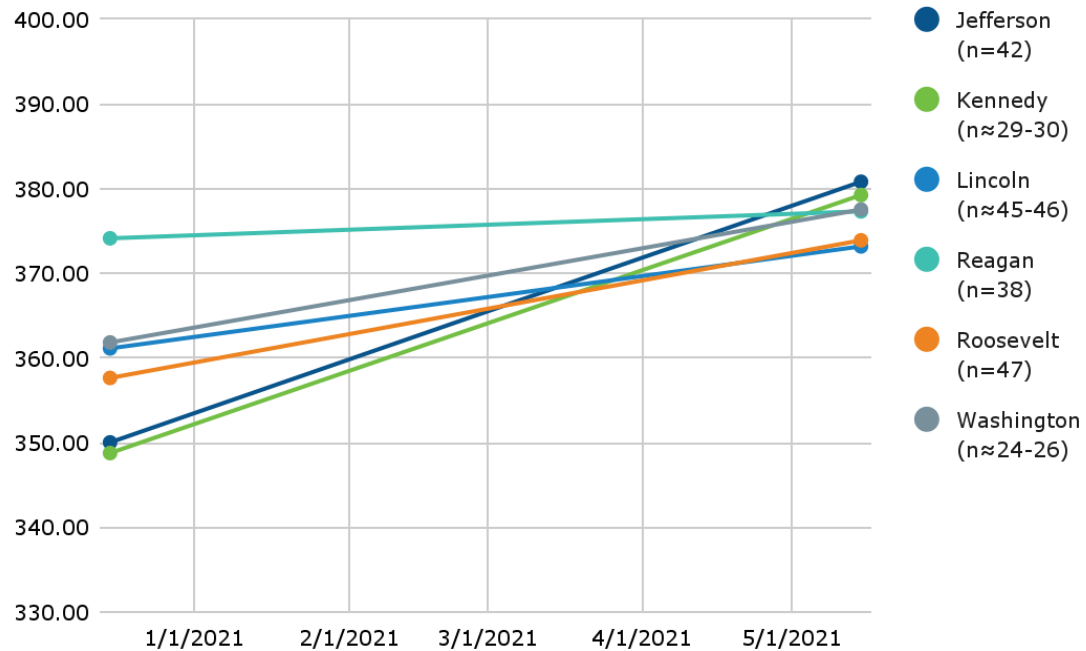
Figure C39. Percentage of Change in Reading Scale Scores for Kindergarten Across Learning Communities in 2020-21
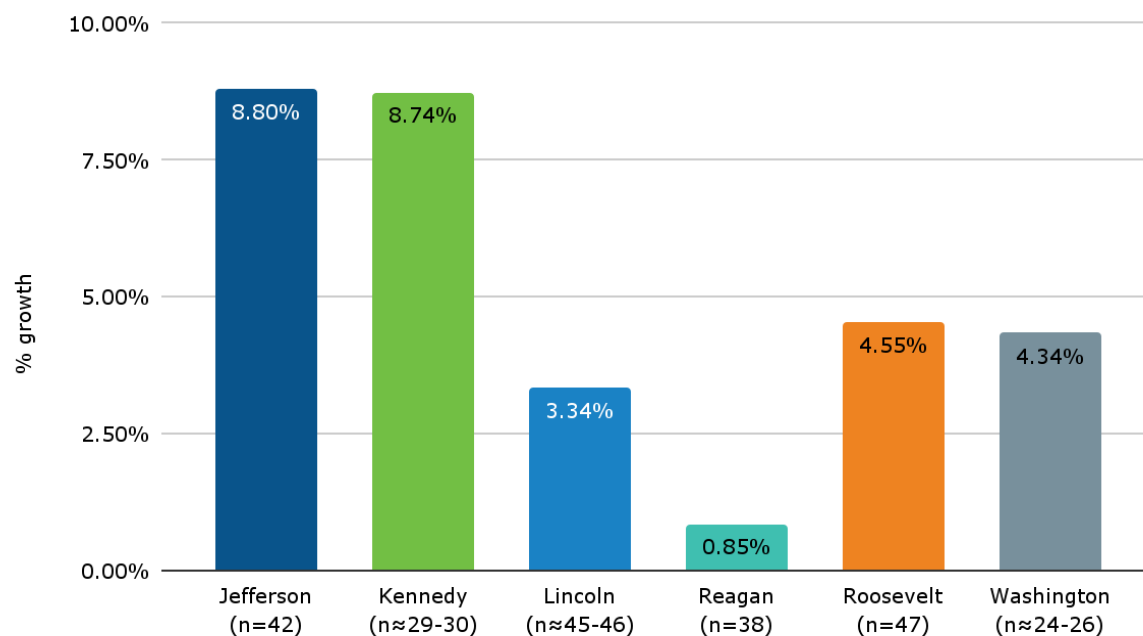
Figure C40. Average Math Scores for Kindergarten Across Learning Communities in 2020-21
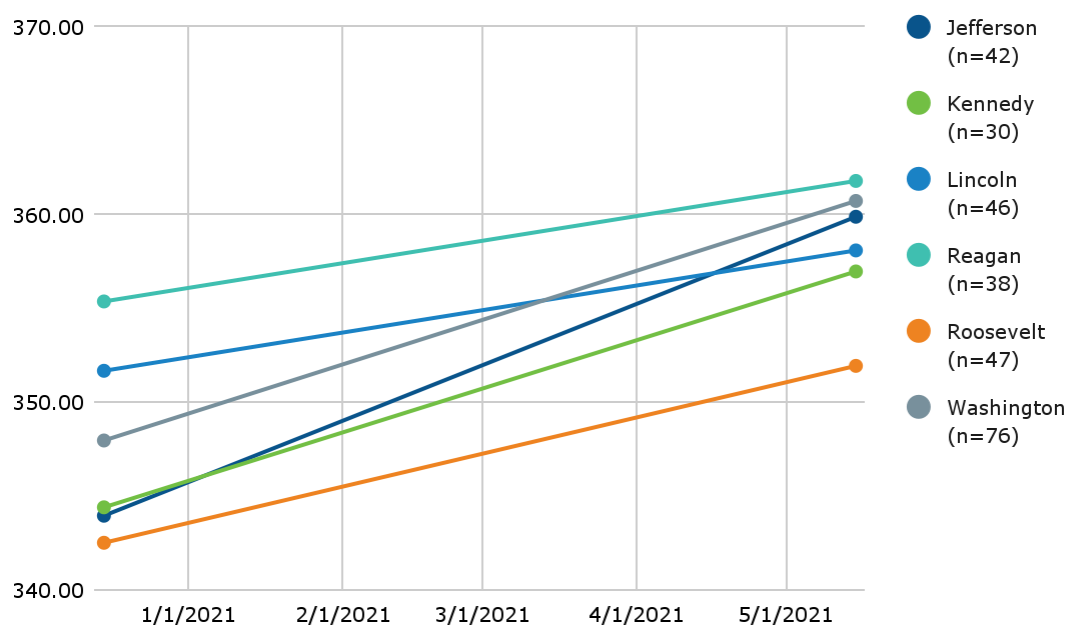
