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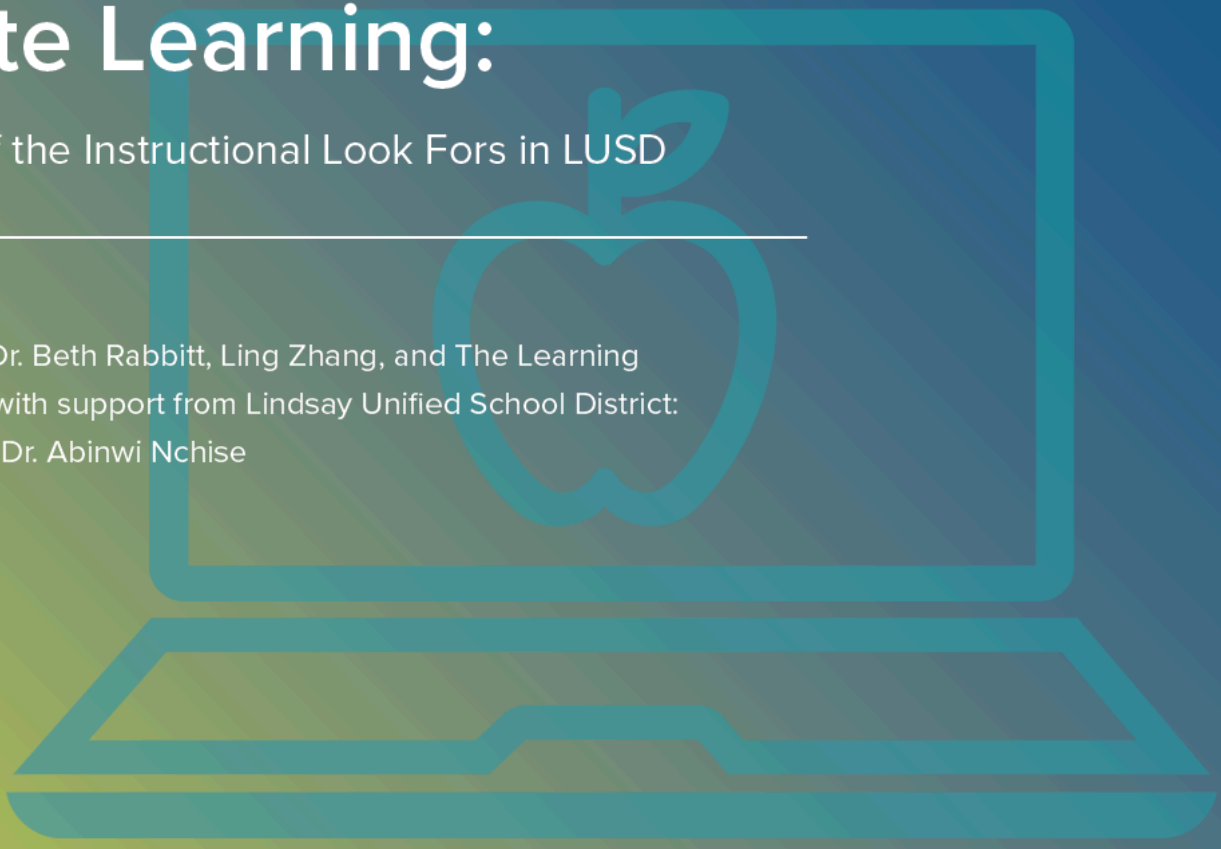
Perceptions of Learner Behaviors and Actions During Personalized, Remote Learning:

An analysis of the Instructional Look Fors in LUSD

Prepared By:
Dr. Beth Holland, Dr. Beth Rabbitt, Ling Zhang, and The Learning Accelerator team with support from Lindsay Unified School District: Amalia Lopez and Dr. Abinwi Nchise



The Learning Accelerator

LINDSAY UNIFIED SCHOOL DISTRICT

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Abstract

Lindsay Unified School District (LUSD) has committed to ensuring that every learner benefits from the best possible learning experience each day. To do this, the district has invested in a model of personalized learning that values learners as stakeholders and encourages their academic, cognitive, and broader social emotional growth. To clearly define its vision for the implementation of personalized learning, LUSD worked in partnership with Summit Public Schools and Transcend Education to develop a series of Instructional Look Fors to build shared language and understanding around what high quality personalized learning looks like. With the transition into remote-only learning as a result of COVID-19 school closure, a broad research question emerged: *What does the Learner Experience look like in a remote environmen*t? This report presents the analysis of a mixed-methods study to examine that broad question as well as three more specific ones: (1) *What learner actions do learning facilitators report observing in a remote environment?* (2) *How do those actions manifest across content levels?* and (3) *What might LUSD leadership learn from these observations to inform future decision making about remote learning?* The findings from this report intend to provide data to support leadership decision making in preparation for the 2020-2021 academic year.

Executive Summary

Lindsay Unified School District (LUSD) has committed to ensuring that every learner has the best learning experience every day. According to the district's Strategic Design, all learners should be challenged and supported at their developmental level; they should have the opportunity to engage in experiences tailored to meet their personal interests, strengths, and preferences; and they should be nurtured such that they develop as self-directed, lifelong learners.

To support this vision for learning, LUSD maximizes its use of technology to ensure learning is available anywhere and at any time. As a result of the district's focus on 24/7 learning both in school and out, during the COVID-19 pandemic that forced schools to close nationwide during the spring of 2020, LUSD was poised to successfully transition into remote-only learning.

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 COVID-19 school closures offered a unique opportunity to examine how the adult learning competencies underpinning LUSD's personalized learning model — what LUSD refers to as its Instructional Look Fors — manifested in a remote, personalized learning environment. Therefore, LUSD partnered with The Learning Accelerator (TLA) to ask the broad research question based on learning facilitator perceptions:

"What does the Learner Experience look like in the context of remote learning?"

More specifically, this report asked three research questions pertaining to the experiences of learners when delivering Lindsay's personalized Performance Based System (PBS) model remotely:

1. What learner actions did learning facilitators report observing in a remote environment?
2. How did those actions manifest across content levels?
3. What might LUSD leadership learn from these observations to inform future decision making about remote learning?

To answer these questions, the research team at TLA designed a convergent mixed methods research study where quantitative and qualitative data were collected concurrently through a single survey, analyzed separately, and then mixed together to construct the final analysis.[1]

[1] Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

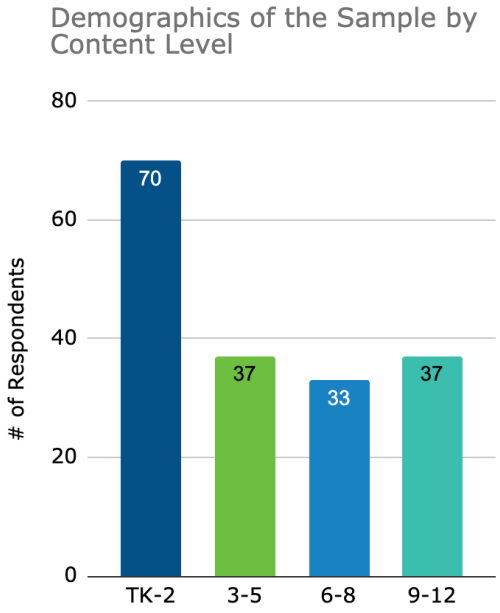
Collected via an online survey, the quantitative data provided general information from a large population of learning facilitators, and the qualitative offered the opportunity to gain rich descriptions of perceived reality in context.

LUSD Remote Learning Context

Of the 206 learning facilitators in LUSD, 177 began the survey. Of those 177, we removed 33 respondents because they did not complete enough of the questions to be considered a valid response, leaving a final sample of 144 for a response rate of 70%.

Overall, the distribution of learning facilitators in the sample was representative of the district population by content level range:

- **TK-2:** 48.6%
- **3-5:** 21.5%
- **6-8:** 18.1%
- **9-12:** 22.9%

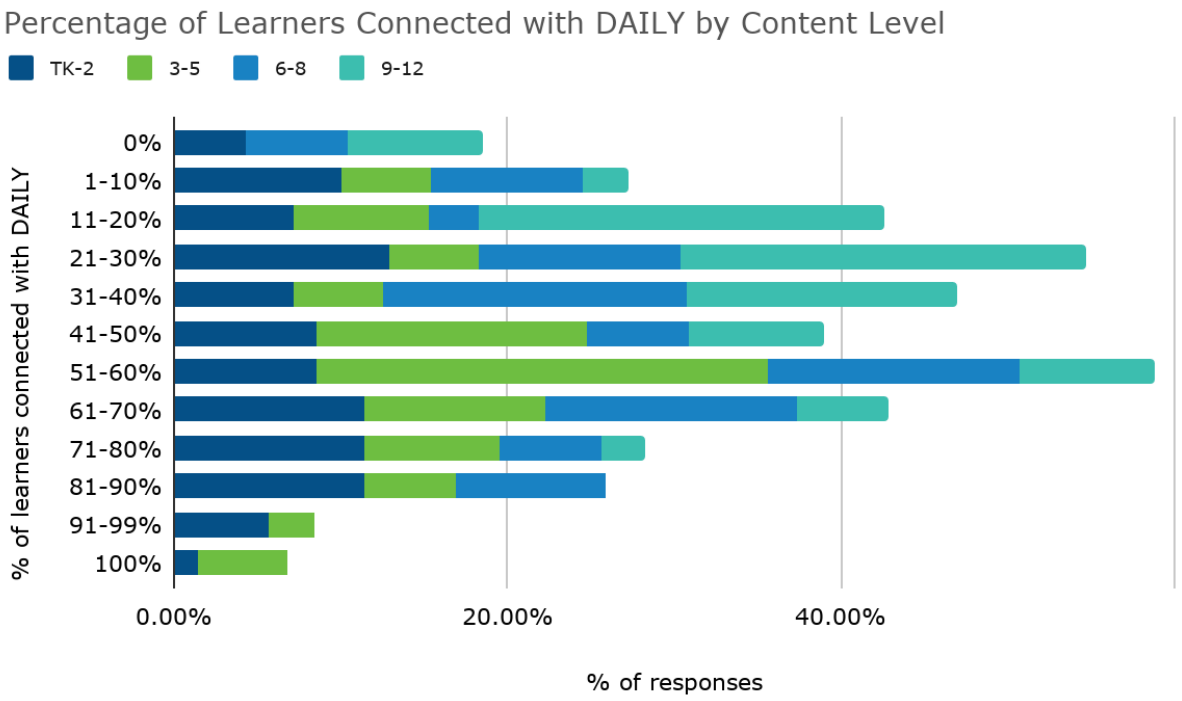


To further define the remote learning context, we examined the frequency of reported interactions that learning facilitators had with their learners. When asked to indicate the percentage of learners whom learning facilitators interacted with on a *daily* basis, less than 5% reported connecting with 90-100% of their learners. At the same time, approximately 12% connected with fewer than 10% of their learners on a daily basis.

Two trends emerged when looking more specifically at the frequency of contact by content level range.

1. Only elementary learning facilitators (TK-5) reported daily contact with ALL of their learners. In particular, **5.41% of learning facilitators in content levels 3-5 and 1.43% in TK-2 indicated that they had contact with 100% of their learners on a *daily* basis.**

2. Learning facilitators of older learners reported the least amount of regular contact. Of note, **over 75% of the learning facilitators in the high school responded that they connected with fewer than 40% of their learners on a *daily* basis**.



Where the quantitative question asked learning facilitators to specifically identify the percentage of learners whom they connected with on a daily basis, an open-response question asked learning facilitators to describe how often they had connected with those learners who they did NOT hear from on a daily basis. From those descriptions, it can be inferred that learning facilitators reported connecting with 10-80% of their learners on a *daily* basis, an average of 50% on a *weekly* basis, and approximately 26% *sporadically*. When asked to indicate the percentage of learners whom they have **not** been able to connect with at all, over 70% of the learning facilitators identified fewer than 20% of their learners.

Learner Actions and How they Manifest

This report sought to understand the learner experience within a remote, personalized learning environment. The survey instrument used to collect the data asked respondents to indicate frequencies of observed learner actions through multiple choice as well as open response questions. While the former reported *what* learning facilitators observed, the latter qualitative descriptions described *how* those actions manifested. LUSD prioritized 8 of the 26 Instructional Look Fors for this study. Since each group of questions aligned to one of those eight and its associated principle, we presented our analysis as such.

Principle #1: Rigor

Rigor describes how learners grow intellectually by engaging with skills, habits, and content in challenging yet developmentally appropriate ways. While the Rigor Principle contains four separate Instructional Look Fors, our analysis examined three: Cognitive Lift, Essential Knowledge, and Social-Emotional Habits. The quantitative and qualitative data indicated that

learning facilitators observed their learners engaging in actions associated with these Instructional Look Fors at varying frequencies depending on the content level of the learners and the particular Look For.

Cognitive Lift Look For

The most frequently observed learner action from the Rigor Principle was associated with the Cognitive Lift Look For: *learners explain their answers to show why they think what they think*.

Over 30% of all learning facilitators reported that this occurred on a *daily* basis. From the qualitative data, we found numerous examples of how **learners leveraged technology to explain their thinking, answers, and problem solving**. Learning facilitators reported that learners took advantage of technology tools such as Zoom, SeeSaw, Padlet, Flipgrid, and Google Docs so that they could *explain their thinking* (12.5%) as well as *communicate ideas and answers through both audio and text* (14.58%).

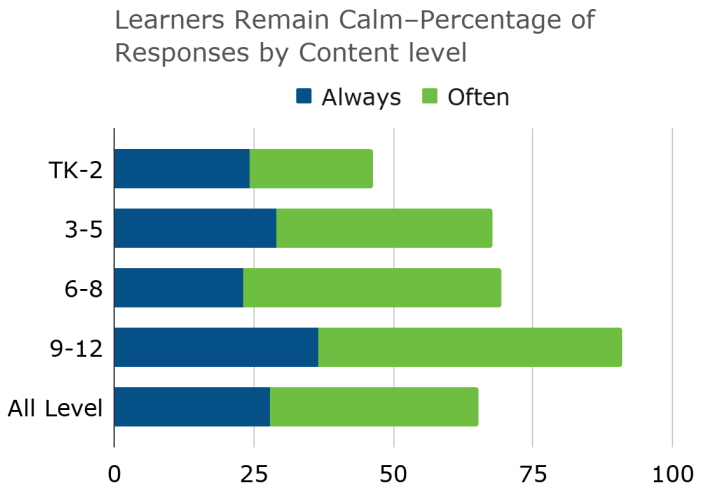
Notably, the actions that aligned to the Cognitive Lift and Essential Knowledge Instructional Look Fors which inferred peer collaboration were reported the least. For example, when asked if *learners explained their problem solving to other classmates*, over 15% of learning facilitators indicated *not at all*. This particular action had the lowest mean score on the survey (mean = 3.458, SD = 1.050).

Essential Knowledge Look For

When comparing the median scores, all content level ranges indicated that their learners *sometimes* demonstrated actions associated with the Essential Knowledge Look For. These actions included *using evidence to support claims*, *discussing different solutions*, and *correcting mistakes or thinking*. Comments from the open-response question revealed that 25% of the learning facilitators described themselves using an action or strategy such as *monitoring* learner thinking and understanding, *correcting* misconceptions, or reinforcing the process of *self-directed learning*.

Social Emotional Habits Look For

Although a large percentage of learning facilitators expressed concern for their learners' emotional well-being and described the challenges that their learners might be confronting during COVID-19 school closure, **8.33% noted in their comments that their *learners continued to express their feelings or emotions in a positive way*** through email, text, one-on-one conversations,



and during synchronous sessions. Learning facilitators also reported that their learners *often remained calm even when presented with feedback* (mean = 2.121, SD =0.940; low score indicates higher frequency) and *cared about their peers' and families' feelings* (mean = 2.164, SD = 0.910).

Particularly at the high school, learning facilitators noted that learners not only struggle with missing their social life but also balancing challenging home situations, caring for younger siblings, and lack of support. These struggles seemed to manifest in what the learning facilitators described as *less motivation*, *less self-reliance*, *frustration*, and *distraction* (8.33% of learning facilitators described their learners as distracted).

Principle #2: Customization

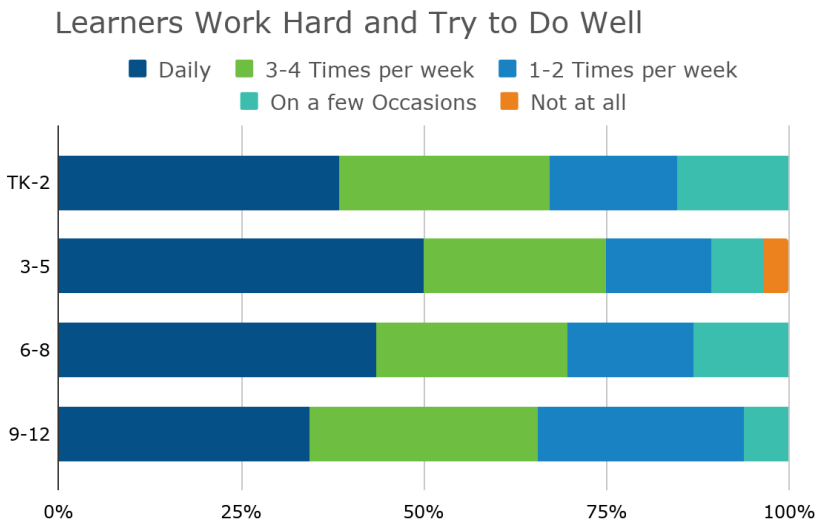
Customization describes how learners engage in experiences tailored to their individual learning needs, their preferences for how to learn, and their specific developmental levels. This Principle includes four distinct Instructional Look Fors: Appropriate Challenge, Student Driven, Additional Supports for Students with IEPs or Defined Language Needs, and Demonstrations of Learning. For this report, Additional Supports for Students with IEPs or Defined Language Needs and Demonstrations of Learning were combined into a single construct and defined as Personalization.

Appropriate Challenge Look For

At least *3-4 times per week*, learning facilitators reported that their learners *experienced challenge in their learning experiences* and *worked hard to do well*. Though learning facilitators did not report that their learners participated in conversations about their data with as much frequency, 10.42% indicated via their open response comments that they did have more general conversations with their learners about their progress.

Student Driven Look For

Despite LUSD making *choice* a district priority, **relatively low percentages of learning facilitators indicated that their *learners chose the kinds of activities and tasks that they wanted to do*.** Only 10.4% of learning facilitators indicated that this *always* happened, and discrepancies did exist based on the age of the learner.



However, when asked the question *Since moving to remote learning, what are some ways, if any, learners engaged in more self-directed learning and voice & choice?* **54.17% of the comments included mention of learner choice, particularly with regards to *whether* learners needed to complete a task and *when* they might choose to do so.**

Personalization Look For

The correlation between the age of the learner and the amount of agency that they demonstrate emerged in this analysis. In particular, **over 40% of learning facilitators from content level ranges 6-8 and 9-12 reported that their learners would reach out for extra help at least 3-4 times per week**. In contrast, 14.8% of TK-2 and 9.7% of 3-5 learning facilitators indicated that this only occurred *on a few occasions* or *not at all.* Relatedly, the majority of learning facilitators also reported that their *learners received feedback and support to ensure they are learning* at least *3-4 times per week* with more than 30% of learning facilitators for content levels 3-12 noting that this occurs on a *daily* basis.

Learning facilitators also created opportunities for learners to produce varied forms of evidence of their learning.

In addition to providing learners with *may do/must do* options to help prioritize tasks, learning facilitators gave limited menus of technology tools, and provided task lists in Google Classroom. Within these boundaries, learners produced multiple forms of evidence of their learning in alignment with the LUSD personalized Performance Based System.

Principle #3: Purposefulness

Multiple concepts combine into this Principle to describe the effort and energy that learners put into their work, how they approach their own goal setting, as well as how they monitor their progress towards achieving their personal objectives. In the survey, we combined questions from the four Instructional Look Fors into two sub-constructs: Goal Orientation & Awareness of Progress and Growth Mindset & Academic Urgency.

Since this particular personalized, remote learning context occurred within the timeframe of the 2020 COVID-19 school closure, it is critical to acknowledge that **“learners are doing the best they can right now to continue working regardless of their situation at home”** (9-12 learning facilitator). As such, learning facilitators across content levels explained how they sought to keep their learners on track while constantly adapting to their needs.

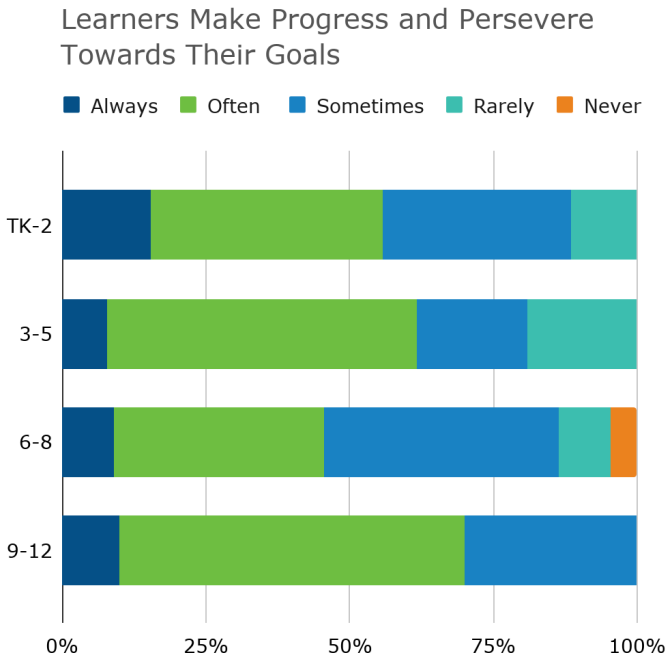
Communicating, self-advocating, and persisting: Learners exemplified many of the traits of the Purposefulness Principle.