Figure C41. Percentage of Change in Math Scores for Kindergarten Across Learning Communities in 2020-21
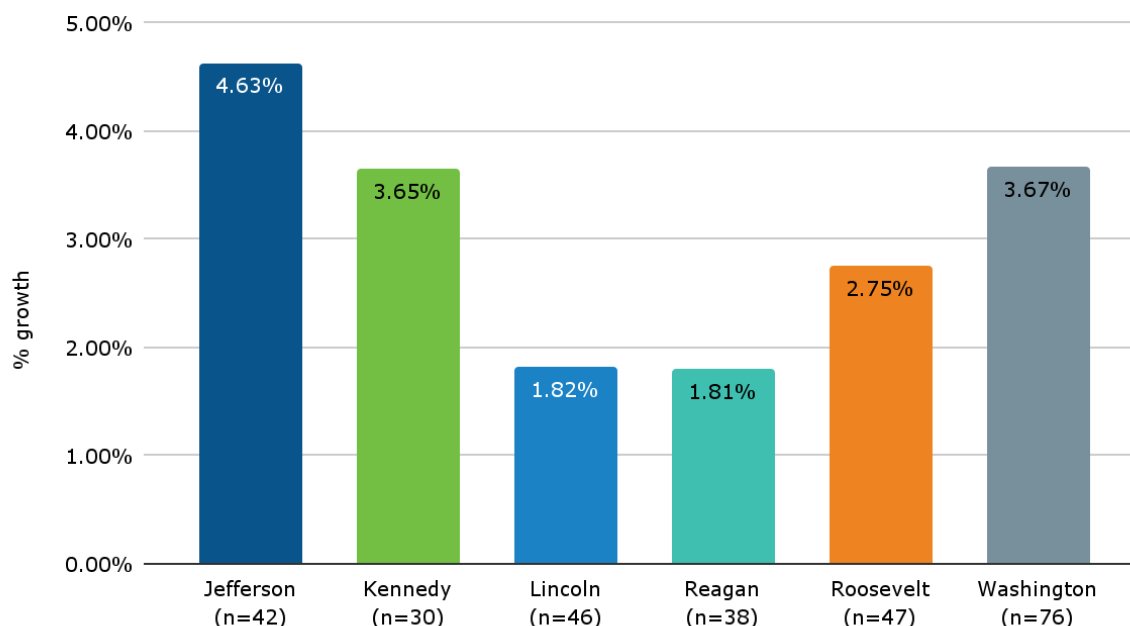
9-12 Cross-Community Observations

For content levels 9-12, average scores were consistently lower for Alternative Education when compared to Lindsay High School. However, it is important to note that these two learning communities had vastly different sample