Across content levels, learning facilitators described how learners consistently maintained their level of effort, persisted during the trying times, and worked through new strategies to learn in a relatively unfamiliar context. Because learners felt safe, comfortable, and cared for, they

proactively reached out for clarification and feedback via text, video, and audio. As such, many of the learning facilitators demonstrated educator actions associated with the Purposefulness Look For. They held office hours, met one-on-one with learners as well as their families, ran Zoom meetings at all hours, made phone calls, sent texts, and even remotely monitored their learners in real time so that they could provide in-the-moment feedback via chat.

Goal Orientation & Awareness Look For

Over 50% of the learning facilitators reported observing learner actions associated with these Instructional Look Fors either *often* or *sometimes*, and **ALL of the 9-12 learning facilitators indicated that their learners had made progress or preserved towards their goals** either *always, often,* or *sometimes*. However, **11.1% of TK-2, 16.1% of 3-5, and 7.7% of 6-8 learning facilitators indicated that this learner action *rarely* happened**. Particularly when considered with the qualitative data, this trend reveals a potential challenge with how younger learners might be able to maintain progress in a remote learning context.



Growth Mindset & Academic Urgency Look For

Despite the relatively low observation rates of specific behaviors associated with these two Look Fors, based on the quantitative data, facilitators reported that learners in LUSD demonstrated many of the tenets of the Purposefulness Principle simply by attempting remote learning. As revealed by the qualitative analysis:

- 4.17% described how their learners had *adapted* to the remote context
- 8.33% indicated that their learners had maintained a consistent level of effort
- 12.50% praised their learners for being persistent in their efforts
- 8.33% stated that their learners had become more independent and better self-advocates

Principle #4: Community

At LUSD, whether in a physical or a remote learning context, the goal is to create an environment where every learner feels safe, valued, secure, and connected. Therefore, the Principle of Community consists of multiple constructs including Connectedness and Upholding Norms — two Instructional Look Fors which we measured together in this study.

Since this study occurred during a global pandemic, the Principle of Community played a critical role. LUSD leadership wanted to ensure that amidst the stress of the situation, learners continued

to feel connected and supported in their community, even if it existed online. As such, unlike the other survey questions, those associated with the Community Principle used a less prescriptive scale. The five items ranged from *Very Frequently, Somewhat Frequently, Frequently, Sporadically,* to *Never*.

Learners and learning facilitators shared in the process of maintaining a safe and supportive learning community.

District leadership in LUSD communicated that maintaining a sense of Community would remain a priority during remote-only instruction. As evidence of this occurring, **learning facilitators reported observing actions associated with Community more frequently than the other three Principles.**

- **Learners felt like they are part of a virtual learning community:** 43% of learning facilitators indicated that their learners perceived this at least *somewhat frequently.*
- **Learners believed that their learning facilitator cared about them:** this question had the highest reported frequency in the survey (mean = 1.638, SD = 0.915). Across content levels, 55.6% of the learning facilitators reported that their learners sensed this *very frequently*.
- **Learners thought that the norms in the virtual learning community were fair:** across content levels, 76.4% of learning facilitators noted that their learners frequently felt that the rules, norms, and procedures were fair.
- **Learners felt safe in their learning community:** both the quantitative and qualitative data inferred that learners feel safe in both synchronous and asynchronous sessions. Over 22% of the open-response comments were coded with either safe or supported. Approximately 82% of the learning facilitators indicated that their learners *frequently* felt safe.

Implications for LUSD Leadership

In analyzing the four Principles and eight Instructional Look Fors, we observed four trends to inform LUSD leadership's decision making about preparing for future remote learning scenarios.

1. Focus on Learner Support and Relationships

In general, learning facilitators perceived that their learners felt safe, cared for, and supported - especially at the younger levels. However, it may be necessary to build more support structures at the high school level where a higher percentage of learning facilitators indicated that they had more concerns about their learners' social emotional well-being.

2. Technology Support for Learning Facilitators and Learners

Across content levels, learning facilitators mentioned the need to ensure greater familiarity with different tools and apps. Therefore, LUSD may consider future professional learning opportunities that address instructional design with technology as well as digital literacy for learning facilitators and learners.

3. Additional Home Learning Environment Support

Throughout the open response comments, learning facilitators discussed their learners' need for more support at home across content levels. Despite numerous outreach strategies by learning facilitators, LUSD leadership should consider ways to provide academic, technical, and social support for families during future remote or distance learning opportunities.

4. Sustaining Momentum

During future personalized, remote learning contexts, sustaining (and maintaining) momentum poses a challenge. For those learners who regularly participated during COVID-19 school closure, learning facilitators noted that their energy and enthusiasm decreased over time. More concerning, learning facilitators reported that they **lacked consistent contact with 1-20% of their learners**. This creates a double challenge: ensuring that learners are not "lost" in a remote context and providing support to learning facilitators as they continue to strive to reach all of their learners.

Final Take-Away

The 2020 COVID-19 school closure created an opportunity to examine remote, personalized learning within the context of LUSD. To operationalize this concept, we used the Instructional Look Fors as a lens through which to address the broad research question: *What does the Learner experience look like in a personalized, remote learning environment?* Based on both the quantitative and qualitative data, we ascertained *which* learner and learning facilitator actions were reported to have occurred most frequently and *how* they were reported to have manifested across content levels. Additionally, we used this analysis to make four recommendations to LUSD district leadership that may inform future remote and distance learning initiatives.

Introduction

Lindsay Unified School District (LUSD) has committed to ensuring that every learner has the best learning experience every day. Over the past several years, this dedication has manifested in significant, system-wide investments in time and resources to support high-quality, personalized learning in both face-to-face and blended learning environments.

According to the district's Strategic Design, all learners should be challenged and supported at their developmental level; they should have the opportunity to engage in experiences tailored to meet their personal interests, strengths, and preferences; and they should be nurtured such that they develop as self-directed, lifelong learners.

To support this vision for learning, LUSD maximizes its use of technology to ensure that learning is available anywhere and at any time. As a result of this focus on 24/7 learning both in school and out, during the COVID-19 pandemic that forced schools to close nationwide during the spring of 2020, LUSD was poised to successfully transition into remote-only learning.

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 COVID-19 school closures offered a unique opportunity to examine how the adult learning competencies underpinning LUSD's personalized learning model – what LUSD refers to as its *Instructional Look Fors* – manifested in a remote, personalized learning environment.

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

In 2018, a collaborative project between Transcend Education, Summit Public Schools, the Center for Public Research and Leadership at Columbia University, and LUSD resulted in the development of a series of learner actions and experiences as well as corresponding educator actions and strategies that exemplified high-quality personalized instruction. Based on an extensive analysis of the existing literature – referred to throughout this report as the *Instructional Look Fors research* – 26 learner actions as well as corresponding educator actions and strategies were

identified and categorized into six principles (see Figure 1). Within each Instructional Look For, the project team articulated a series of sample educator actions that they hypothesized would facilitate or produce the desired learner experiences or behaviors.

Figure 1: The Six Instructional Look Fors Principles

Prior research studies completed in partnership between TLA and LUSD have examined how these Instructional Look Fors manifest in a face-to-face environment. First, we sought to understand the relationships between professional learning in Guided Reading and associated learner outcomes during the 2018-19 school year. **Central to that study was the documentation of learning facilitator actions associated with the Instructional Look Fors and their positive effect on learners' reading growth.**

Next, using two years of data (2017-18 and 2018-19 school years), we examined the effects of professional learning provided by BetterLesson and PBLWorks on learning facilitator actions. Classroom observations of participating learning facilitators revealed that the strategies developed through these professional learning opportunities led to increased presence of

learner actions associated with the Instructional Look Fors. **Consequently, a positive relationship between participation and learners' growth in four core content areas — math, science, English language arts, and history — could be detected.**

A January 2020 study conducted by LUSD, TLA, and LearnPlatform then offered a first look at the internal consistency reliability and construct validity of the Instructional Look Fors in a face-to-face context. The analysis found that 12 of the 16 analyzed Instructional Look Fors — chosen because they were intentionally prioritized by the district — had at least moderate internal consistency reliability. Five of the six Instructional Look Fors examined for construct validity had at least moderate fit. **Overall, that report concluded that the Instructional Look Fors are a measurable, reliable, and valid way for LUSD to understand the behaviors that occur in the district's learning environments as well as the relationships between professional learning, those behaviors, and learner outcomes.** TLA and LUSD had intended to expand that study this spring. However, when the COVID-19 school closure occurred, that plan had to be re-evaluated.

Purpose and Research Questions

Due to COVID-19 school closure, an extended validation study of the Instructional Look Fors could not be completed. Instead, it created an opportunity to examine how the Instructional Look Fors manifest in a remote, personalized learning environment. Therefore, this report asks the broad research question: *What does the Learner Experience look like in the context of remote learning?*

More specifically, this report asks the following research questions about learning facilitator perceptions of the experiences of learners when Lindsay's personalized Performance Based System (PBS) model is delivered remotely:

1. What learner actions do learning facilitators report observing in a remote environment?
2. How do those actions manifest across content levels?
3. What might LUSD leadership learn from these observations to inform future decision making about remote learning?

Research Methods

The research questions required both quantitative and qualitative data to be answered. Therefore, we designed a convergent mixed methods research study where we collected quantitative and qualitative data concurrently through a single survey, analyzed the two data sets separately, and then mixed the results to construct the final analysis.[2] While the quantitative data allowed us to quickly gather information from a large population of learning facilitators via an online survey, the qualitative offered the opportunity to gain rich descriptions of reality in context and presented deeper explanations. Using both forms of data also allowed us to corroborate results by relating the two sets of findings.

[2] Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

Survey Design

Given the unique nature of the LUSD Instructional Look Fors, and the reality that remote learning had not previously occurred at a national scale, an existing survey instrument did not exist and needed to be created. As part of a previous effort, TLA and LUSD had designed a survey to measure learner perceptions of their actions within the context of their learning environment. To do so, we conducted a crosswalk of eight previously validated instruments designed to measure the presence of personalized learning and aligned the questions from those surveys with the Instructional Look Fors. Because all of the questions on the learner survey came from previously validated instruments, and aligned with the Instructional Look Fors research, the survey as a whole could be described as having face validity[3]. It is important to note that the instrument did not address all 26 Instructional Look Fors. Instead, it focused on those prioritized by the district in a similar manner as with the January 2020 validation study.

Using the learner survey as a foundation, the questions were revised to be relevant to learning facilitators. Further, in attempts to mitigate potential measurement error — i.e., satisficing, discomfort with disclosing feelings or behaviors, and acceptability bias[4] — questions were asked based on *frequency* rather than *likelihood.* Open-response questions then allowed for the collection of qualitative data to triangulate the findings and provide more concrete insights into how the learning facilitator and learner actions manifested in context (see Appendix A for the schedule of questions).

Data Analysis Process

Per the procedures of a convergent mixed methods design[5], the quantitative and qualitative data were analyzed separately and then mixed during the final analysis and writing of the report.

Quantitative Data Analysis Procedure

The data was exported from SurveyMonkey (the online platform used to disseminate the survey) and then imported into a statistical analysis program. Before analyzing the data, we conducted an analysis of reliability to statistically determine whether the instrument reliably measured the intended constructs. Cronbach's alpha showed the survey instrument to reach acceptable reliability, $\alpha = 0.93$.

Because the survey contained multiple questions for each Instructional Look For as a way to gauge the frequency of learner actions, we also ran a confirmatory factor analysis to see how the questions loaded onto the constructs/Look Fors that they intended to measure. Though the indices showed an acceptable fit for the model, because the survey had not been statistically

[3] Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin.
[4] Schutt, R. K. (2018). *Investigating the social world: The process and practice of research*. Sage publications.
[5] Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

validated, we decided that examining each survey question individually provided a more accurate means to answer the research questions.

It is important to note that we used a qualitative approach for the quantitative analysis — solely incorporating descriptive statistics (mean/median scores) as well as frequencies. We made this decision for several reasons:

1. The survey instrument had not been statistically validated.
2. We did not have a random sample, and therefore had no intention to make any generalizable claims.
3. Within the sample of learning facilitators as a whole, we had an unequal distribution of learning facilitators across content level ranges.
4. Some participant attrition did occur. Later survey questions had smaller sample sizes.

Finally, because different frequency scales and numbers of questions were associated with the different Instructional Look Fors, we determined that it would not be logical to make comparisons across Instructional Look Fors or Principles. As such, for each question within each Instructional Look For, we first compared the average scores by content level (mean/standard deviation and median). Then, we calculated percentages of responses based on content level to more closely examine the frequency of reported actions within each content level grouping.

Qualitative Analysis Procedure

To analyze the qualitative data captured by the nine open-response questions, we imported the data from SurveyMonkey into a spreadsheet application and then followed Saldaña's[6] process for coding.

First, we created a codebook (see Appendix B) based on the text in the survey questions, the Instructional Look Fors descriptions, as well as from the Instructional Look Fors research. Then, we conducted two cycles of coding for each open response question before moving on to the next question. During the first cycle of coding, we applied the provisional codes as well as identified and defined emergent ones. When multiple codes could be applied to a single comment, we used annotations to document the rationale for the simultaneous coding[7]. Upon completion of that cycle, we examined the codes to identify themes and make consolidations (i.e., combined like codes into one code). During the second cycle of coding, we applied the new themes and codes until reaching saturation.

Throughout the process, analytic memos and annotations documented code choices, emergent patterns and themes, and notes for future directions[8]. After completing both cycles of coding, we

[6]Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage.
[7] Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.
[8] Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage.

analyzed themes as well as quantitized[9] coding patterns — meaning that frequency counts were conducted to analyze the prevalence of each code within the analysis of each open-response question.

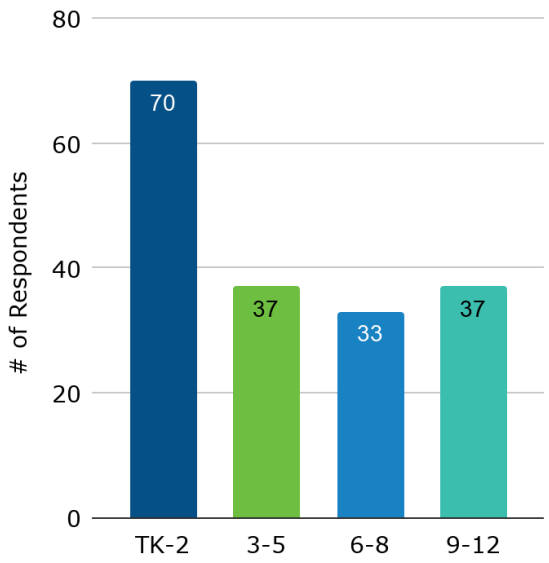
To establish trustworthiness and mitigate potential bias, we employed a rigorous approach that included sincerity, transparency, and self-reflexivity[10]. This included using multiple sources to inform the coding of the qualitative data, maintaining a reflective journal per the recommendations of Nastasi and Schensul[11], and eventually incorporating the quantitative data to triangulate findings.

LUSD Remote Learning Context

The survey was administered via a link provided in a direct email from the Human Resources Department approximately two months after the start of remote learning (March 17, 2020). The principals in each learning community then followed up and encouraged participation. Learning facilitators could then complete the survey between May 18-29, 2020. Of the 206 learning facilitators in LUSD, 177 started the survey. Of those 177, 33 respondents were removed because they did not complete enough of the questions to be considered a valid response. This left a final sample of 144 for a response rate of 70%.

Within the full sample of respondents (n=177), learning facilitators who work with content levels TK-2 comprised 48.6%. The remaining 51.4% was relatively evenly distributed across content level ranges 3-5, 6-8, and 9-12. However, the percentages by content level were more evenly distributed when looking solely at the 144 learning facilitators counted in the analysis. Overall, the distribution of learning facilitators in the sample represented the district population as TK-2 serves as the largest enrollment group

Figure 2: Demographics of the Sample by Content Level



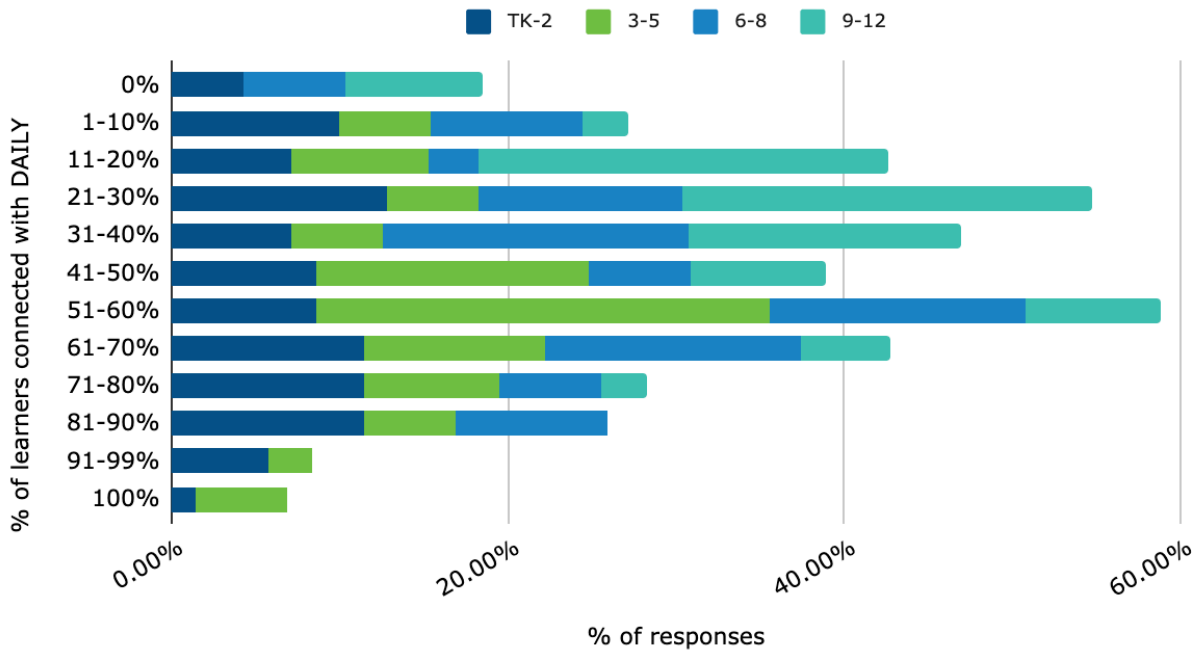
To further define the remote learning context, we examined the frequency of interactions that learning facilitators reported having with their learners. When asked to indicate the percentage of learners whom learning facilitators interacted

[9] Teddlie, C., & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In *Handbook of Mixed Methods in Social Behavioral Research*. Thousand Oaks, CA: Sage Publications.
Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1*(1), 77–100. doi:10.1177/2345678906292430
[10]Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 837–851. doi:10.1177/1077800410383121
[11] Nastasi, B. K., & Schensul, S. L. (2005). Contributions of qualitative research to the validity of intervention research. *Journal of School Psychology, 43*(3), 177-195. doi:10.1016/j.jsp.2005.04.003

with on a *daily* basis, less than 5% reported connecting with 90-100% of their learners. At the same time, approximately 12% connected with fewer than 10% of their learners on a daily basis (see Figure 3).

When looking more specifically at the frequency of contact by content level range, two trends emerged. First, **elementary learning facilitators from content levels TK-5 reported daily contact with higher percentages of their learners**. In particular, 5.41% of learning facilitators in content levels 3-5 indicated that they had contact with 100% of their learners on a daily basis. On the other hand, **learning facilitators of older learners reported the least amount of regular contact.** Of note, over 75% of the learning facilitators in the high school responded that they connected with fewer than 40% of their learners on a daily basis.

Figure 3: Percentage of Learners Connected with DAILY by Content Level



Where the quantitative question asked learning facilitators to specifically identify the percentage of learners whom they connected with on a daily basis, an open-response question asked learning facilitators to describe how often they had connected with those learners who they did NOT hear from on a daily basis. From those descriptions, it can be inferred that learning facilitators reported connecting with 10-80% of their learners on a *daily* basis, an average of 50% on a *weekly* basis, and approximately 26% *sporadically*. When asked to indicate the percentage of learners whom they have **not** been able to connect with at all, over 70% of the learning facilitators identified fewer than 20% of their learners.

Of note, **learning facilitators at the high school reported higher percentages of learners with whom they had not been able to connect.** As will be noted in the qualitative analysis later in this report, some of this lack of connection could be attributed to older learners needing to work or care for younger siblings. Similarly, learning facilitators at the elementary level noted more parental contact and support to ensure that they could connect with the learners.

Learner Actions and *How* they Manifest

This report sought to understand the learner experience within a remote, personalized learning environment. Consequently, we asked two specific research questions:

1. What learner actions do learning facilitators report observing in a remote environment? and
2. How do those actions manifest across content levels?

The survey instrument used to collect the data asked respondents to indicate frequencies of observed learner actions through multiple choice questions and then to describe those actions via open response. While the former reported *what* was observed, the latter described *how* those actions manifested. Since each group of questions aligned to a different Instructional Look For, we present our analysis as such.