sizes and learner populations. Both learning communities exhibited negative growth in reading, with the exception of slight positive growth for content level 9 learners from Lindsay High School between Winter 2020 and Spring 2021.

In math, both learning communities exhibited little to no growth in content levels 10-12. For content level 9, both learning communities exhibited positive growth from Fall to Winter 2020, but negative growth from Winter 2020 to Spring 2021. This may have been due to smaller sample sizes and/or pandemic fatigue.

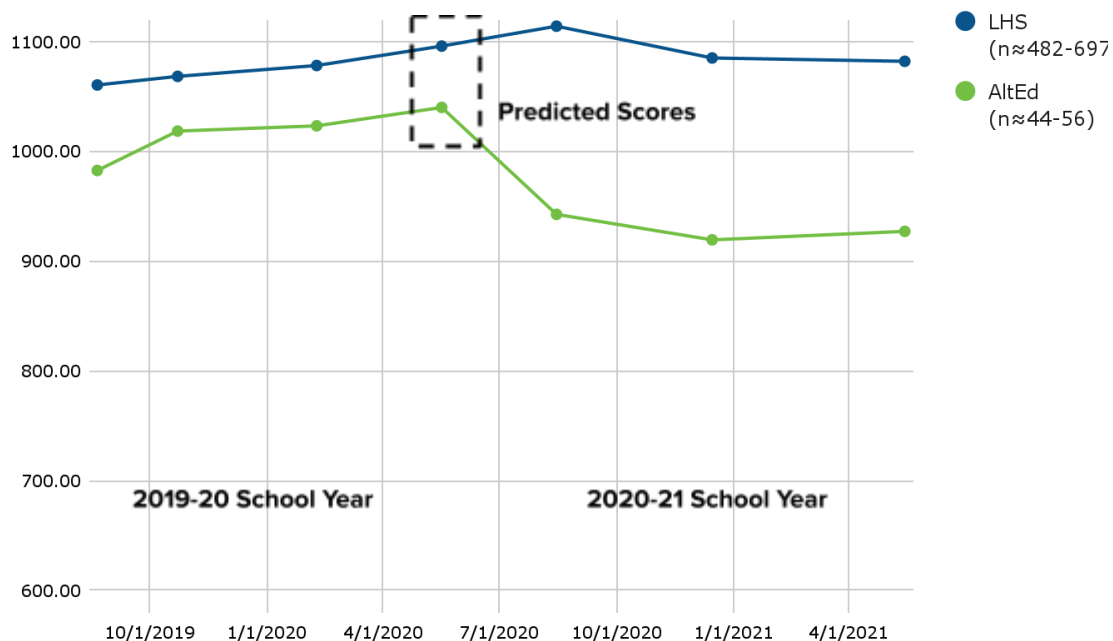Figure C42. Average Lexile Scores for Content Levels 10-12 Across Learning Communities

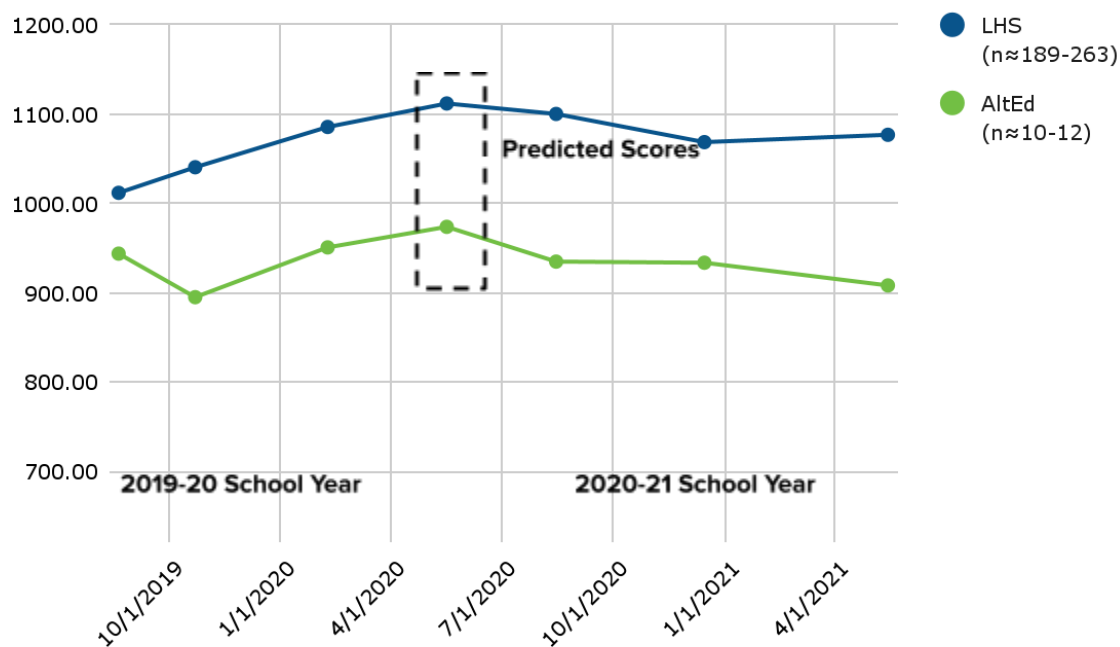Figure C43. Average