Principle #1: Rigor

According to the Instructional Look Fors research, Rigor describes how learners grow intellectually by engaging with skills, habits, and content in challenging yet developmentally appropriate ways. While the Rigor Principle contains four separate Instructional Look Fors, this report specifically examined three: Cognitive Lift, Essential Knowledge, and Social-Emotional Habits. The district had previously identified these Instructional Look Fors as a priority out of the larger framework of 26.

Cognitive Lift

LUSD's personalized, Performance Based System model intends for the learners to do the majority of the cognitive lifting. Whether in classroom discussion or through written work, this means that learners should be the ones offering explanations, making connections, addressing questions, solving problems, summarizing ideas, and describing their thinking. Relatedly, learning facilitators should create opportunities for their learners to take on the majority of the work through the facilitation of consistent and varied opportunities for active learning.

To determine whether these experiences might be occurring in a remote context either synchronously or asynchronously, the survey asked learning facilitators to identify the frequency with which learners had the opportunity to:

1. Explain their answers to show why they think what they think.
2. Examine possible solutions or answers with their peers.
3. Explain how they work out problems to other classmates.
4. Continue to use various thinking skills and not just memorize content.

When responding to the survey, learning facilitators could indicate whether their learners had these opportunities on a *daily* basis, *3-4 times per week, 2-3 times per week*, *On a few*

occasions, or *Not at all*. When looking at the average scores (see Table 1), we examined both the mean and median to make comparisons across content levels. With these descriptive statistics, very little difference could be detected between the content levels, particularly when comparing the median scores.

Table 1: Mean and Median Scores on Questions Associated with Cognitive Lift

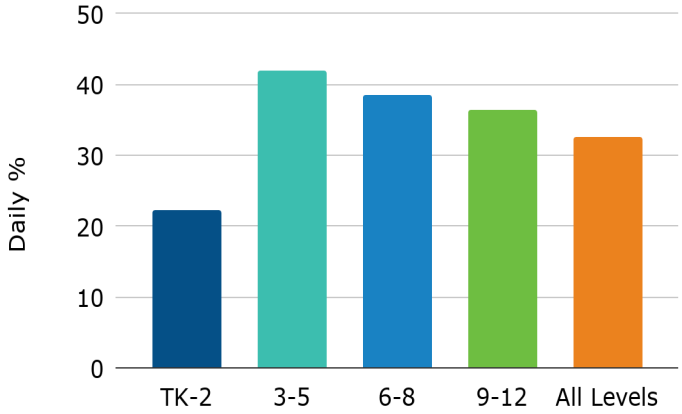
Cognitive Lift		Mean (Standard Deviation)	Median	Sample Size
Explain their answers to show why they think what they think	TK-2	2.389 (0.899)	3.000	54
	3-5	2.000 (1.000)	2.000	31
	6-8	2.077 (0.935)	2.000	26
	9-12	2.242 (1.173)	2.000	33
	All Levels	2.215 (0.998)	2.000	144
Examine possible solutions or answers with their peers	TK-2	2.926 (0.988)	3.000	54
	3-5	2.806 (1.138)	3.000	31
	6-8	2.923 (1.129)	3.000	26
	9-12	3.424 (1.062)	3.000	33
	All Levels	3.014 (1.077)	3.000	144
Explain how they work out problems to other classmates	TK-2	3.593 (1.055)	4.000	54
	3-5	3.258 (1.094)	3.000	31
	6-8	3.154 (0.925)	3.000	26
	9-12	3.667 (1.051)	4.000	33
	All Levels	3.458 (1.050)	4.000	144
Continue to use various thinking skills and not just memorize content	TK-2	2.382 (1.103)	2.000	54
	3-5	2.426 (1.092)	2.000	31
	6-8	2.308 (1.123)	2.000	26
	9-12	2.545 (1.175)	2.000	33
	All Levels	2.382 (1.103)	2.000	144

Key data points explained further in the text.

Looking more closely at the percentages of how the learning facilitators responded within each content level revealed further insights into the frequency of actions associated with Cognitive Lift.

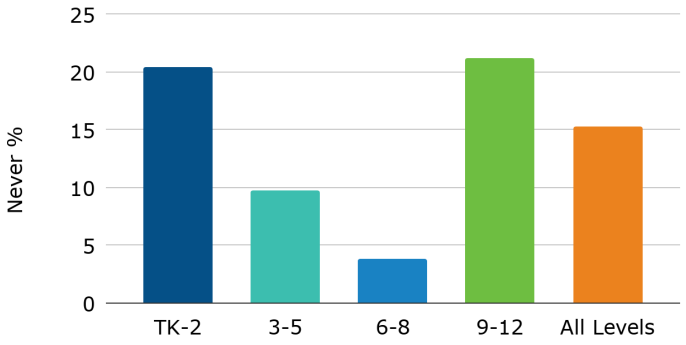
- When asked how often their learners had an opportunity to ***explain their answers to show why they think and what they think*, over 30% of all learning facilitators reported that this occurred on a *daily* basis** with percentages ranging from a low of 22.2% in TK-2 to a high of 41.9% in 3-5.

Figure 4: Percentage of Learners who Explain Their Answers DAILY



- Compared to other content level ranges, **learning facilitators at the high school rated lower frequencies of learners *examining possible solutions or answers with their peers*** (mean = 3.424, SD = 1.062; larger number indicates a lower frequency), and 18.2% of these learning facilitators reported that it *never* occurred.

Figure 5: Percentage of Learners Who NEVER Explain How They Work Out Problems to Classmates



- On average, learning facilitators noted a **relatively low frequency of their learners *explaining how they worked out problems to other classmates*** (mean = 3.458, SD = 1.050), with TK-2 and 9-12 learning facilitators rating higher (larger number indicates a lower frequency) on the item than other content level ranges. Just over 20% of TK-2 and 21.2% of 9-12 learning facilitators indicated that this action *never* happened as compared to only 9.7% of 3-5 learning facilitators and 3.8% of those who work in 6-8.

- Across all of the learner actions within this Look For, **learning facilitators indicated higher frequencies in which learners *explained their answers to show why they think what they think*** (mean = 2.215, SD = 0.998) **and *continued to use various thinking skills*** (mean = 2.382, SD = 1.103). In particular, larger percentages of 3-5 learning facilitators reported these occurred on a daily basis.

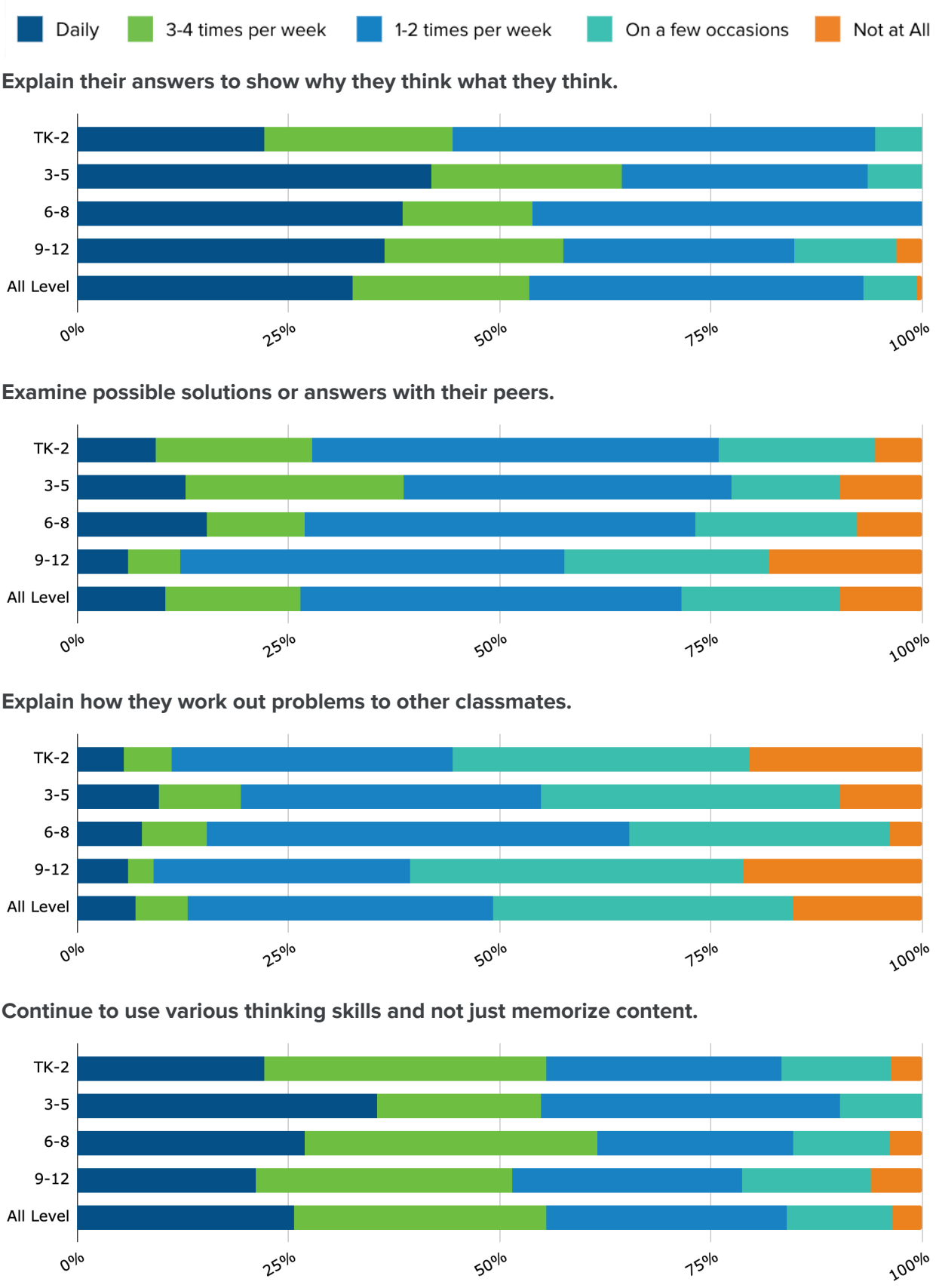
- **Learning facilitators in the high school indicated that their learners *never* demonstrated these actions with the greatest frequency.** Depending on the question, between 3-22.2% of the learning facilitators responded with *Not at all*.

Table 2: Frequency of Observations of Actions Associated with Cognitive Lift

Cognitive Lift		Daily (%)	3-4 times per week (%)	1-2 times per week (%)	On a few occasions (%)	Not at all (%)
Explain their answers to show why they think what they think	TK-2	22.2	22.2	50.0	5.6	0
	3-5	41.9	22.6	29.0	6.5	0
	6-8	38.5	15.4	46.2	0	0
	9-12	36.4	21.2	27.3	12.1	3.0
	All Levels	32.6	20.8	39.6	6.2	0.7
Examine possible solutions or answers with their peers	TK-2	9.3	18.5	48.1	18.5	5.6
	3-5	12.9	25.8	38.7	12.9	9.7
	6-8	15.4	11.5	46.2	19.2	7.7
	9-12	6.1	6.1	45.5	24.2	18.2
	All Levels	10.4	16.0	45.1	18.8	9.7
Explain how they work out problems to other classmates	TK-2	5.6	5.6	33.3	35.2	20.4
	3-5	9.7	9.7	35.5	35.5	9.7
	6-8	7.7	7.7	50.0	30.8	3.8
	9-12	6.1	3.0	30.3	39.4	21.2
	All Levels	6.9	6.2	36.1	35.4	15.3
Continue to use various thinking skills and not just memorize content	TK-2	22.2	33.3	27.8	13.0	3.7
	3-5	35.5	19.4	35.5	9.7	0
	6-8	26.9	34.6	23.1	11.5	3.8
	9-12	21.2	30.3	27.3	15.2	6.1
	All Levels	25.7	29.9	28.5	12.5	3.5

Key data points explained further in the text.

Figure 6: Frequency of Reported Actions Associated with Cognitive Lift



The learning facilitators were also asked to describe some of the ways in which their learners have explained their thinking and learning since moving to a remote instructional context. Although 6.25% of the learning facilitators either did not answer the question or wrote that it was *not applicable (N/A),* **of the 93.75% who did respond, 28.47% mentioned an action associated with the language of the Cognitive Lift Look For.** More specifically, 12.5% described how their learners explained their thinking or problem-solving, and 14.58% remarked that their learners communicated their learning either orally or in text (e.g., via the text chat in Zoom or Google Meet). For example, one TK-2 learning facilitator wrote:

> *During Zoom sessions [learners] take turns showing the class different adding strategies or how to solve an addition problem. During Zoom, they take turns explaining halves and fourths. In Seesaw, learners use the microphone tool to explain their thinking on one of their math problems.*

While the statement above explicitly states that the learners had to *explain* and *share their thinking* as well as *use different thinking strategies* — terms identified as learner actions in the Cognitive Lift Look For — the majority of the open-response comments focused more specifically on technologies or products. In all, 56.25% of all learning facilitator comments included the mention of a specific technology, and 27.08% identified that learners produced a product.

However, it is not clear from the data how specific tools and products actually supported learners' engaging in Cognitive Lift. Over 32% of the responses simply stated the name of a technology such as Zoom, Google Docs, Padlet, or FlipGrid without discussing its purpose or describing its use. These tools may have supported the process of engaging in Cognitive Lift, but unlike the example above, that learner action was not explicitly stated. Similarly, 9.03% of the comments listed a product such as a worksheet or assessment without further explanation of how it served as a demonstration of the learners' actions.

Essential Knowledge

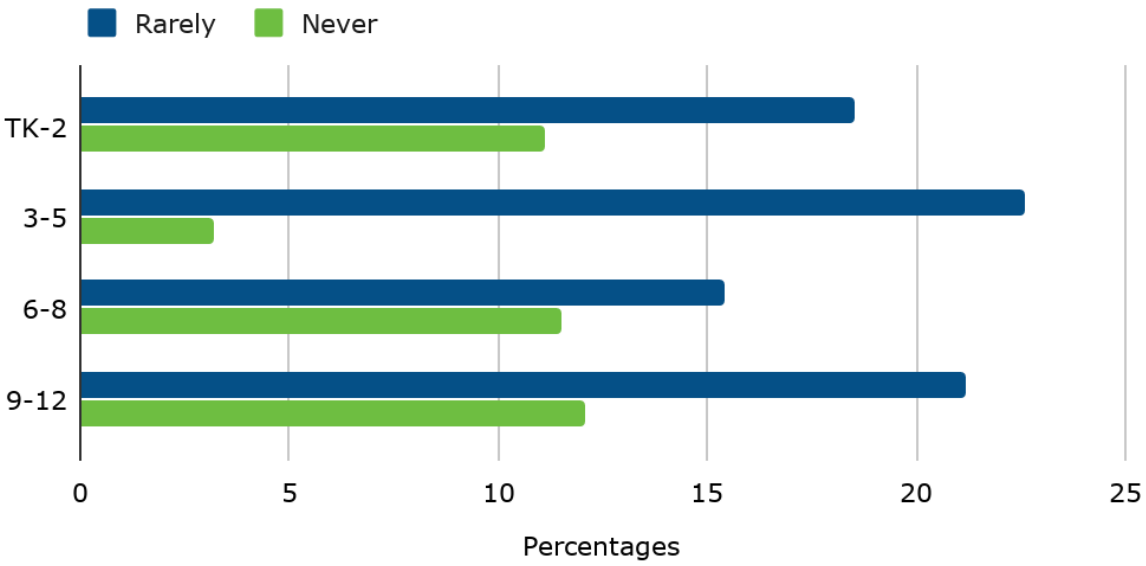
In support of the Rigor Principle, Essential Knowledge exists as an Instructional Look For to describe how learners engage deeply with complex and challenging facts and concepts that build a meaningful foundation of knowledge. According to the Instructional Look Fors research, learners need to build an extensive base of knowledge on which to engage in rigorous analysis. To determine the frequency with which the three actions associated with this Look For occurred in a remote context, learning facilitators used a scale of *Always, Often, Sometimes, Rarely, Never* to respond to the prompt, *How often do the learners you've been connecting with do the following during Zoom sessions or via other synchronous platforms?*

1. Discuss different solutions or points of view.
2. Correct their mistakes or thinking on a topic.
3. Use evidence or data to support their claims or hypotheses.

When comparing the median scores, all content level ranges indicated that their learners *sometimes* demonstrated actions associated with the Essential Knowledge Look For. However, some variation could be detected when looking at the specific actions.

- **Learning facilitators in 9-12 rated lower frequencies of *learners discussing different solutions or points of view*** (mean = 3.212, SD = 0.960; larger number indicating lower frequency). Over 21% indicated that this learner action *rarely* happened, and 12.1% noted that it *never* occurred. Given the age of the learners, it is surprising that these percentages were so large.

Figure 7: Learners Discuss Different Solutions or Points of View



- Conversely, **TK-2 learning facilitators reported a relatively low frequency of their learners *using evidence or data to support their claim*** (mean = 3.204, SD = 1.155). Over 14% of them indicated that this *never* happened. While an important instructional finding to note, this is perhaps unsurprising given the learners' younger age and virtual medium for engagement. On the other hand, 3-5 learning facilitators reported the highest frequency of this learner action across all content level ranges (mean = 2.645, SD = 1.082) as 19.4% indicated that this learner action *always* occurred.

Figure 8: Learners Use Evidence or Data to Support their Claims

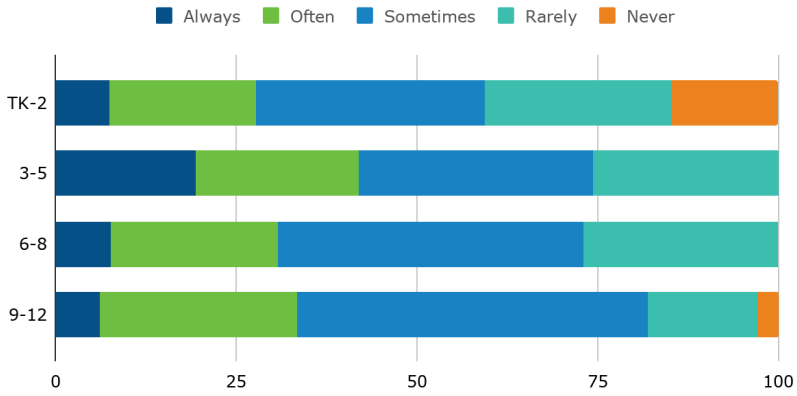


Table 3: Mean and Median Scores Associated with Essential Knowledge

Essential Knowledge		Mean (Standard Deviation)	Median	Sample Size
Discuss different solutions or points of view	TK-2	3.037 (1.098)	3.000	54
	3-5	2.742 (1.125)	3.000	31
	6-8	3.077 (1.017)	3.000	26
	9-12	3.212 (0.960)	3.000	33
	All Levels	3.021 (1.061)	3.000	144
Use evidence or data to support their claims or hypotheses	TK-2	3.204 (1.155)	3.000	54
	3-5	2.645 (1.082)	3.000	31
	6-8	2.885 (0.909)	3.000	26
	9-12	2.818 (0.882)	3.000	33
	All Levels	2.938 (1.053)	3.000	144
Correct their mistakes or thinking on a topic	TK-2	3.278 (1.156)	3.000	54
	3-5	2.968 (1.224)	3.000	31
	6-8	2.769 (0.951)	3.000	26
	9-12	2.848 (1.093)	3.000	33
	All Levels	3.021 (1.131)	3.000	144

Key data points explained further in the text.

Table 4: Frequency of Observations of Actions Associated with Essential Knowledge

Essential Knowledge		Always (%)	Often (%)	Sometimes (%)	Rarely (%)	Never (%)
Discuss different solutions or points of view	TK-2	9.3	18.5	42.6	18.5	11.1
	3-5	19.4	16.1	38.7	22.6	3.2
	6-8	3.8	23.1	46.2	15.4	11.5
	9-12	0	24.2	42.4	21.2	12.1
	All Levels	8.3	20.1	42.4	19.4	9.7
Use evidence or data to support their claims or hypotheses	TK-2	7.4	20.4	31.5	25.9	14.8
	3-5	19.4	22.6	32.3	25.8	0
	6-8	7.7	23.1	42.3	26.9	0
	9-12	6.1	27.3	48.5	15.2	3.0
	All Levels	9.7	22.9	37.5	23.6	6.2
Correct their mistakes or thinking on a topic	TK-2	7.4	16.7	33.3	25.9	16.7
	3-5	19.4	12.9	22.6	41.9	3.2
	6-8	7.7	30.8	42.3	15.4	3.8
	9-12	6.1	36.4	36.4	9.1	12.1
	All Levels	9.7	22.9	33.3	23.6	10.4

Key data points explained further in the text.

Much like with the Cognitive Lift Look For, the qualitative data associated with Essential Knowledge presented a different perspective; **learning facilitators tended to describe specific tools or educator actions, rather than learner actions.** Of the 96.5% of respondents who wrote a response to the prompt, *What structures or supports, if any, have you put in place to support learners engaging with instructional topics in a remote environment?*, only 2.78% described a learner action associated with the Instructional Look For. Instead, 13.89% described some sort of instructional support such as *provided audio instructions,* and 26.39% of the comments were coded as *Responsiveness*. This code described how a learning facilitator offered a direct response to a learner need or request. Examples included holding regular office hours, meeting with learners one-on-one, answering emails, or responding to text.

As one 9-12 learning facilitator explained:

> *I hold daily office hours and respond to email questions or concerns very quickly. Once instructional material has been given, I have learners send videos back to me so that I can see their progress and assist with any difficulty. We also do this in live platforms such as Zoom or google video. I also have peer supports in place for each class (and subject)*

for learners who may be more comfortable asking a peer for help. I also use platforms such as Zoom, Google Hangouts, Youtube playlist, REMIND, and the band app.

This particular comment was also coded as *instructional support* in addition to *peer support* which only accounted for 2.08% of the responses. Many learning facilitators described *priming activities* — activities designed specifically to motivate and prepare learners — as well as conducting or presenting compelling demonstrations (coded as *demos*). For example, two learning facilitators described using virtual field trips to better engage their learners, and 21 learning facilitators (14.58% of respondents) remarked that they created videos, tutorials, presentations, or screencasts to demonstrate concepts and skills.

Of note, **technology emerged again as one of the most frequently applied codes when examining the qualitative data.** Thirty-seven learning facilitators (25.69%) responded to the prompt by listing a specific tool such as Zoom, SeeSaw, Google Docs, or Flipgrid but without identifying any particular action. Further, 59.72% of the responses included the mention of a specific technology alongside a learner action (i.e., *checking for understanding via SeeSaw activities*).

Social Emotional Habits

The final Instructional Look For examined within the Rigor Principle, Social Emotional Habits, refers to how learners consciously apply key social emotional habits that will be necessary for lifelong success. Due to the abstract nature of social emotional learning, this particular Instructional Look For had not previously been studied as part of a formal research process within LUSD.

According to the Instructional Look Fors research, a learner's capacity to demonstrate empathy, remain calm, manage their own behaviors, and engage in self-reflection serves as an indicator for future positive relationships, experiences, and academic growth. This particular Look For also aligns to the district's Lifelong Learning Standard and SEL (Social Emotional Learning) curriculum.

To measure the frequency with which learning facilitators observed learners demonstrating actions associated with this Instructional Look For, the survey asked learning facilitators to indicate the frequency with which they observed the following three actions on the *Always, Often, Sometimes, Rarely, Never* scale:

1. Learners remain calm even when provided feedback.
2. Learners care about their peers' and families' feelings.
3. Learners describe their thoughts and feelings in ways that others understand.

Given the pressures of remote learning during a global pandemic, the quantitative data was somewhat surprising.

- With few exceptions, the median scores indicate that learners *often* demonstrate positive social emotional habits. When looking more closely, **90.9% of 9-12 learning facilitators indicated that their learners *always* or *often remained calm even when provided feedback*.**
- At the same time, **74.2% of 3-5 and 61.5% of 6-8 learning facilitators reported that their learners *always* or *often care about peers' and families' feelings*.**

Figure 9: Learners Remain Calm–Percentage of Responses by Content level

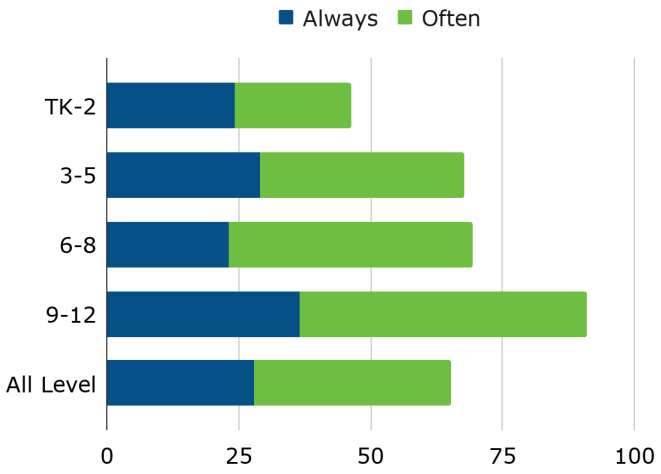


Table 5: Mean and Median Scores Associated with Social Emotional Habits

Social Emotional Habits		Mean (Standard Deviation)	Median	Sample Size (% Missing)
Learners remain calm even when provided feedback	TK-2	2.426 (1.039)	3.000	54 (0%)
	3-5	2.034 (0.944)	2.000	29 (6.5%)
	6-8	2.042 (0.806)	2.000	24 (7.7%)
	9-12	1.758 (0.708)	2.000	33 (0%)
	All Levels	2.121 (0.940)	2.000	140 (2.8%)
Learners care about peers' and families' feelings	TK-2	2.130 (0.891)	2.000	52 (3.7%)
	3-5	1.897 (0.817)	2.000	31 (0%)
	6-8	2.292 (0.999)	2.000	24 (7.7%)
	9-12	2.364 (0.929)	2.000	33 (0%)
	All Levels	2.164 (0.910)	2.000	140 (2.8%)
Learners describe their thoughts and feelings in ways that others understand	TK-2	2.519 (1.023)	2.500	54 (0%)
	3-5	2.414 (0.817)	2.000	29 (6.5%)
	6-8	2.583 (1.018)	2.000	24 (7.7%)
	9-12	2.394 (0.788)	2.000	33 (0%)
	All Levels	2.479 (0.925)	2.000	140 (2.8%)

Key data points explained further in the text.

Table 6: Frequency of Observations of Actions Associated with Social Emotional Habits

Social Emotional Habits		Always (%)	Often (%)	Sometimes (%)	Rarely (%)	Never (%)
Learners remain calm even when provided feedback	TK-2	24.1	22.2	44.4	5.6	3.7
	3-5	29.0	38.7	22.6	0	3.2
	6-8	23.1	46.2	19.2	3.8	0
	9-12	36.4	54.5	6.1	3.0	0
	All Levels	27.8	37.5	26.4	3.5	2.1
Learners care about peers' and families' feelings	TK-2	25.9	40.7	29.	6	1.9
	3-5	32.3	41.9	16.1	3.2	0
	6-8	19.2	42.3	15.4	15.4	0
	9-12	18.2	36.4	39.4	3.0	3.0
	All Levels	24.3	40.3	26.4	4.9	1.4
Learners describe their thoughts and feelings in ways that others understand	TK-2	16.7	33.3	35.2	11.1	3.7
	3-5	12.9	35.5	38.7	6.5	0
	6-8	11.5	38.5	19.2	23.1	0
	9-12	12.1	42.4	39.4	6.1	0
	All Levels	13.9	36.8	34.0	11.1	1.4

Key data points explained further in the text.

In contrast to the quantitative data, the qualitative comments revealed different findings. Only two learning facilitators (1.39% of respondents) described instances when learners ***remained calm*** and only seven (4.86%) indicated that their learners *cared* about their peers' emotions. On the contrary, **22.92% reported that their learners seemed *withdrawn,* and 14.58% commented how their learners missed their friends and the learning community.** Some learning facilitators describe their learners as *grieving* or *in a state of depression*. Those with the youngest learners report that they seemed more sensitive and cried more often.

One 6-8 learning facilitator's comment offered more context:

> *My learners are having withdrawals. They miss their peers. They miss socializing not in an academic setting. They miss their learning facilitators and support staff. They are not motivated to work. You are asking parents who have little patience for them to support them.*

Particularly at the high school, learning facilitators noted that learners not only struggle with missing their social life but also balancing challenging home situations, caring for younger

siblings, and lack of support. These struggles seemed to manifest in what the learning facilitators described as *less motivation*, *less self-reliance*, *frustration*, and *distraction* (8.33% of learning facilitators described their learners as distracted).

And yet, 8.33% of the learning facilitators also described their learners as maintaining the same level of motivation and social emotional habits as before the move to a remote learning context. As a 9-12 learning facilitator stated:

> *I have noticed that even my learners that had behavior problems in class have shown extreme politeness in our small group and one-on-one tutorial sessions. Every learner I have interacted with has been empathetic with their peers, supportive of our groups, and respectful of all members of any learning environment. It has been amazing to see this side of my learners!*

As a final note, 12 learning facilitators (8.33%) either left the question blank or wrote "none," and eight (5.56%) wrote "N/A."

Final Observations

Based on the premise that all learners should experience challenging content and experiences, Rigor describes the ways in which learners develop intellectually and personally in developmentally appropriate ways. This report examined three Instructional Look Fors within the Rigor Principle: Cognitive Lift, Essential Knowledge, and Social Emotional Habits.

Although the quantitative data indicated that learning facilitators observed their learners engaging in actions associated with these Instructional Look Fors at varying frequencies, the qualitative data revealed HOW both learners and learning facilitators engaged in multiple actions associated with this concept as a whole:

- **Cognitive Lift:** 12.5% of learning facilitators noted that they explicitly observed their learners explain their thinking, and 14.58% described how their learners communicate ideas or answers through both audio and text.
- **Essential Knowledge:** 25% of the learning facilitators described themselves using an action or strategy such as *monitoring* learner thinking and understanding, *correcting* misconceptions, or reinforcing the process of *self-directed learning*.
- **Social Emotional Habits:** while a large percentage of learning facilitators expressed concern and described the challenges that their learners might be confronting during this difficult time, **8.33% noted that their learners *continued to express their feelings or emotions in a positive way through email, text, one-on-one conversations, and during synchronous sessions.*** Many learning facilitators commented on their learners' use of their camera during video conferences as an indicator of their emotional wellbeing. This trend further emerges later in the report after analysis of the Community Principle.

Principle #2: Customization

Within the context of the Instructional Look Fors research, Customization describes how learners engage in experiences tailored to their individual learning needs, their preferences for how to learn, and their specific developmental levels. As a critical component of the LUSD personalized, Performance Based System, the Customization Principle includes four distinct Instructional Look Fors: Appropriate Challenge, Student Driven, Additional Supports for Students with IEPs or Defined Language Needs, and Demonstrations of Learning. For this report, Additional Supports for Students with IEPs or Defined Language Needs and Demonstrations of Learning were combined into a single construct that will be defined as Personalization.

Appropriate Challenge

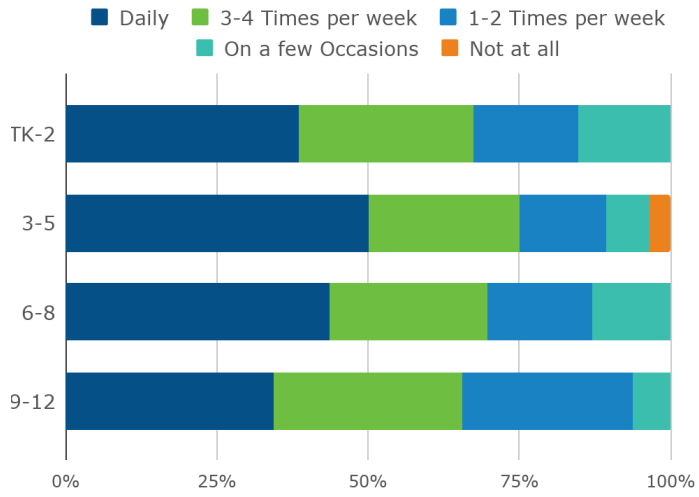
At the heart of LUSD's model lies the belief that all learners should engage with appropriately challenging activities that meet them at their developmental level and stretch them just beyond their comfort zone. Based on Vygotsky's theory of the Zone of Proximal Development[12], which describes the process by which a learner may progress to a higher level of cognitive achievement when provided both challenge and support, Appropriate Challenge manifests in how learners engage with material and how learning facilitators design experiences that scaffold, challenge, and support each individual.

To understand the tenets of this Instructional Look For within a remote, personalized learning context, learning facilitators were asked to indicate with what frequency (*Daily, 3-4 times per week, 2-3 times per week, On a few occasions, or Not at all*) their learners had the opportunity to do the following either through synchronous or asynchronous opportunities:

1. Experience challenge in their new and ongoing learning experiences.
2. Work hard and try to do well.
3. Participate in a conversation about their learning data.

Across all content level ranges, learning facilitators generally indicated that their learners had these opportunities every week. In particular, **38.2% of all learning facilitators reported that their learners *work hard and try to do well* on a daily basis** (mean = 2.030, SD = 1.058), and only 3.2% of learning facilitators — all from content levels 3-5 — indicated *not at all*.

Figure 10: Learners Work Hard and Try to Do Well



[12] Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Harvard university press.

Learning facilitators in 6-8 and 9-12 reported that **a majority of their learners *experience challenge in their new and ongoing learning experiences* either *daily* or *3-4 times per week*.** Although, the TK-2 and 3-5 learning facilitators noted that their learners experienced this with less frequency. Similarly, **learning facilitators across content levels reported a relatively low frequency of their learners *participating in a conversation about their learning data*** (mean = 3.074; SD = 1.027), with 13.0% of TK-2 and 6.5% of 3-5 learning facilitators indicating that this *never* happened.

Table 7: Mean and Median Scores Associated with Appropriate Challenge

Appropriate Challenge		Mean (Standard Deviation)	Median	Sample Size (% Missing)
Experience challenge in their new and ongoing learning experiences	TK-2	2.692 (1.130)	3.000	52 (3.7%)
	3-5	2.286 (1.049)	2.500	28 (9.7%)
	6-8	2.043 (0.976)	2.000	23 (11.5%)
	9-12	2.219 (1.039)	2.000	32 (3.0%)
	All Levels	2.385 (1.086)	2.000	135 (6.3%)
Work hard and try to do well	TK-2	2.096 (1.089)	2.000	52 (3.7%)
	3-5	1.893 (1.1333)	1.500	28 (9.7%)
	6-8	2.000 (1.087)	2.000	23 (11.5%)
	9-12	2.062 (0.948)	2.000	32 (3.0%)
	All Levels	2.030 (1.058)	2.000	135 (6.3%)
Participate in a conversation about their learning data	TK-2	3.308 (1.001)	3.000	52 (3.7%)
	3-5	2.679 (1.090)	2.500	28 (9.7%)
	6-8	2.870 (1.100)	3.000	23 (11.5%)
	9-12	3.188 (0.859)	3.000	32 (3.0%)
	All Levels	3.074 (1.027)	3.000	135 (6.3%)

Key data points explained further in the text.

Table 8: Frequency of Observations of Actions Associated with Appropriate Challenge

Appropriate Challenge		Daily (%)	3-4 times per week (%)	1-2 times per week (%)	On a few occasions (%)	Not at all (%)
Experience challenge in their new and ongoing learning experiences	TK-2	18.5	20.4	33.3	20.4	3.7
	3-5	29.0	16.1	35.5	9.7	0
	6-8	30.8	30.8	19.2	7.7	0
	9-12	30.3	27.3	27.3	12.1	0
	All Levels	25.7	22.9	29.9	13.9	1.4
Work hard and try to do well	TK-2	37.0	27.8	16.7	14.8	0
	3-5	45.2	22.6	12.9	6.5	3.2
	6-8	38.5	23.1	15.4	11.5	0
	9-12	33.3	30.3	27.3	6.1	0
	All Levels	38.2	26.4	18.1	10.4	0.7
Participate in a conversation about their learning data	TK-2	5.6	7.4	48.1	22.2	13.0
	3-5	9.7	35.5	25.8	12.9	6.5
	6-8	11.5	23.1	19.2	34.6	0
	9-12	6.1	6.1	51.5	30.3	3.0
	All Levels	7.6	16.0	38.9	24.3	6.9

Key data points explained further in the text.

Of the **78.47% who provided an example of a learner feeling as though their instructional needs were met, 22.22% of the learning facilitators offered a statement specifically describing how they provided ongoing support:**

- 15.28% explicitly described how they have been *providing individual instructional support*;
- 11.81% explained myriad ways in which they designed some form of *scaffolding such as reteaching or creating videos* that learners could review as needed; and
- 8.33% mentioned that they provided *regular feedback* either via email, synchronous video, or the chat features available through GoGuardian (a filtering, classroom management, and learner safety platform) which allowed for an immediate response.

Particularly with younger learners, learning facilitators explained the need to provide *parent support*. As a TK-2 learning facilitator wrote:

> *I have had many Zoom meetings rescheduled to evenings to accommodate parents working. I meet regularly with one learner still in the evenings because mom works. I feel like that is a direct example of meeting my learners' needs and supporting them and their parents any way I can. I let my parents know from day one I was willing to do whatever was needed to help them and if it meant evening Zooms then so be it.*

The efforts from the learning facilitators seemed to be acknowledged and appreciated. Over 9% of the learning facilitators noted that their learners or parents thanked them. One 9-12 learning facilitator commented that when she could help a learner to "decompress and feel empowered to handle whatever is being asked (instructionally or otherwise)," then she knew that she was providing both appropriate challenge and appropriate support.

Student Driven

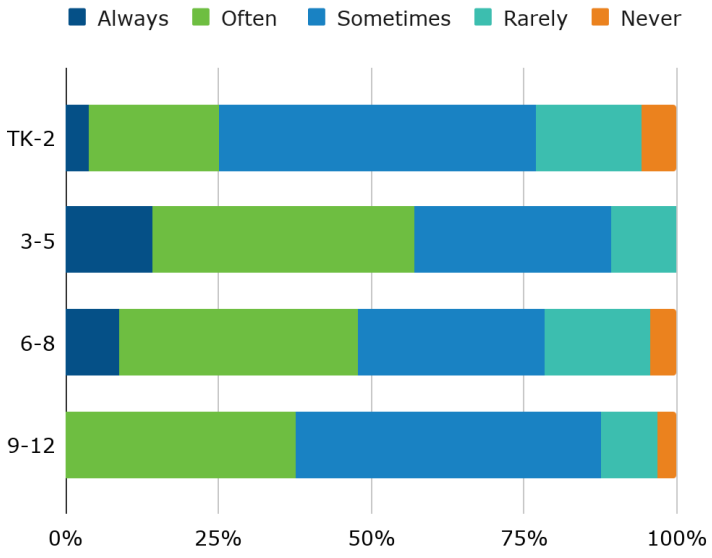
Central to the Principle of Customization is the notion that learning should be Student Driven. According to the actions described in this Instructional Look For, learners should deliberately self assess, set goals, create plans to meet those goals, and progress along their learning pathway in ways that allow them to be appropriately challenged while still meeting their objectives. Using the scale of *Always, Often, Sometimes, Rarely, Never*, learning facilitators were asked how often they observed the following in their learners:

1. Before starting on a challenging project, learners think about the best way to do it.
2. Learners choose what kind of activities and tasks they want to do.
3. Learners use strategies to learn more effectively.

When examining the responses to the survey questions, the median score indicated that these actions *sometimes* occurred across all content levels. Analysis of the mean scores on each question revealed that the learning facilitators of middle and high school-aged learners reported slightly higher frequencies (lower score = higher frequency).

Somewhat surprising, **NONE of the learning facilitators in the high school responded that their learners *always* use strategies to learn more**

Figure 11: Learners Use Strategies to Learn More Effectively



effectively, though 85% remarked that their learners use strategies *often* or *sometimes*. At the elementary level, 3.7% of TK-2 and 12.9% of 3-5 learning facilitators indicated that their learners *always* use strategies.

Table 9: Mean and Median Scores Associated with Student Driven

Student Driven		Mean (Standard Deviation)	Median	Sample Size (% Missing)
Before starting on a challenging project, learners think about the best way to do it	TK-2	3.288 (0.957)	3.000	52 (3.7%)
	3-5	3.179 (0.905)	3.000	28 (9.7%)
	6-8	3.000 (1.000)	3.000	23 (11.5%)
	9-12	2.875 (1.100)	3.000	32 (3.0%)
	All Levels	3.119 (0.993)	3.000	135 (6.2%)
Learners choose what kind of activities and tasks they want to do	TK-2	2.923 (1.064)	3.000	52 (3.7%)
	3-5	2.714 (0.897)	3.000	28 (9.7%)
	6-8	2.870 (1.058)	3.000	23 (11.5%)
	9-12	2.562 (0.982)	3.000	32 (3.0%)
	All Levels	2.785 (1.010)	3.000	135 (6.2%)
Learners use strategies to learn more effectively	TK-2	3.000 (0.886)	3.000	52 (3.7%)
	3-5	2.393 (0.875)	2.000	28 (9.7%)
	6-8	2.696 (1.020)	3.000	23 (11.5%)
	9-12	2.781 (0.751)	3.000	32 (3.0%)
	All Levels	2.770 (0.897)	3.000	135 (6.2%)

Key data points explained further in the text.