Lexile Scores for Content Level 9 Across Learning Communities

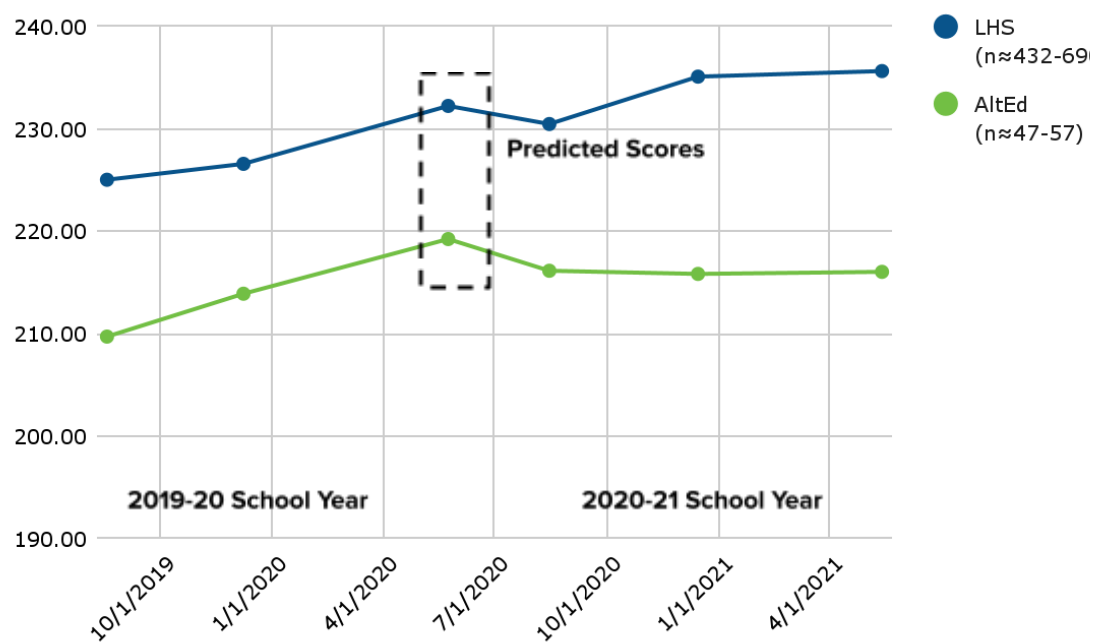Figure C44. Average Math Scores for Content Levels 10-12 Across Learning Communities
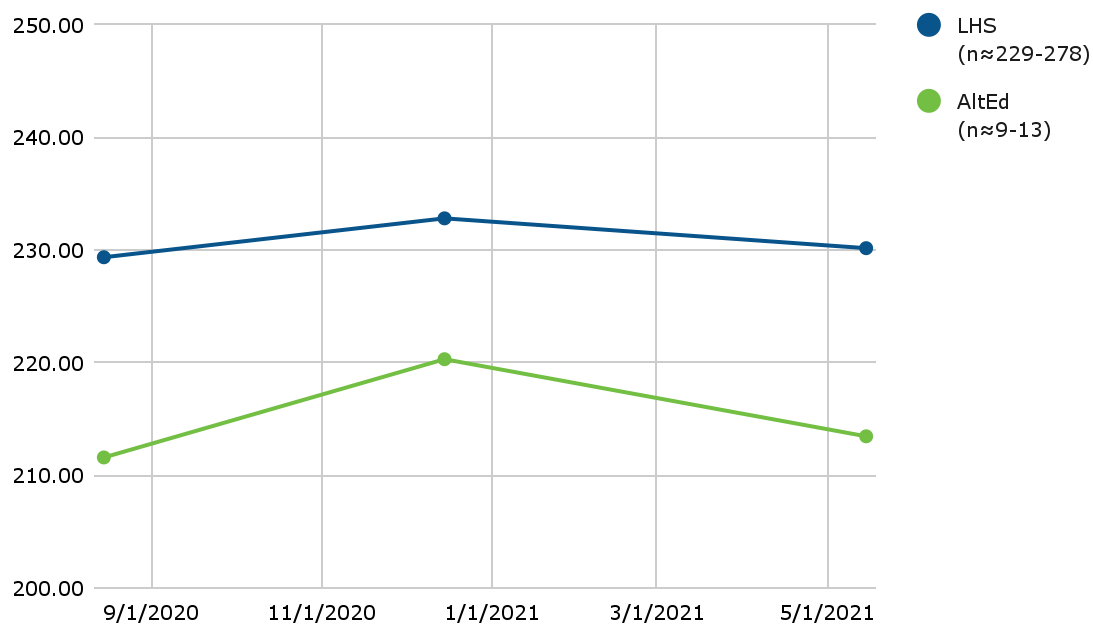

Figure C45. Average Math Scores for Content Level 9 Across Learning Communities

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