*** A median score of 3 translates to sometimes on the frequency scale*

Table 10: Frequency of Observations of Actions Associated with Student Driven

Student Driven		Always (%)	Often (%)	Sometimes (%)	Rarely (%)	Never (%)
Before starting on a challenging project, learners think about the best way to do it	TK-2	3.7	13.0	40.7	29.6	9.3
	3-5	0	19.4	45.2	16.1	9.7
	6-8	3.8	23.1	38.5	15.4	7.7
	9-12	12.1	21.2	36.4	21.2	6.1
	All Levels	4.9	18.1	40.3	22.2	8.3
Learners choose what kind of activities and tasks they want to do	TK-2	11.1	16.7	44.4	16.7	7.4
	3-5	6.5	29.0	41.9	9.7	3.2
	6-8	7.7	23.1	38.5	11.5	7.7
	9-12	15.2	27.3	42.4	9.1	3.0
	All Levels	10.4	22.9	42.4	12.5	5.6
Learners use strategies to learn more effectively	TK-2	3.7	20.4	50.0	16.7	5.6
	3-5	12.9	38.7	29.0	9.7	0
	6-8	7.7	34.6	26.9	15.4	3.8
	9-12	0	36.4	48.5	9.1	3.0
	All Levels	5.6	30.6	41.0	13.2	3.5

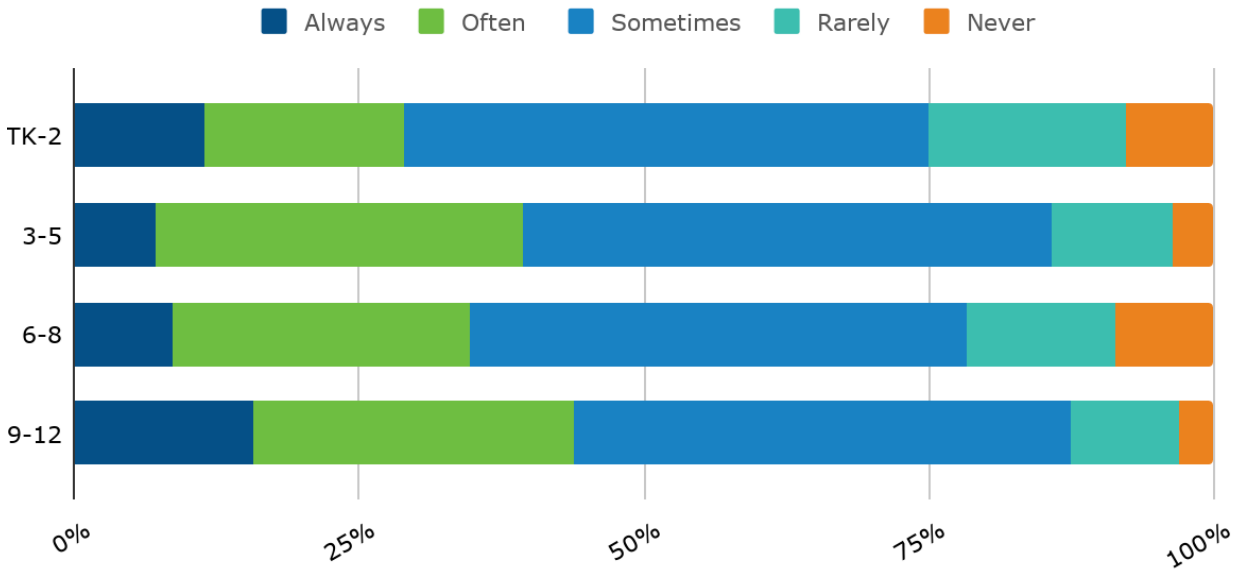
Key data points explained further in the text.

The interesting trends by content level range also extended to the idea of learner autonomy or choice, which was reported at lower rates at younger grade levels. When asked how often learners choose the kinds of activities and tasks that they would like to complete, 16.7% of TK-2 learner facilitators indicated that this *rarely* occurred, and 7.4% noted that it *never* happened. As one kindergarten learning facilitator explained:

> *Because this was so new to Kindergarten much of what we did was directed by me. If this continues into the fall I can see where it will be necessary to implement more choice. It was get connected with my learners fast, train their parents in how to use many of the platforms I was learning to use as well (Zoom, Seesaw) and then just survive.*

On the contrary, 15.2% of the high school learning facilitators responded that learners *always* chose their tasks and activities, and 27.3% stated that it *often* happened. This could imply a correlation between the age of the learners and the amount of autonomy that their learning facilitators felt that they could afford.

Figure 12: Learners Choose the Kinds of Tasks or Activities



Based on analysis of the qualitative data, **54.17% of the learning facilitators described *how* they gave their learners choice**, intimating that the learning facilitators did emphasize the idea of *voice and choice*. Of note, many commented that much of the choice lay in when or whether the learners might complete a task rather than describing the type of task or activity provided.

Eleven learning facilitators (7.64% of the sample) from across the content levels left comments about how they provided more directed learning than when in a face-to-face environment. Many attributed this to a combination of urgency with the situation as well as the perceived need to provide more structure. As one 3-5 learning facilitator wrote,

> *I haven't created a lot of voice and choice because learners seemed they needed structure at the beginning. They needed a plan and liked following it. When given choices, it seemed overwhelming at first for learners.*

Others found more balance between the need for structure and the desire to give choice. Several noted the use of choice boards, or "the voice and choice button in Empower." In fact, 11.11% of the respondents mentioned a specific technology such as Empower (LUSD's custom learning management system) as the mechanism for creating a learner driven environment but without elaboration. Finally, it is important to note that 15.28% of the learning facilitators did not answer the question and 9.72% wrote "N/A."

Personalization

This last construct within the Customization Principle is actually a combination of two Instructional Look Fors: Additional Supports for Students with IEPs or Defined Language Needs and Demonstrations of Learning. Referred to for the purpose of this research study as Personalization, the questions associated with this new construct sought to understand how learners received

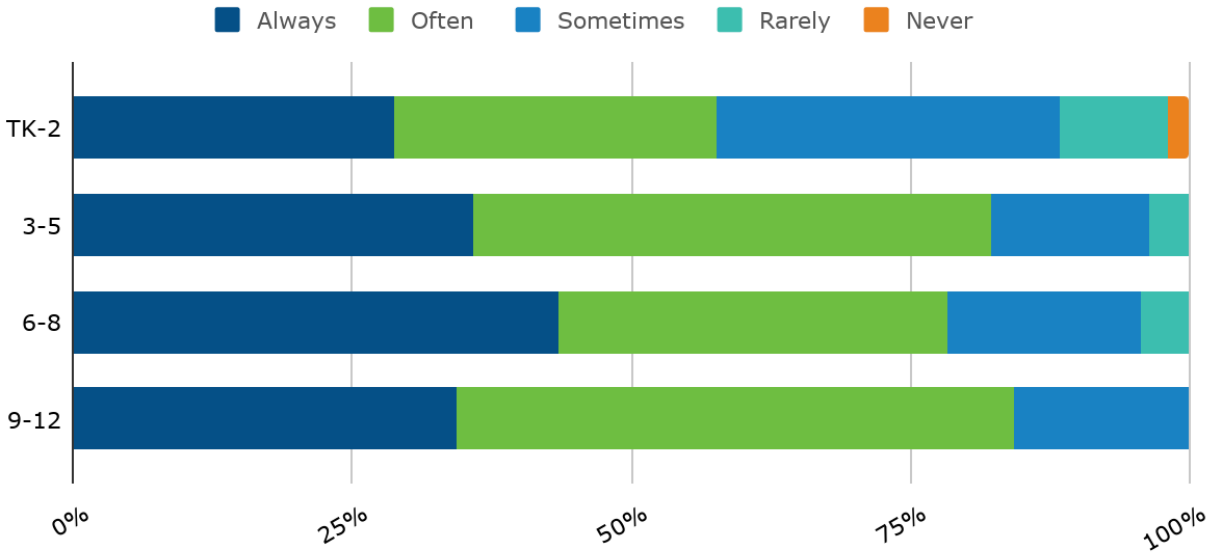
instructional support and engaged in learning activities tailored to their unique profile or defined learning needs and preferences. The Additional Supports Instructional Look For specifically addresses modifications and accommodations for specific subpopulations of learners with Individualized Education Plans (IEPs) or who may be designated as English Learners (ELs).

Within this dual construct, we sought to understand how learners demonstrate their evolving knowledge, skills, and habits through a variety of modalities and at various points in the learning process. As such, learning facilitators responded to four prompts based on the *Daily, 3-4 times per week, 2-3 times per week, On a few occasions, or Not at all* scale. Each question asked with what frequency have learners had the opportunity to do the following either during synchronous sessions or through asynchronous tools:

1. My learners receive feedback and support to ensure that they understand the learning.
2. My learners get individual instructional attention, supports, or scaffolds.
3. My learners reach out to get extra help on their learning.
4. My learners demonstrate that they understand a topic before moving on to a new one.

Of all the Instructional Look Fors and constructs explored by this survey, Personalization had some of the lowest mean scores, meaning that these actions occurred with a higher frequency. In particular, learning facilitators indicated that their learners received feedback and support to ensure that they understood the learning with great regularity. **Across all content levels, 68% of learning facilitators reported that their learners received feedback either *daily* or *3-4 times per week*.** However, it is important to note that when examining the open-response comments, only 18 learning facilitators (12.5%) described HOW they provide feedback to support their learners.

Figure 13: Learners Receive Feedback to Ensure that They are Learning



When looking at the results of the other questions across content levels, the **6-8 learning facilitators reported the highest frequency of learners receiving individual instructional attention, supports, or scaffolds (mean = 1.870, SD = 0.757)**. Over 30% of these learning facilitators indicated this occurred on a *daily* basis, and 38.5% reported that this happened *3-4 times per week*.

Relatedly, ***30.8% of the 6-8 learning facilitators indicated that their learners reached out to get extra help on a daily basis***. This figure stands in contrast to the remainder of the sample as well as the qualitative data. An average of **21.2% of the learning facilitators across the other three content level ranges indicated their learners asked for extra help on a daily basis.** With the open response question, only 16 learning facilitators (11.11%) commented that their learners asked for help. Of those 16, only three supported 6-8 learners.

Table 11: Mean and Median Scores Associated with Personalization

Personalization		Mean (Standard Deviation)	Median	Sample Size (% Missing)
My learners receive feedback and support to ensure that they understand the learning.	TK-2	2.269 (1.050)	2.000	52 (3.7%)
	3-5	1.857 (0.803)	2.000	28 (9.7%)
	6-8	1.826 (0.887)	2.000	23 (11.5%)
	9-12	1.812 (0.693)	2.000	32 (3.0%)
	All Levels	2.000 (0.914)	2.000	135 (6.2%)
My learners get individual instructional attention, supports, or scaffolds.	TK-2	2.673 (1.061)	3.000	52 (3.7%)
	3-5	2.357 (1.062)	2.000	28 (9.7%)
	6-8	1.870 (0.757)	2.000	23 (11.5%)
	9-12	2.250 (0.950)	2.000	32 (3.0%)
	All Levels	2.370 (1.020)	2.000	135 (6.2%)
My learners reach out to get extra help on their learning.	TK-2	3.212 (1.242)	3.500	52 (3.7%)
	3-5	2.643 (1.162)	3.000	28 (9.7%)
	6-8	2.391 (1.196)	3.000	23 (11.5%)
	9-12	2.594 (1.103)	3.000	32 (3.0%)
	All Levels	2.807 (1.219)	3.000	135 (6.2%)
My learners demonstrate that they understand a topic before moving on to a new one.	TK-2	3.135 (1.284)	3.000	52 (3.7%)
	3-5	3.179 (0.905)	3.000	28 (9.7%)
	6-8	2.739 (1.176)	2.000	23 (11.5%)
	9-12	2.469 (1.077)	2.500	32 (3.0%)
	All Levels	2.919 (1.172)	3.000	135 (6.2%)

Key data points explained further in the text.

Table 12: Frequency of Observations Associated with Personalization Actions

Personalization		Daily (%)	3-4 times per week (%)	1-2 times per week (%)	On a few occasions (%)	Not at all (%)
My learners receive feedback and support to ensure that they understand the learning	TK-2	27.8	27.8	29.6	9.3	1.9
	3-5	32.3	41.9	12.9	3.2	0
	6-8	38.5	30.8	15.4	3.8	0
	9-12	33.3	48.5	15.2	0	0
	All Levels	31.9	36.1	20.1	4.9	0.7
My learners get individual instructional attention, supports, or scaffolds	TK-2	16.7	18.5	46.3	9.3	5.6
	3-5	22.6	29.0	22.6	16.1	0
	6-8	30.8	38.5	19.2	0	0
	9-12	24.2	33.3	30.3	9.1	0
	All Levels	22.2	27.8	32.6	9.0	2.1
My learners reach out to get extra help on their learning	TK-2	14.8	9.3	24.1	37.0	11.1
	3-5	19.4	22.6	19.4	29.0	0
	6-8	30.8	11.5	26.9	19.2	0
	9-12	21.2	21.2	30.3	24.2	0
	All Levels	20.1	15.3	25.0	29.2	4.2
My learners demonstrate that they understand a topic before moving on to a new one	TK-2	13.0	18.5	22.2	27.8	14.8
	3-5	0	25.8	25.8	35.5	3.2
	6-8	11.5	34.6	11.5	26.9	3.8
	9-12	21.2	27.3	33.3	12.1	3.0
	All Levels	11.8	25.0	23.6	25.7	7.6

Key data points explained further in the text.

With the qualitative data, 20.14% of the respondents described a learner action that aligned with either the Additional Supports for Students with IEPs or Defined Language Needs or Demonstrations of Learning Look For such as *ask for help or demonstrate understanding*. And yet, this percentage does not account for the 60 comments (41.67%) coded as *Evidence*. We used *Evidence* when a learning facilitator stated that a product or project submitted by the learner served as evidence of their learning or understanding. Oftentimes, the learning facilitator might simply write a generic statement such as “through writing” or “on quizzes.” However, the comment below from a high school learning facilitator may be a more accurate representation of what occurred in context.

Some learners have chosen to continue the traditional work from our English 3D and READ 180 programs. Those learners have shared their work, received feedback, and revised work for final products mostly through our Zoom meetings and photos of their work from their portfolios. Other learners have chosen to do some of the more creative work options from their choice boards. Those learners have shown work through videos, Google hangout conversations, and Google docs. My Drama learners have demonstrated learning through collaborative writing, peer editing, video submissions, Empower, and photo submissions.

Even **fewer learning facilitators (18.75%) used language associated with a learning facilitator actions from the Instructional Look Fors** such as ***conducts checks for understanding* (6.94%)**, ***offers content or experiences through a variety of modes* (6.94%), *provides individual instruction* (4.86%)**, or ***uses different research-based strategies* (3.47%)**. Instead, much like with the Cognitive Lift and Essential Knowledge Instructional Look Fors, ***46 learning facilitators (31.94%) used a specific tool or technology*** to describe Personalization (i.e., "via Empower and during Zoom meetings"). Approximately 16% of all comments were coded as either "None" or "N/A."

Final Observations

According to the Instructional Look Fors research, Customization describes individualization, differentiation, and personalization. Although four Instructional Look Fors comprise this Principle, the current study closely examined Appropriate Challenge, Student Driven, and a construct called Personalization, which combined the Additional Supports for Students with IEPs or Defined Language Needs and the Demonstrations of Learning Instructional Look Fors. **Both the quantitative and qualitative data inferred that learners experienced each of these Instructional Look Fors with regular frequency.**

- **Appropriate Challenge:** at least *3-4 times per week*, learners experienced challenge in their learning experiences and worked hard to do well. Though learning facilitators did not report that their learners participated in conversations about their data with as much frequency, 10.42% indicated via their open response comments that they did have more general conversations with their learners about their progress.
- **Student Driven:** according to the quantitative data, learners experienced learner driven learning *often* or *sometimes*; and yet, **54.17% of the qualitative comments implied that learning facilitators provided their learners with *voice and choice***. It is important to remember that learning facilitators at the high school reported greater frequency of opportunity for choice.
- **Personalization:** the correlation between the age of the learner and the amount of agency that they demonstrate continued to emerge. In particular, **over 40% of learning facilitators reported that their 6-8 and 9-12 learners would reach out for extra help at least *3-4 times per week***. In contrast, 14.8% of TK-2 and 9.7% of 3-5 learning facilitators indicated that this only occurred *on a few occasions* or *not at all*.

Principle #3: Purposefulness

According to the Instructional Look Fors research, Purposefulness combines multiple concepts into a single Principle to describe the effort and energy that learners put into their work, into how they approach their own goal setting, as well as how they monitor their progress towards achieving their personal objectives. In the survey, we combined questions from multiple Instructional Look Fors into two sub-constructs for Purposefulness: Goal Orientation & Awareness of Progress and Growth Mindset & Academic Urgency.

Goal Orientation & Awareness of Progress

Within the Purposeful principle, the first two Instructional Look Fors identify how learners work towards and monitor their own goals and objectives. With Goal Orientation, learners remain focused on attaining meaningful short and long term goals. They develop the capacity to articulate why they prioritize those goals, how their goals are interrelated, and what success might look like. Awareness of Progress describes how learners recognize and monitor their own development towards achieving those goals through self-reflection, peer feedback, and learning facilitator guidance.

To measure this construct, learning facilitators responded to how often (*Always, Often, Sometimes, Rarely, Never)* their learners had demonstrated the following:

1. If a learner fails to reach an important goal, they try again.
2. Learners have made progress and persevere towards their goals.
3. Learners continue to keep track of their learning progress in Empower.

Before looking at the quantitative data, it is important to remember the context in which this remote, personalized learning occurred: a global pandemic. As one 6-8 learning facilitator stated,

> *They've been trying to pass [learning] targets during a pandemic that has been very directly affecting their community. Any day that they turn on their computer is progress towards their meaningful short and long term goals.*

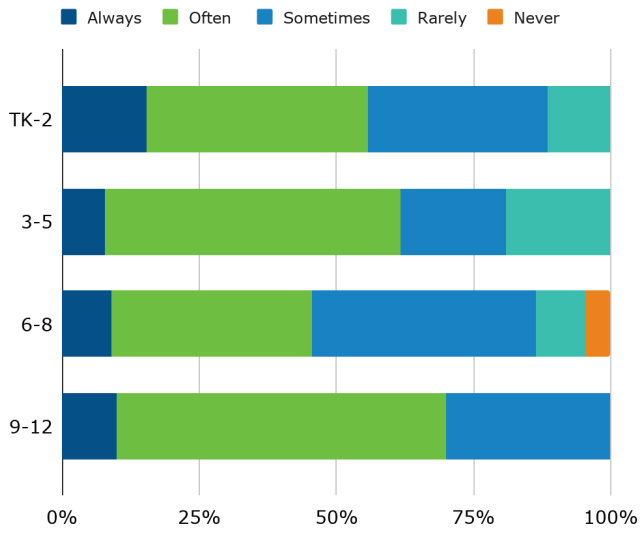
Sensitive to this reality, learning facilitators across content levels explained how they sought to keep their learners on track while still acknowledging the complexities of the situation. This required “prods, pokes, and pushes until they get work done” (9-12 learning facilitator) as well as constant adaptation:

> *As I presented the initial assignments, I had deadlines that were long term. As time progressed, I decided to give weekly schedules with expectation. Now I plan on checking daily since time is running out and there are a few remaining tasks to be completed. (3-5 learning facilitator)*

Across content levels, learning facilitators expressed that their learners found goal setting and progress monitoring to be more of a challenge in a remote context — particularly if they required more support than what was available at home. **While 8 learning facilitators (5.56%) explicitly described this challenge in their comments, only 10 learning facilitators (6.94%) remarked that their learners were maintaining similar progress as before remote learning**.

However, when explicitly asked whether learners had *made progress or persevered towards their goals* on the survey, ALL of the 9-12 learning facilitators indicated that their learners had *always*, *often*, or *sometimes* been able to do so. However, **11.1% of TK-2, 16.1% of 3-5, and 7.7% of 6-8 learning facilitators indicated that this learner action *rarely* happened**. Particularly when considered with the qualitative data, this trend reveals a potential challenge with how younger learners might be able to maintain progress in a remote learning context.

Figure 14: Learners Make Progress and Persevere Towards Their Goals



This data stands in contrast to responses from the question asking whether learners continued to monitor their progress via Empower — the district's custom-built Learning Management System (LMS). **Across all content levels, learning facilitators reported a relatively low frequency of their learners continuing to keep track of their learning progress in Empower** (mean = 3.108, SD = 1.222), especially with TK-2 learner population (mean = 3.731, SD = 0.891). **Thirty-seven percent of TK-2 learning facilitators indicated that this *never* occurred.** In the open-response comments, only 10.42% of learning facilitators indicated that their learners monitored their progress either in Empower or another platform such as iReady or Clever.

Table 13: Mean and Median Scores Associated with Goal Orientation & Awareness of Progress

Goal Orientation & Awareness of Progress		Mean (Standard Deviation)	Median	Sample Size (% Missing)
If a learner fails to reach an important goal, they try again	TK-2	2.577 (1.144)	3.000	52 (3.7%)
	3-5	2.615 (1.061)	3.000	26 (16.1%)
	6-8	3.000 (0.980)	3.000	22 (15.4%)
	9-12	2.200 (0.7143)	2.000	30 (9.1%)
	All Levels	2.569 (1.034)	3.000	130 (9.7%)
Learners have made progress and persevere towards their goals	TK-2	2.404 (0.891)	2.000	52 (3.7%)
	3-5	2.500 (0.906)	2.000	26 (16.1%)
	6-8	2.636 (0.953)	3.000	22 (15.4%)
	9-12	2.200 (0.610)	2.000	30 (9.1%)
	All Levels	2.415 (0.852)	2.000	130 (9.7%)
Learners continue to keep track of their learning progress in Empower	TK-2	3.731 (0.891)	4.000	52 (3.7%)
	3-5	3.038 (1.076)	3.000	26 (16.1%)
	6-8	2.773 (1.066)	3.000	22 (15.4%)
	9-12	2.333 (0.884)	2.000	30 (9.1%)
	All Levels	3.108 (1.222)	3.000	130 (9.7%)

Key data points explained further in the text.

Table 14: Frequency of Observations Associated with Goal Orientation & Awareness of Progress Actions

Goal Orientation & Awareness of Progress		Always (%)	Often (%)	Sometimes (%)	Rarely (%)	Never (%)
If a learner fails to reach an important goal, they try again	TK-2	20.4	24.1	33.3	13.0	5.6
	3-5	12.9	25.8	29.0	12.9	3.2
	6-8	3.8	23.1	30.8	23.1	3.8
	9-12	12.1	51.5	24.2	3.0	0
	All Levels	13.9	30.6	29.9	12.5	3.5
Learners have made progress and persevere towards their goals	TK-2	14.8	38.9	31.5	11.1	0
	3-5	6.5	45.2	16.1	16.1	0
	6-8	7.7	30.8	34.6	7.7	3.8
	9-12	9.1	54.5	27.3	0	0
	All Levels	10.4	42.4	27.8	9.0	0.7
Learners continue to keep track of their learning progress in Empower	TK-2	1.9	18.5	20.4	18.5	37.0
	3-5	6.5	22.6	19.4	32.3	3.2
	6-8	7.7	30.8	23.1	19.2	3.8
	9-12	12.1	48.5	18.2	12.1	0
	All Levels	6.2	28.5	20.1	20.1	15.3

Key data points explained further in the text.

However, 26 learning facilitators (18.06% of the sample) reported in the open-response question that they used at least one of the following instructional strategies associated with these two Instructional Look Fors:

- Provide direct instruction on how to set and monitor goals (3 learning facilitators)
- Build routines and systems to help learners self-monitor their own progress (16 learning facilitators)
- Use and provide data to learners to support their own progress monitoring and reflection (6 learning facilitators)
- Regularly meet with learners to discuss their goals and/or provide feedback, tools, or resources to support goal attainment (12 learning facilitators)
- Work directly with parents, guardians, and family members to ensure that learners had enough support (6 learning facilitators)

Growth Mindset & Academic Urgency

Two other critical components of the Purposeful Principle include Growth Mindset and Academic Urgency. Learners who possess the traits of a Growth Mindset are more willing to engage and persevere when learning becomes difficult or they may make a mistake; they avoid negative commentary or self-deprecating comments and instead use more positive or self-motivating language to describe their actions. At the same time, when learners understand Academic Urgency, they use their time, effort, and energy more strategically as well as employ self-regulation strategies such that they may maximize their learning and progress toward goals.

However, according to Albert Bandura's social cognitive theory[13], learning must be understood as a set of interdependent relationships between academic behaviors, cognitive factors, and environmental forces. Therefore, since this particular personalized, remote learning context occurred within the timeframe of COVID-19 school closure, it is critical to acknowledge that **"learners are doing the best they can right now to continue working regardless of their situation at home"** (9-12 learning facilitator). Further, without even analyzing the survey data, we must keep in mind this comment from a TK-2 learning facilitator: **"Just by doing distance learning, they are showing a growth mindset."**

With the qualitative data, only **12.50% of the open-responses described a learner action associated with the Growth Mindset & Academic Urgency Look For** such as *try new strategies when stuck* (11.11%). Additionally, 4.86% of comments could be ascribed to instructional actions like *provide guidance or support (1.39%)* or *provide explicit instruction related to self-regulation skills (2.08%)*. According to a high school learning facilitator the learners often got "discouraged when working independently."

On the other hand, as a 6-8 learning facilitator explained, those "same learners who tried to make progress in the classroom tried to make progress in a remote setting." Despite the challenges of the context, learning facilitators still described the following learner actions:

- **4.17% described how their learners had *adapted* to the remote context:** "Many learners have developed a sense of how to work online. They have been able to adjust to learning at home, realized that the LF is still close though we are not in an actual class, and have figured out ways to make this learning work for them."
- **8.33% indicated that their learners have maintained a consistent level of effort:** "They remain positive and optimistic and keep working hard on assignments."
- **12.50% of learning facilitators praised their learners for being persistent in their efforts:** "Learners have continued to persevere despite many obstacles. They have been very responsive and have kept a steady pace towards their goals."
- **8.33% stated that their learners have become more independent and better self-advocates:** "I see some taking more initiative in finding out what their grades are and how to improve them rather than waiting to be told."

[13] Bandura, A. (1986). *Social foundations of thought and action.* Prentice Hall

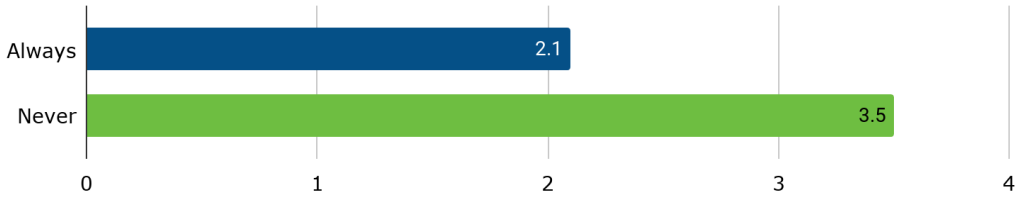
The quantitative data also revealed the presence of learner actions associated with this Instructional Look For, though with less frequency. Using the *Always, Often, Sometimes, Rarely, Never* scale to measure frequency, learning facilitators indicated how often they observed the following four actions:

1. When they get stuck while learning something new, learners try a different strategy.
2. Learners think about ways to improve the quality of their work.
3. Learners bounce back from delays, obstacles, or disappointments.
4. In Zoom or other synchronous sessions, learners pay attention and resist distractions.

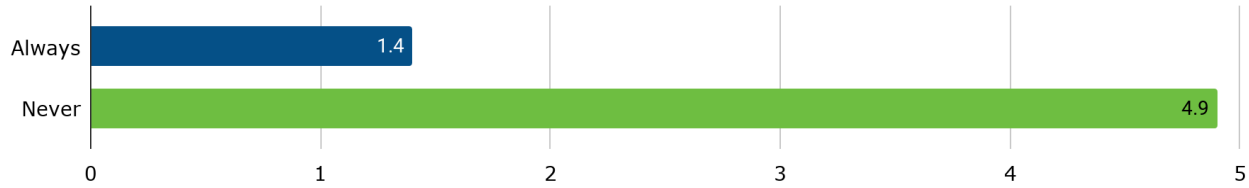
Across questions and content levels, with only three exceptions, the majority of the learning facilitators indicated that these actions occurred *sometimes* (median = 3.000). Learning facilitators from content levels 3-5 indicated that their learners *often bounce back from delays, obstacles, or disappointments* as well as *pay attention and resist distractions*. High school learning facilitators also indicated that their learners could also *often* resist distractions.

Figure 15: Percentage of Observations Indicating What Learners ALWAYS or NEVER Do

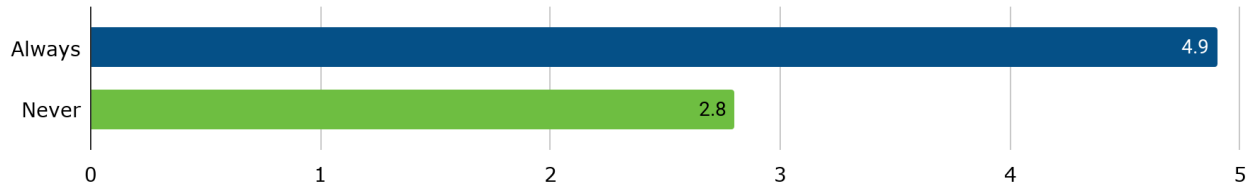
When they get stuck while learning something new, learners try a different strategy.



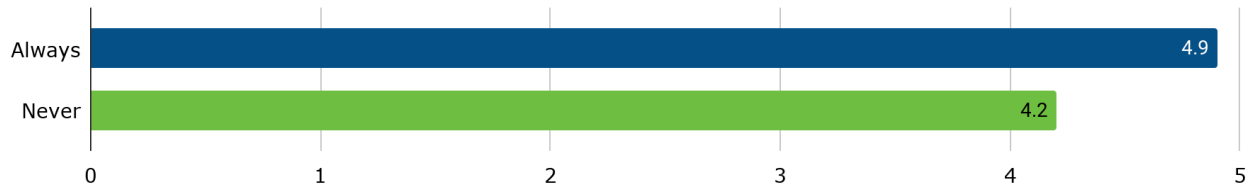
Learners think about ways to improve the quality of their work.



Learners bounce back from delays, obstacles, or disappointments.



In Zoom or other synchronous sessions, learners pay attention and resist distractions.



However, as illustrated by Figure 15 above, very small percentages of learning facilitators across content levels noted that their learners *always* did any of these actions, and the elementary learning facilitators (TK-5) did so the least. In particular, approximately **30% of the TK-2 learning facilitators noted that their learners *rarely* or *never* performed any of the actions associated with the survey questions**.

Table 15: Mean and Median Scores Associated with Growth Mindset & Academic Urgency

Growth Mindset & Academic Urgency		Mean (Standard Deviation)	Median	Sample Size (% Missing)
When they get stuck while learning something new, learners try a different strategy	TK-2	3.269 (0.888)	3.000	52 (3.7%)
	3-5	2.962 (0.662)	3.000	26 (16.1%)
	6-8	2.864 (0.834)	3.000	22 (15.4%)
	9-12	2.600 (0.724)	3.000	30 (9.1%)
	All Levels	2.985 (0.835)	3.000	130 (9.7%)
Learners think about ways to improve the quality of their work	TK-2	3.250 (0.888)	3.000	52 (3.7%)
	3-5	2.885 (0.711)	3.000	26 (16.1%)
	6-8	3.136 (1.037)	3.000	22 (15.4%)
	9-12	2.733 (0.785)	3.000	30 (9.1%)
	All Levels	3.038 (0.884)	3.000	130 (9.7%)
Learners bounce back from delays, obstacles, or disappointments	TK-2	2.962 (1.028)	3.000	52 (3.7%)
	3-5	2.500 (0.906)	2.000	26 (16.1%)
	6-8	2.818 (0.853)	3.000	22 (15.4%)
	9-12	2.733 (0.691)	3.000	30 (9.1%)
	All Levels	2.792 (0.912)	3.000	130 (9.7%)
In Zoom or other synchronous sessions, learners pay attention and resist distractions	TK-2	3.000 (0.950)	3.000	52 (3.7%)
	3-5	2.615 (0.906)	2.500	26 (16.1%)
	6-8	2.682 (0.839)	3.000	22 (15.4%)
	9-12	2.500 (0.861)	2.500	30 (9.1%)
	All Levels	2.754 (0.916)	3.000	130 (9.7%)

Key data points explained further in the text.

Table 16: Frequency of Observations of Actions Associated with Growth Mindset and Academic Urgency

Growth Mindset & Academic Urgency		Always (%)	Often (%)	Sometimes (%)	Rarely (%)	Never (%)
When they get stuck while learning something new, learners try a different strategy	TK-2	1.9	13.0	48.1	24.1	9.3
	3-5	0	19.4	48.4	16.1	0
	6-8	3.8	23.1	38.5	19.2	0
	9-12	3.0	39.4	39.4	9.1	0
	All Levels	2.1	22.2	44.4	18.1	3.5
Learners think about ways to improve the quality of their work	TK-2	1.9	14.8	46.3	24.1	9.3
	3-5	0	25.8	41.9	16.1	0
	6-8	3.8	19.2	30.8	23.1	7.7
	9-12	0	42.4	30.3	18.2	0
	All Levels	1.4	24.3	38.9	20.8	4.9
Learners bounce back from delays, obstacles, or disappointments	TK-2	5.6	27.8	35.2	20.4	7.4
	3-5	9.7	35.5	25.8	12.9	0
	6-8	3.8	26.9	34.6	19.2	0
	9-12	0	36.4	42.4	12.1	0
	All Levels	4.9	31.2	34.7	16.7	2.8
In Zoom or other synchronous sessions, learners pay attention and resist distractions	TK-2	1.9	27.8	44.4	13.0	9.3
	3-5	6.5	35.5	25.8	16.1	0
	6-8	3.8	34.6	30.8	15.4	0
	9-12	9.1	36.4	39.4	3.0	3.0
	All Levels	4.9	32.6	36.8	11.8	4.2

Key data points explained further in the text.

Again, it is critical to remember the context in which these actions occurred. A 6-8 learning facilitator reminded us that **"They continue to work and learn and find ways to connect. Some have done it from the fields using their phone, others in the car."** Further, a 3-5 elementary learning facilitator described the tremendous skills that the younger learners had to demonstrate just to function in a remote learning environment:

> *They have shown growth mindset to even try to connect with me via Zoom, figure out how to use Google Classroom independently, access and use the interactive*

lesson plan independently. The learners have had to rely on themselves and their families (if they are home) to grow and learn. It's been amazing to watch them grow in their own self-confidence as they can now do things independently — virtual learning is really sink or swim... you have to want it.... even if it takes 2 weeks to figure out how to get on Zoom — some never gave up... they kept asking, trying and eventually we celebrated when they joined us.

Final Observations

Within the Purposefulness Principle lies multiple strategies associated with social learning theory, and each one represented by a distinct Instructional Look For: Goal Orientation, Awareness of Progress, Growth Mindset, and Academic Urgency. For this study, we combined these Instructional Look Fors into two constructs Goal Orientation & Awareness of Progress as well as Growth Mindset & Academic Urgency. Despite the challenges and stresses of the global pandemic:

- **Goal Orientation & Awareness:** Over 50% of the learning facilitators reported observing learner actions associated with these Instructional Look Fors either *often* or *sometimes*, and **ALL of the 9-12 learning facilitators indicated that their learners had made progress or preserved towards their goals** either *always, often,* or *sometimes.*
- **Growth Mindset & Academic Urgency:** Despite the relatively low observation rates of specific behaviors associated with the Instructional Look Fors, based on the quantitative data, **it is important to note that learners in LUSD demonstrated many of the tenets of the Purposefulness Principle simply by attempting remote learning**.

Principle #4: Community

The environment and community in which learning occurs has just as much influence on the learner as the content or instruction[14]. At LUSD, whether in a physical or a remote learning context, the goal is to create an environment where every learner feels safe, valued, secure, and connected. Therefore, the Principle of Community consists of multiple constructs including Connectedness and Upholding Norms — two Instructional Look Fors which we measured together in this study.

Connectedness describes the positive relationships that learners have with their peers as well as with the adults who act as role models and provide emotional support. To accomplish this, every learning community, learning facilitator, and learner understands and Upholds Norms to maintain physical and emotional safety as well as a sense of predictability and routine.

Since this study occurred during COVID-19 school closure, the Principle of Community played a critical role. LUSD leadership wanted to ensure that amidst the stress of the situation, learners

[14] Bandura, A. (1986). *Social foundations of thought and action.* Prentice Hall

continued to feel connected and supported in their community — even if it existed online. As such, unlike the other survey questions, those associated with Community used a less prescriptive scale. The five items ranged from *Very Frequently, Somewhat Frequently, Frequently, Sporadically,* to *Never*. This intentional choice allowed learning facilitators to reflect more broadly on their personal context and intended to provide a more nuanced understanding of the learners' emotions.

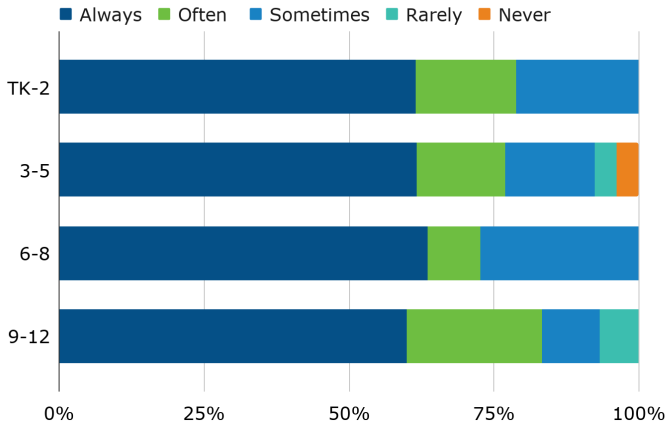
The survey questions asked learning facilitators to indicate how frequently they believed that their learners had the following feelings since moving to remote learning.

1. Even during remote instruction, my learners feel like a part of a virtual learning community.
2. My learners feel as though I really care about them.
3. Learners believe that the norms in the virtual community are fair.
4. Learners feel safe in their virtual learning community both during synchronous and asynchronous interactions.

It is important to note that two learning facilitators wrote in the open-response comments that they "don't know what they [their learners] feel or believe," and that "I had to choose 'never' since the questions above require that I put myself in their heads and that is not possible." Also, since this was the last section of the survey, some participant attrition did occur. Of the 144 learning facilitators included in the sample, 130 responded to the survey questions about the Community Principle and 125 wrote comments to the open-response question.

Three critical findings emerged from the quantitative data. First, when asked whether their *learners feel as though I really care about them*, on average and across content levels, the **learning facilitators indicated that this occurred *very frequently* (mean = 1.638, SD = 0.915, median = 1.000). Over 55.6% of the learning facilitators reported this sentiment.** However, with self-reported data, individuals often overestimate or underestimate when reporting frequency[15]. **This could explain both the high percentages as well as the 16.1% of 3-5 learning facilitators and 15.4% of 6-8 learning facilitators who responded that this action *never* occurred.** Analysis of the qualitative data resulted in only three comments being coded as *learners perceived as though their learning facilitator cares about them.*

Figure 16: Learners Feel as though I Really Care About Them



[15] Dusenbury, L., Brannigan, R., Falco, M. (2003). A review of research on fidelity of implementation: implications for drug abuse prevention in school settings. *Health education Research. 18(*2), 237 - 256. doi:0.1093/her/18.2.237

Table 17: Mean and Median Scores Associated with Community

Community		Mean (Standard Deviation)	Median	Sample Size (% Missing)
Even during remote instruction, my learners feel like a part of a virtual learning community	TK-2	2.423 (1.073)	3.000	52 (3.7%)
	3-5	2.385 (1.235)	2.000	26 (16.1%)
	6-8	2.682 (1.323)	3.000	22 (15.4%)
	9-12	2.933 (1.081)	3.000	30 (9.1%)
	All Levels	2.577 (1.160)	3.000	130 (9.7%)
My learners feel as though I really care about them	TK-2	1.596 (1.073)	1.000	52 (3.7%)
	3-5	1.731 (1.116)	1.000	26 (16.1%)
	6-8	1.636 (0.902)	1.000	22 (15.4%)
	9-12	1.633 (0.928)	1.000	30 (9.1%)
	All Levels	1.638 (0.915)	1.000	130 (9.7%)
Learners believe that the norms in the virtual community are fair	TK-2	2.423 (1.161)	2.000	52 (3.7%)
	3-5	1.962 (1.076)	2.000	26 (16.1%)
	6-8	2.000 (1.069)	2.000	22 (15.4%)
	9-12	1.933 (1.081)	2.000	30 (9.1%)
	All Levels	2.146 (1.121)	2.000	130 (9.7%)
Learners feel safe in their virtual learning community both during synchronous and asynchronous interactions	TK-2	1.885 (1.161)	1.500	52 (3.7%)
	3-5	1.846 (1.076)	2.000	26 (16.1%)
	6-8	2.045 (1.214)	1.500	22 (15.4%)
	9-12	1.967 (0.999)	2.000	30 (9.1%)
	All Levels	1.923 (1.046)	2.000	130 (9.7%)

Key data points explained further in the text.

Second, most learning facilitators also reported that their *learners felt safe in their virtual learning community both during synchronous and asynchronous interactions* (mean = 1.923, SD = 1.046). The qualitative data corroborated this finding:

- 11.81% of the comments discussed how learners felt safe in their community
- 11.11% included mention that learners felt as though they could get the emotional support that they needed
- 13.19% described how learners felt comfortable asking questions, seeking help, or sharing their feelings

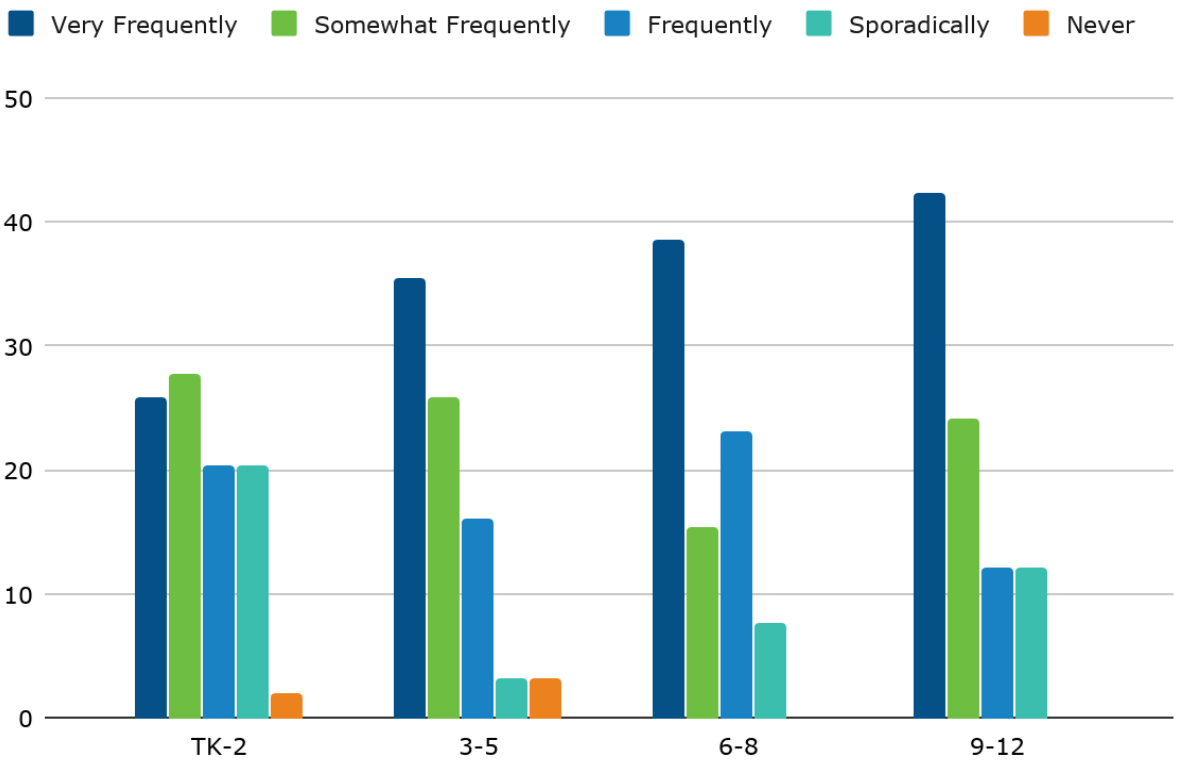
Table 18: Frequency of Observations of Actions Associated with Community

Community		Very Frequently (%)	Somewhat Frequently (%)	Frequently (%)	Sporadically (%)	Never (%)
Even during remote instruction, my learners feel like a part of a virtual learning community	TK-2	25.9	20.4	33.3	16.7	0
	3-5	25.8	22.6	16.1	16.1	3.2
	6-8	23.1	15.4	15.4	26.9	3.8
	9-12	9.1	27.3	15.2	39.4	0
	All Levels	21.5	21.5	22.2	23.6	1.4
My learners feel as though I really care about them	TK-2	59.3	16.7	20.4	0	0
	3-5	51.6	12.9	12.9	3.2	3.2
	6-8	53.8	7.7	23.1	0	0
	9-12	54.5	21.2	9.1	6.1	0
	All Levels	55.6	15.3	16.7	2.1	0.7
Learners believe that the norms in the virtual community are fair	TK-2	25.9	27.8	20.4	20.4	1.9
	3-5	35.5	25.8	16.1	3.2	3.2
	6-8	38.5	15.4	23.1	7.7	0
	9-12	42.4	24.2	12.1	12.1	0
	All Levels	34.0	24.3	18.1	12.5	1.4
Learners feel safe in their virtual learning community both during synchronous and asynchronous interactions	TK-2	48.1	18.5	24.1	3.7	1.9
	3-5	38.7	25.8	16.1	0	3.2
	6-8	42.3	11.5	15.4	15.4	0
	9-12	36.4	30.3	15.2	9.1	0
	All Levels	42.4	21.5	18.8	6.2	1.4

Key data points explained further in the text.

Third, learning facilitators predominantly indicated that their learners *believed that the norms in the virtual learning community were fair*. Across all content levels, over 76% noted that their learners perceived this *frequently*. With older learners, the percentages increased as 38.5% of 6-8 and 42.4% of 9-12 learning facilitators thought that their learners felt this *very frequently*. Intriguingly, learning facilitators of TK-5 learners intimated that 5.1% of their learners *never* felt that norms were fair. We wonder if this could be as much a function of the age of the learners as any norms or procedures implemented by the learning facilitators.

Figure 17: Learners Feel as though Norms are Fair



From the qualitative analysis, several themes emerged with regards to HOW learners indicated that they felt connected to their learning communities.

- **13.89% of the comments described their learners' positive emotions** when joining a synchronous session. Particularly with the youngest learners, learning facilitators remarked how the learners smiled to see them and were excited to see their peers.
- **15.97% noted that the act of showing up served as an indication of feeling safe, cared for, and supported.** For example, “I have a high number of learners coming to my daily zoom meetings. They want to talk to me and to each other. We do some sort of a game or activity every day. This keeps the learners having fun and wanting to join each day” (6-8 learning facilitator).
- **5.56% of the comments included mentions of social activities, games, and fun.** Particularly at the elementary level, learning facilitators described activities such as playing games with Quizzizz, sharing feelings via Padlet, dancing, and even “Disney days.”

Some learning facilitators explicitly described receiving messages from learners via email, text, and even audio describing their feelings. “The vulnerability required to share shows that there is a feeling of safety and connectedness,” remarked a high school learning facilitator.

Critical Consideration for Practitioners

As mentioned in the final observations of the Social Emotional Habits Instructional Look For, many learning facilitators commented on their learners' use of their camera during video conferences as an indicator of their emotional wellbeing. This trend re-emerged within the comments around Community — particularly with the older learners. Several learning facilitators remarked that those learners who felt safe and connected were not afraid to show their faces on screen during video meetings and unmute their microphones to engage in discussion without hesitation.

Nationally, the use of cameras during synchronous learning has become a point of conversation. First, using a camera allows peers and learning facilitators into a learners' home environment. As illustrated by an April 2020 New York Times article, learners may feel a sense of equity with their peers when in school. However, turning on cameras once home can reveal different realities and place learners in an uncomfortable position. Second, some learners may experience negative emotions or even trauma if they have to see themselves and their peers online —even if they personally turn their cameras off. Studies of various personality and trauma-induced disorders document "mirror exposure" as a triggering effect[16]. Finally, *Zoom fatigue* has become a documented phenomenon caused by the challenge of watching multiple video feeds simultaneously and trying to interpret non-verbal cues. If learners have spent a significant amount of time on video, they may need a break.

While learning facilitators might want to use cameras to build community and better engage with their learners, they may also need to consider when to turn them OFF. Further, learning facilitators and leaders should have more nuanced conversations regarding how to interpret and react to a learner who regularly leaves a camera off or chooses not to respond via a microphone. These actions could signify their social emotional state, intimate a larger issue, or just be a matter of insufficient bandwidth.

[16] Schäflein, E., Sattel, H., Schmidt, U., & Sack, M. (2018). The enemy in the mirror: self-perception-induced stress results in dissociation of psychological and physiological responses in patients with dissociative disorder. *European journal of psychotraumatology, 9*(Suppl 3), 1472991. doi:10.1080/20008198.2018.1472991

Final Observations

Based on the Instructional Look Fors research, the focus of the Community Principle is primarily the emotional environment in which learners exist. **With the shift to a remote-only learning context, learning facilitators established new norms and protocols to ensure and maintain a safe and supportive environment for their learners.** As a result of these efforts:

- **Learners felt like they are part of a virtual learning community:** 43% of learning facilitators indicated that their learners perceived this at least *somewhat frequently.*
- **Learners believed that their learning facilitator cared about them:** this question had the highest reported frequency in the survey (mean = 1.638, SD = 0.915). Across content levels, 55.6% of the learning facilitators reported that their learners sensed this *very frequently*.
- **Learners thought that the norms in the virtual learning community were fair:** across content levels, 76.4% of learning facilitators noted that their learners frequently felt that the rules, norms, and procedures were fair.
- **Learners felt safe in their learning community:** both the quantitative and qualitative data inferred that learners feel safe in both synchronous and asynchronous sessions. Over 22% of the open-response comments were coded with either safe or supported. Approximately 82% of the learning facilitators indicated that their learners *frequently* felt safe.

Whether through creating space for learners to socialize with their peers or establishing norms to minimize disruptive behaviors, the data implies that the learners perceived a sense of connectedness. A 3-5 learning facilitator best describes the situation:

> *We laugh and have conversations like we did in our LE [Learning Environment]. We have discussions about life long learning topics. Learners feel free to share and talk. They were apprehensive at first, but are developing what we had in class. They will talk to me about things happening in their real lives.*

Implications for LUSD Leadership

In analyzing these four Principles and eight Instructional Look Fors, we observed four trends to inform LUSD leadership's decision making in future remote learning situations.

1. Focus on Learner Support and Relationships

From the analysis of the Community Principle as well as the Social Emotional Habits Instructional Look For, learning facilitators perceived that their learners feel safe, cared for, and supported — especially at the younger levels. As a 3-5 learning facilitator reflected:

> *Learners are realizing that I'm still here for them and willing to help them even if I'm not physically next to them. It has been difficult for my learners with this sudden transition and they were uncertain if they were going to return to school.*

However, it seems necessary to build more support structures at the high school level where a higher percentage of learning facilitators indicated that they had more concerns about their learners' social emotional wellbeing particularly since,

> *The ones who connect with me mention that they are bored and lonely and miss school. Those who connected with me once or twice during closure have told me that they are watching siblings, working with their parents, or spending all day watching Netflix (9-12 learning facilitator).*

Throughout the qualitative data, learning facilitators noted that their learners appreciated their support, looked forward to synchronous video sessions when they could see their peers, and valued the ability to reach out and connect via text, email, audio, and video.

> *Simply put I've had several learners say, "thank you Ms. Doe [pseudonym] I feel so much better," or "Okay I can do this. thank you for explaining it to me". IF I can help a learner to decompress and feel empowered to handle whatever is being asked (instructionally or otherwise) I know I'm doing what I'm here to do. (9-12 learning facilitator)*

Moving forward, LUSD leadership should continue to encourage learning facilitators to build relationships with their learners and offer ongoing support.

Of particular note, within the Goal Orientation & Awareness of Progress construct, 15% of the learning facilitators indicated that their learners *rarely* or *never try again if they fail to reach an important goal*. At the 6-8 content level range, the percentage jumps to 26.9%. Relatedly, approximately 13% of TK-5 learning facilitators reported that their learners *rarely made progress towards their goals* since moving to remote learning, and 11.5% of 6-8 learning facilitators indicated that their learners *rarely* or *never* did so. **These findings further point towards the need to expand learner support structures to help learners establish and maintain momentum.**

The comment below from a 3-5 learning facilitator reinforces this need to focus on building connections, and serves as a reminder that relationships are equally critical for academic skills such as engaging in cognitive lift:

> *This part [explaining their thinking] has been difficult because learners need motivation and someone to have them on a schedule. Learners who would get work done at school are not completing tasks. This is all new to us so I need to understand my learners.*

2. Technology Support for Learning Facilitators & Learners

In the qualitative analysis of the Cognitive Lift and Essential Knowledge Instructional Look Fors, over 50% of the open-response comments included direct mention of specific technologies such as Flip Grid, Google Docs, and Padlet absent larger discussions about how the learners might have used those tools to explain their thinking or engage in problem solving. Future inquiry into how these tools actually supported specific learner actions could be valuable. Further, oftentimes, when educators first learn new tools, they associate the tool itself with the broader learning objective that they intend to achieve[17]. As educators become more comfortable with the tools, then they can focus more on their instructional strategies.

In addition to the comments coded as *technology,* multiple learning facilitators wrote about needing more support with digital tools for themselves as well as their learners. Across content levels, learning facilitators mentioned the need to ensure greater familiarity with different apps. These comments were more prevalent at the elementary level where learning facilitators noted that learners required additional support to accomplish critical tasks such as logging into Zoom and finding Empower playlists. **Therefore, LUSD should consider future professional learning opportunities that address instructional design with technology as well as digital literacy for learning facilitators and learners.**

3. Additional Home Learning Environment Support

Throughout the open response comments, learning facilitators discussed their learners' need for more support at home. Whether it was a 6-8 or 9-12 learning facilitator commenting about how their learners' required more support to stay on task and complete assignments or an elementary learning facilitator reporting that their learners could not access online materials without assistance, home support emerged as a need.

> *Again, I'm providing lots of learning experiences but unless they have family support or someone to hold them accountable at home to continue the learning or finish the learning after a Zoom meeting or following a schedule from Class Dojo I didn't receive work back to see if they were able to apply their learning. (TK-2 learning facilitator)*

[17] Wiske, M. S., Rennebohm Franz, K., & Breit, L. (2004). *Teaching for understanding with technology*. San Francisco: Jossey-Bass.

While learning facilitators shared that they held weekly parent meetings after work, reached out via platforms such as Class Dojo or Remind, and made themselves available, **LUSD leadership needs to consider ways to provide academic, technical, and social support for families to better assist their children during future distance and remote learning situations.**

4. Sustaining Momentum

As the district prepares for the next personalized, remote learning context, sustaining momentum may become more of a challenge. With social distancing, the inability to go to school, and the approaching end of the school year, learning facilitators noted that their learners' effort and enthusiasm began to wane. "They don't like it," reported a 6-8 learning facilitator. "Many of my top learners are not working."

Beyond those who faded towards the end of the year, many learning facilitators had almost no contact with some of their learners on a regular basis. It is important to remember that **only 1.69% of learning facilitators had daily contact with ALL of their learners.** In reality, learning facilitators connected with anywhere from 20-50% of their learners each day. More concerning, **53.17% of the learning facilitators indicated that they had not been able to connect at all with 1-20% of their learners**.

This creates concern not only about reaching those learners but also sustaining momentum with learning facilitators who continually try to maintain regular contact. As one 3-5 learning facilitator shared:

> *Not very many are reaching out to ask questions or to even check in so it is hard to evaluate their growth mindset or goal achievement. Like I said 40% of them check in daily but that doesn't mean they are completing work assigned. I'm answering this survey based on the 20% who check in with me daily and submit their work. That 20% is showing great mindset because even though we are going through some rough times they are committed and continue to pursue their educational goals. I don't know what is stopping the other 80%. I've collected feedback from them on how to make it better. I've contacted parents letting them know their child is not completing assignments. I have connected one on one with some of them to explain, yet I don't see progress. If anything, I've had to keep a growth mindset myself and not give up.*

Leaders must consider ways to provide clear expectations for contact as well as strategies and social emotional support for their learning facilitators as well as their learners before the next shift to a remote-only context.

Final Take-Aways

The 2020 COVID-19 school closure created an opportunity to examine how the Instructional Look Fors manifested in a remote environment. Therefore, this report asked the broad research question: *What does the Learner experience look like in a personalized, remote learning environment?* From both the quantitative and qualitative data, we could ascertain *WHICH* learner and learning facilitator actions occurred most frequently and *HOW* they manifested across content levels.

WHICH learner actions occurred most frequently

Despite the challenges of learning during a global pandemic, **learning facilitators indicated that many learners put forward consistent effort, persisted in their work towards achieving their goals, tried new strategies to improve their learning, and showed kindness towards their peers**. Learning facilitators believed that their learners felt safe, cared for, comfortable, and supported in their learning environments. After looking across the various principles, we can make several observations.

Learning facilitators reported observing actions associated with Community more frequently than the other three Principles.

Over 87% of the learning facilitators from all content levels noted that their learners felt cared for either *frequently, somewhat frequently,* or *very frequently*. The prevalence of these actions could be due to the explicit focus that the district placed on the Community Principle before the start of remote learning. It also aligns with findings from two previous studies mentioned at the start of this report.

- Both Community and Customization had the highest observed frequency in the BetterLesson and PBLWorks report on the effects of instructional behaviors on learner outcomes.
- With the Guided Reading Report, the most frequently observed learning facilitator actions aligned with the Community Principle.

Based on the quantitative data, learning facilitators reported that they observed actions associated with Purposefulness less frequently.

Although approximately 50% of the learning facilitators reported observing learner actions associated with Goal Orientation & Awareness either *often* or *sometimes*, fewer than 15% noted that their learners demonstrated these actions *always*. Additionally, over 35% of 3-5 learning facilitators and 55% of TK-2 learning facilitators noted that their learners *rarely* or *never* continued to keep track of their progress in Empower.

Similar discrepancies by content level were reported with Growth Mindset & Academic Urgency. Whereas roughly 70% of 9-12 learning facilitators reported that their learners *often* or *sometimes* demonstrated actions associated with this Look For, the reported percentages were much lower for TK-2 learners.

Within the Rigor Principle, survey data revealed some of the lowest and highest mean scores across all content levels.

Learning facilitators noted that their learners *often remained calm even when presented with feedback* (mean = 2.121, SD =0.940; low score indicates higher frequency) and *cared about their peers' and families' feelings* (mean = 2.164, SD = 0.910). Both of these actions are associated with the Social Emotional Habits Instructional Look For. Further, over 50% of learning facilitators reported that their learners *explained their answers to show what they think* and *continued to use various thinking strategies* at least *3-4 times per week*.

Notably, the actions that aligned to Cognitive Lift and Essential Knowledge which inferred peer collaboration were reported the least. For example, when asked if *learners explained their problem solving to other classmates*, over 15% of learning facilitators indicated *not at all*. This action had the lowest mean score on the survey (mean = 3.458, SD = 1.050).

Learning facilitators also indicated varying frequencies of actions associated with Customization.

The majority of learning facilitators reported that their *learners receive feedback and support to ensure they are learning* at least *3-4 times per week* with more than 30% of learning facilitators for content levels 3-12 noting that this occurs on a *daily* basis. Similarly high percentages (64.6% across content levels) suggest that *learners work hard to do well* at least *3-4 times per week.* Some discrepancies emerged across content levels as approximately 30% of the learning facilitators of 3-5, 6-8, and 9-12 learners noted that their *learners experienced challenge in their learning experiences* on a *daily basis* as compared to only 18.5% in TK-2.

Interestingly, three of the survey questions with the highest mean score (high score implies low frequency) all centered around the theme of goal setting: *participate in a conversation about learning data* (mean = 3.074, SD = 1.027), *keep track of progress in Empower* (mean = 3.108, SD = 1.222), and *consider the best ways to complete a project before beginning* (mean = 3.119l SD = 0.993). Once again, when looking across content levels, learning facilitators in 6-8 and 9-12 reported higher frequencies of these actions.

Finally, despite LUSD making *choice* a district priority, relatively low percentages of learning facilitators indicated that their ***learners chose the kinds of activities and tasks that they wanted to do***. Only 10.4% of learning facilitators indicated that this *always* happened, and discrepancies did exist based on the age of the learner. However, when asked the question, *Since moving to remote learning, what are some ways, if any, learners engaged in more self-directed learning*

and voice & choice? **54.17% of the comments included mention of learner choice, particularly with regards to *whether* learners needed to complete a task and *when* they might choose to do so.**

HOW actions manifested across content levels

The qualitative data provided insights into *how* these actions appeared in context. Although the initial research questions focused on learner actions, with the open response questions, many learning facilitators provided insights into their own educator actions either in response to (or because of) the needs of their learners.

When coding the qualitative data, relatively small percentages of the comments were associated with the specific learner and learning facilitator actions defined by the Instructional Look Fors. Instead, different themes and concepts emerged in conjunction with each Principle.

Learners leveraged technology to explain their thinking, answers, and problem solving.

The most frequently observed learner action from the Rigor Principle was associated with the Cognitive Lift Instructional Look For: *learners explain their answers to show why they think what they think*. From the qualitative data, we found numerous examples of how learners and learning facilitators took advantage of technology tools such as Zoom, SeeSaw, Padlet, Flipgrid, and Google Docs so that learners could share their learning, show their thinking, and explain their problem solving through writing, audio, video, and screencasting.

Even though less than 20% of the learning facilitators described these types of actions, across content levels, we found several examples:

- In TK-2, learners used the microphone in SeeSaw to explain their thinking and even held their paper to the camera during a Zoom session to share what they learned.
- Learners completed written responses as well as explained their thinking through the use of Flipgrid in 3-5.
- As explained by a 9-12 learning facilitator: “They send me video of themselves explaining a level 4 and write [Claim-Evidence-Reasoning] CER essays. [They] describe simulation results, complete STEMscope labs and describe results, post [their findings] to a group Padlet.”

Several learning facilitators also shared how they modeled the process of making virtual explanations in how they provided demonstrations and scaffolding using screencasts or videos. In addition, many learning facilitators noted the benefits of asynchronous explanations and supports. For example:

Providing feedback as a screencast video was supportive because they could review it again, and it contained line-specific feedback. It felt like feedback was more in-depth when I had the time to talk about a learner's work without the demands of being in a classroom with other learners, trying to get it done before the bell rings. (9-12 learning facilitator)

Learning facilitators created opportunities for learners to produce varied forms of evidence of their learning.

As discussed previously, learning facilitators sought to achieve a balance between learner choice and autonomy with the need to provide direction as a means to reduce ambiguity within the remote learning context. For example, learning facilitators offered up *may do/must do* options to help learners prioritize their tasks, gave limited menus of technology tools, and provided task lists in Google Classroom. At the same time, they recognized the need to provide learners with a plan so that they did not feel overwhelmed by options.

Within these boundaries, learners produced multiple forms of evidence of their learning in alignment with the LUSD personalized Performance Based System:

- This evidence ranged from common formative assessments and quizzes to videos and virtual science labs.
- Learning facilitators captured data via platforms like iReady or Socrative and assigned creative multimedia projects using tools like Adobe Spark.
- Using multiple modalities, learning facilitators conducted checks for understanding and afforded learners a variety of ways to demonstrate their learning.

Communicating, self-advocating, and persisting: Learners exemplified many of the traits of the Purposefulness Principle.

During remote learning, across content levels, learning facilitators described how learners consistently maintained their level of effort, persisted during the trying times, and worked through new strategies to learn in a relatively unfamiliar context. Because they felt safe, comfortable, and cared for, learners proactively reached out for clarification and feedback via text, video, and audio.

In response, many of the learning facilitators demonstrated educator actions associated with the Purposefulness Instructional Look For. They held office hours, met one-on-one with learners as well as their families, ran Zoom meetings at all hours, made phone calls, sent texts, and even monitored their learners via GoGuardian so that they could provide in-the-moment feedback via chat. Learning facilitators provided individual instructional support for both academic and social emotional learning. As mentioned previously, learners in LUSD demonstrated many of the tenets of the Purposefulness Principle simply by attempting remote learning and persevering to the end of the school year.

Learners and Learning Facilitators shared in the process of maintaining a safe and supportive learning community.

District leadership in LUSD communicated that maintaining a sense of Community would remain a priority during remote-only instruction. As proof of this occurring, learning facilitators noted that their learners were happy to see everyone online via Zoom or Google Meet. They wanted to share what had been happening in their lives and with their families. As one 9-12 learning facilitator wrote:

> *After lectures or presentations or individual meetings, they will continue conversing and it seems that they need time for emotional social time with their peers and their learning facilitator.*

To accomplish this feat, learning facilitators demonstrated compassion, made themselves available at all hours, and created both academic and social opportunities. Especially at the TK-2 level, learning facilitators read "social stories" and encouraged participation through singing, dancing, and games.

What LUSD leaders can learn

Based on all of the analysis in this report as well as the final observations, the following four trends should inform LUSD leadership's decision making as they consider preparing for future remote learning.

1. Learner Support and Relationships

In general, learning facilitators perceived that their learners felt safe, cared for, and supported — especially at the younger levels. However, it appears necessary to build more support structures at the high school level where a higher percentage of teachers indicated that they had more concerns about their learners' social emotional well-being.

2. Technology Support & Professional Learning

The qualitative analysis of the Cognitive Lift and Essential Knowledge Instructional Look Fors revealed that learning facilitators and learners required more support with digital tools, and across content levels, learning facilitators mentioned the need to ensure greater familiarity with different apps. These comments were more prevalent at the elementary level where learning facilitators noted that learners required additional support to accomplish critical tasks such as logging into Zoom and finding Empower playlists. Therefore, LUSD should create future professional learning opportunities that address digital literacy for learning facilitators and learners.

3. Additional Home Learning Environment Support

Throughout the open response comments, learning facilitators discussed their learners' need for more support at home across content levels. This support extended from the technical (accessing online resources and course materials) to emotional (ensuring that learners stayed on task and

motivated). Despite numerous outreach strategies such as weekly parent meetings after work as well as reminders and notices sent out via platforms such as Class Dojo or Remind, learning facilitators still noted the need for more ways to assist learners at home. Therefore, LUSD leadership should consider ways to provide academic, technical, and social support for families should remote learning occur again.

4. Sustaining Momentum

Sustaining (and maintaining) momentum poses a challenge for when the district returns to a personalized, remote learning context in the future. For those learners who regularly participated, learning facilitators noted that their energy and enthusiasm decreased over time. More concerning, learning facilitators reported that they **lacked consistent contact with 1-20% of their learners**. This creates a double challenge: ensuring that learners are not "lost" in a remote context and providing support to learning facilitators as they continue to strive to reach all of their learners.

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Appendix A - Survey Instrument Questions

Introduction

LUSD has committed to ensuring that every learner has the best learning experience every day. The goal of this survey is to begin to understand what the remote learning experience may look like for Lindsay learners. The district will use information from this survey to inform future investments in professional learning opportunities as well as resources to support continued remote learning, should that be required in the next school year.

This survey is anonymous and only asks that you report the content level range in which you teach. You will be asked to complete a combination of multiple-choice and short-answer questions. Your input is highly valued and appreciated.

General Information

1. Please indicate the content level range of your learners:
    - TK-2
    - 3-5
    - 6-8
    - 9-12
2. What percentage of your learners have you connected with on a DAILY basis since moving to remote instruction?
    - 0-10%
    - 11-20%
    - 21-30%
    - 31-40%
    - 41-50%
    - 51-60%
    - 61-70%
    - 71-80%
    - 81-90%
    - 91-99%
    - 100%
3. **Open Response:** Please describe how often you have connected with those learners who you do NOT hear from on a daily basis. (i.e., I have heard from 40% on a weekly basis and about 20% just a few times)
4. What percentage of your learners have you NOT been able to connect with since moving to remote instruction?
    - 0-10%
    - 11-20%

- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- 91-99%
- 100%

Rigor Principle

Cognitive Lift Look For

Since moving to remote learning, with what frequency have the learners you've been connecting with had the opportunity to do the following either during Zoom sessions or through other synchronous/asynchronous tools?

Scale: *Daily; 3-4 times per week; 1-2 times per week; On a few occasions; Not at all*

5. Explain their answers to show why they think what they think.
6. Examine possible solutions or answers with their peers.
7. Explain how they work out problems to other classmates.
8. Continue to use various thinking skills and not just memorize content.
9. **Open Response:** Since moving to remote learning, what are some ways, if any, learners have explained their thinking and learning?

Essential Knowledge Look For

How often do the learners you've been connecting with do the following during Zoom sessions or via other synchronous platforms?

Scale: *Always; Often; Sometimes; Rarely; Never*

10. Discuss different solutions or points of view.
11. Correct their mistakes or thinking on a topic.
12. Use evidence or data to support their claims or hypotheses.
13. **Open Response:** What structures or supports, if any, have you put in place to support learners engaging with instructional topics in a remote environment?

Social Emotional Habits Look For

How often have you noticed the following behaviors from your learners since shifting to remote learning?

Scale: *Always; Often; Sometimes; Rarely; Never*

14. Learners remain calm even when provided feedback.
15. Learners care about their peers' and families' feelings.
16. Learners describe their thoughts and feelings in ways that others understand.
17. **Open Response:** Since moving to remote learning, what are some ways, if any, you have observed changes in your learners' social emotional skills as compared to before facilities closed?

Customization Principle

Appropriate Challenge Look For

Since moving to remote learning, with what frequency have your learners had the opportunity to do the following either during Zoom sessions or through other synchronous/asynchronous tools?

Scale: *Daily; 3-4 times per week; 1-2 times per week; On a few occasions; Not at all*

18. Experience challenge in their new and ongoing learning experiences.
19. Work hard and try to do well.
20. Participate in a conversation about their learning data.
21. **Open Response:** What is an example, if any, from your remote instruction of a learner feeling their instructional needs were met and supported?

Student-Driven Look For

Since moving to a remote learning environment, how often do your learners do the following?

Scale: *Always; Often; Sometimes; Rarely; Never*

22. Before starting on a challenging project, learners think about the best way to do it.
23. Learners choose what kind of activities and tasks they want to do.
24. Learners use strategies to learn more effectively.
25. **Open Response:** Since moving to remote learning, what are some ways, in any, learners engaged in more self-directed learning and voice and choice?

Personalization Construct

Since moving to remote learning, with what frequency have your learners had the opportunity to do the following either during Zoom sessions or through other synchronous/asynchronous tools?

Scale: *Daily, 3-4 times per week; 1-2 times per week; On a few occasions; Not at all*

26. My learners receive feedback and support to ensure that they understand the learning.
27. My learners get individual instructional attention, supports, or scaffolds.
28. My learners reach out to get extra help on their learning.
29. My learners demonstrate that they understand a topic before moving on to a new one.
30. **Open Response:** Since moving to remote learning, what are some ways, if any, learners have demonstrated their learning and received the appropriate support?

Purposefulness Principle

Goal Orientation & Awareness of Progress Constructs

Since moving to remote learning, how often do your learners do the following?

Scale: *Always; Often; Sometimes; Rarely; Never*

31. If a learner fails to reach an important goal, they try again.
32. Learners have made progress and persevere towards their goals.
33. Learners continue to keep track of their learning progress in Empower.
34. **Open Response:** Since moving to remote learning, what are some ways, if any, learners have worked toward meaningful short- and long-term goals?

Growth Mindset & Academic Urgency Constructs

Since moving to remote learning, how often are your learners doing the following?

Scale: *Always; Often; Sometimes; Rarely; Never*

35. When they get stuck while learning something new, learners try a different strategy.
36. Learners think about ways to improve the quality of their work.
37. Learners bounce back from delays, obstacles, or disappointments.
38. In Zoom or other synchronous sessions, learners pay attention and resist distractions.
39. **Open Response:** Since moving to remote learning, what are some ways, if any, learners have used a growth mindset and tried to make progress in their learning?

Community Principle

Since moving to remote learning, how frequently do you believe that your learners have the following feelings?

Scale: *Very Frequently; Somewhat Frequently; Frequently; Sporadically; Never*

40. Even during remote instruction, my learners feel like a part of a virtual learning community.
41. My learners feel as though I really care about them.
42. Learners believe that the norms in the virtual community are fair.
43. Learners feel safe in their virtual learning community both during synchronous and asynchronous interactions.
44. **Open Response:** Since moving to remote learning, what are some ways, if any, learners have demonstrated feeling safe and connected during virtual learning?

Appendix B - Qualitative Codebook

Using an iterative, multicycle process, two rounds of coding occurred until saturation. After importing the data into a spreadsheet program for analysis, the researcher categorized elements using codes associated with the Instructional Look Fors as well as emergent codes. During the second round, the researcher applied these provisional codes, as well as codes associated with broader themes, to the data. Each open-response question was coded separately.

Rigor Principle

Students stretch themselves intellectually and personally by engaging with skills, habits, and content in challenging, developmentally appropriate ways.

Cognitive Lift

Students do the majority of the cognitive lifting — explaining, making connections, addressing questions, etc. — during written work and discourse.

- **Cognitive Lift** (broader theme coded in cycle 2 to bring these codes together into the construct)
    - **Explain -** learners explain their thinking (Look For)
    - **Examine -** learners examine different possible solutions to problems (Look For)
    - **Show/Share Thinking -** invivo code (i.e., show their thinking)
    - **Summarize -** LF specifically states that students summarize what they learn.
    - **Create -** LF states that learners create products to share their thinking
    - **Solve Problems -** describes explicit learner action
    - **Describe -** refers to asking students to describe their thinking or process
    - **Answer Questions -** LF specifically identifies this activity
    - **Communicate -** states either text or oral communication
- **Product -** describes the object produced vs the thinking
- **Technology -** describes a tool or app but not what was done or created
- **Discussion -** describes process of engaging in discussion (i.e., through Zoom)
- **Activity -** describes the act of doing an undefined activity
- **Hard -** LF indicates that it is difficult with the learners
- **Respond to Content -** indicates that students complete an activity as prompted by the LF
- **Content -** lists out content areas (i.e., math)
- **Exploring -** invivo code

Essential Knowledge

Learners engage deeply with complex and challenging facts and concepts that build a meaningful foundation of knowledge.

- **Learner Action (Theme)**
    - Discuss (e.g., solutions, points of view, opinions)
    - Correct (correct their mistakes or thinking)
    - Evidence (use evidence or data)
- **LF Action (Theme)**

    - **Explanation -** states need to provide explanation/clarification but not in the form of a differentiated support; may not be connected to responsiveness
    - **Help -** LF describes structures in place to provide assistance to learners
    - **Responsiveness -** LF describes how they respond to learners to help them gain knowledge (e.g., office hours, 1:1, answering emails, Zoom, any mention of how they respond)
    - **Instructional Support -** describes what LF does to make it easier for learner (e.g., record audio instructions)
    - **SOP -** when focus of structure is on creating the procedure for operating within a remote environment; becomes virtual classroom management
    - **Parent Support -** explicitly states that learners require parent support as a way to acquire essential knowledge
    - **Understanding -** LF states that they check for understanding/comprehension
    - **Ask Questions -** LF creates opportunity for learner to ask questions and seek clarification
    - **LF Look For Action**
        - **Monitoring -** LF keeps tabs on learner (e.g., thinking, questions, understanding)
        - **Correcting -** LF corrects student misconceptions
        - **Priming Activities -** activities specifically to motivate and prepare learners
        - **Demos -** conducting or presenting compelling demonstrations
        - **Self-Directed Learning -** reinforces development as a self-directed learner
        - **Language Differentiation -** explicitly states providing dual language support.
- **Product -** describes the object produced vs the thinking
- **Technology -** describes a tool or app but not what was done or created
- **Peer Support -** LF states that peer support is in place to scaffold learning
- **Hard -** indicates that it is difficult with the learners
- **Reward -** LF explicitly describes some form of extrinsic reward provided to the learners
- **Engage -** vague statement that “learners engage” but no explanation of how or in what
- **Activity -** describes the act of doing an undefined activity

Social Emotional Habits

Learners consciously apply key social emotional habits necessary for lifelong success to their interpersonal and intrapersonal activities.

- **Instructional Look Fors**
    - **Remain Calm (learner) -** remains calm in situations
    - **Care (learner) -** cares about others’ emotions/feelings
    - **Feelings/Emotions (learner) -** describes thoughts and feelings
    - **Modeling Habits (LF) -** models social emotional habits
    - **Providing Instruction (LF) -** provides direct instruction to support social emotional learning
    - **Emphasize Importance (LF) -** emphasizes the importance of feelings and emotions
    - **Positive Reinforcement (LF) -** provides positive reinforcement.

- In vivo codes describing learner emotions
    - **Withdrawn -** LF indicates that percentage of students have withdrawn from learning
    - **Assertive -** LF indicates that learners have been more assertive.
    - Frustrated
    - Overwhelmed
    - Confused
    - **Struggle -** comment may describe how students are struggling to adapt or to communicate, for example
    - **Stress -** perceiving stress, especially because of uncertainty
    - Grieving
    - Depressed
    - Less motivation
    - Less stressed
    - **Faces -** LF indicates that learners do not want to “show their faces” on Zoom
    - **Excited -** learners indicate they are excited to see peers and have social interactions via Zoom
    - **Distracted -** LF notes that learners are easily distracted in online setting
    - Less self-reliant
    - More engaged
    - Happy to have mom at home all the time
    - Sad (especially with little ones)
    - Self-control
    - **Sensitive to feedback -** LF indicates that learners are sensitive and feel as though they are not being successful
    - Bored
    - Lonely
- **LF Observations**
    - **Proactive -** LF indicates that learners reaching out with questions or for support
    - **Unsupported -** LF indicates that learners feel as though they do not have adult support from home or school
    - **Less Interaction -** LF comments that learners are not interacting with their peers either socially or academically because of quarantine
    - **Dependent -** LF indicates that learners seem to depend more on them and parents; less willing to problem-solve; lack of confidence
    - **Progressing -** indication that learners have maintained existing levels of SEL or are doing well in the learning environment
    - **Emotional -** either LF notes that learners are more emotional or describes that they are fragile, or worried, or sad
    - **Social -** some learners want to share all the time
    - **Miss -** learners miss peers, LFs, and/or school
    - **Less communication -** general statement from LF that they have not connected with groups of learners
    - **SOP -** brought this back over when LF explicitly states that learners need rules/etiquette for engaging online

Customization Principle

Students engage in experiences tailored to their learning needs, preferences for how to learn, and specific developmental levels.

Appropriate Challenge

Learners engage with appropriately challenging activities that meet them at their developmental level, stretching them just beyond their comfort zone.

- **Learner Actions**
    - **Challenge -** learners engage with challenging materials or activities
    - **Try -** learners work hard and put in effort to do well
    - **Conversation -** learners discuss progress with LF
- **Survival Mode -** In vivo. LF indicates that they are just trying to get through to the end of the year
- **Support -** LF indicates they are providing ongoing support
- **Thank -** LF states that learners thank them for support
- **LF Actions**
    - **Groups -** LF uses small-group (rather than whole-group) instruction to differentiate
    - **Scaffolds -** LF mentions some form of scaffolding such as reteaching
    - **Data -** learner feedback or assessment feedback to inform instruction
    - **Individual Instruction -** LF explicitly states that they provide 1:1 support
    - **Feedback -** how LF provides feedback and/or that the learners ask for it
    - **Modalities -** statement that learners use a variety of tools to show learning
- **Learning Targets -** statement that learners are meeting targets as the answer to the question
- **Parent Support -** LF notes that learner had or did not have parent support (key to their performance)
- **Excited/Happy to Learn -** LF indicates that learners are still excited or happy to learn; more affective than “try,” which seems tied to effort
- **SEL -** statement about emotions and the need to address psychology of learners (e.g., they will contact me when they feel low)
- **Choose Not to Do -** LF indicates learners choose to not do their work

Student Driven

Learners deliberately self assess, set goals, create plans to meet those goals, and progress along their learning pathway in ways that allow them to be appropriately challenged and meet their objectives.

- **Learner Actions (Theme)**
    - **Set Goals -** learner sets personal goals
    - **Self-Assess -** learner self-assesses and self-corrects
    - **Agency -** learner takes responsibility for learning
- **LF Actions (Theme)**

    - **Choice -** might be used interchangeably with “voice and choice” or that learners can choose activities, topics, or forms of expression
    - **Design -** LF designs activities/lessons/experiences to foster agency and encourage meaningful learning
    - **Routines -** LF establishes routines to support learners having choice and/or engaging in meaningful learning
    - **Reflection -** LF creates opportunities for meaningful reflection
    - **Plan -** LF meets with learners to create individual learning plans
- **Directed Learning -** LF states that they have needed to bound learning to accomplish objectives
- **Collaborate -** learners work together instead of with the LF
- **Challenge -** LF states that the learners faced a hurdle or challenge with the remote model (e.g., they don’t know how to advocate and fell behind)
- **Home Support -** LF states that learner needs more support at home
- **IDK -** LF writes that they don’t know
- **Unclear -** LF comment seems disconnected from prompt (e.g., express by sharing feelings)

Personalization

Learners receive supports and engage in learning activities tailored to their unique profile of defined learning needs and preferences. They also demonstrate their evolving knowledge, skills, and habits through a variety of modalities and at various points in the learning process. This construct is a combination of two Instructional Look Fors within the *Customization* principle: *Additional Supports for Students with IEPs or Defined Language Needs* and *Demonstrations of Learning*.

- **Learner Action (Theme)**
    - Ask for Help
        - Neg - learners/families NOT asking for help
        - Pos - learners ask for help
    - Demonstrate Understanding
- **LF Action (theme)**
    - **Checks for Understanding -** LF regularly checks learner understanding to adapt instruction; often in vivo code
    - **Individual Instruction -** learners receive individual feedback and support
    - **Multiple Modalities -** LF offers content and experience in multiple modes
    - **Strategies -** LF uses different research-based strategies
    - **Options -** LF offers various options to show mastery
    - **On-Demand Assessment -** learners can choose when they are ready to test for mastery
    - **Feedback -** LF states that they provide feedback as a form of support
- **Thank -** LF mentions learner gratitude
- **Evidence -** LF states that a product or project submitted by a learner serves as evidence of learning/understanding; often shared as “through writing” or “on quizzes”
- **Technology -** mention of a specific technology tool or application

- **Engaging -** LF mentions that learners demonstrate their understanding by engaging with them via Zoom or other platforms
- **Challenge -** LF explains efforts and then describes the challenge of getting the learner to do the work
- **PBL -** LF explicitly mentions the use of PBL (vs project)

Purposefulness Principle

Purposefulness combines multiple concepts into a single principle to describe the effort and energy that learners put into their work, how they approach their own goal setting, as well as how they monitor their own progress towards achieving their objectives. We combined multiple Instructional Look Fors into two sub-constructs.

Goals and Objectives

The *Goal Orientation* Look For describes how learners work towards meaningful goals and develop the capacity to articulate why they prioritize them. *Awareness of Progress* describes how learners recognize and monitor their own progress through self-reflection, peer feedback, and learning facilitator guidance.

- **Learner Actions (Theme)**
    - **Perseverance -** if a learner doesn't attain a goal, then they persist
    - **Monitor -** learners track their progress in Empower (or other platforms like iReady or Clever)
- **LF Actions (Theme)**
    - **Instruction -** LF provides direct instruction on how to achieve goals
    - **Routines -** LF builds in routines and systems to help learners self-monitor
    - **Data -** LF uses and/or provides data about progress to learners
    - **Check-Ins -** LF regularly meets with learners to discuss goals
    - **Family Support -** LF works with families to help learners
    - **Feedback -** LF gives learner feedback (which could also include tools or resources)
- **Completed** - learners have completed learning targets, activities, or projects
- **Progress -** LF makes a statement that learners have made progress
- **Incentive -** LF offers an incentive to get learners to do work
- **Set Goals -** describes a formal process where learners set goals
- **Statement -** LF makes a general statement that describes the goals of a learner or how learners might be moving towards goals but does not address the question

Mindset and Agency

Learners who possess the traits of a Growth Mindset are more willing to engage and persevere when learning becomes difficult or they may make a mistake; they avoid negative commentary or self-deprecating comments and instead use more positive or self-motivating language to describe their actions. Academic Urgency allows learners to use their time, effort, and energy more strategically as well as to employ self-regulation strategies.

- **Learner Actions (Theme)**
    - **Try Strategies -** learners try strategies when stuck
    - **Quality -** learners improve or focus on quality of their work
        - Pos - LF comments that learners work to improve quality
        - Neg - learners seem willing to sacrifice quality
    - **Resist Distractions -** learner demonstrates ability to maintain focus
- **LF Actions (Theme)**
    - **Support -** provides guidance or support to help learners
    - **Instruction -** gives explicit instruction to learners about requisite skills
    - **Routines -** establishes clear routines for in class (or in Zoom)
    - **Explicit -** provides explicit directions or feedback to learners
    - **Positive -** recognizes growth
- **Focused -** learner stays focused on one task/class/project before moving on
- **Adapted -** statement that learners have adapted to new context
- **Consistent -** learners continue to work/consistently work
- **Ask Questions -** learners ask questions
- **Judgement -** LF makes a judgement call about learner's mindset (e.g., a statement claiming those who have been silent do not have a growth mindset)
- **SEL -** some mention of personal connection as a source of motivation
- **Model -** LF acknowledges the need to have and model a growth mindset
- **Independence -** learners demonstrate their ability to be self-directed and independent
- **Statement -** generic statement (e.g., "they used a growth mindset")
- **Self-Correction -** learners reflect on what they need to do and then self-correct
- **Skill -** LF describes a specific skill or content area (e.g., "learning Zoom")
- **Persistent -** learner retries something or redoes a task (may or may not involve changing strategies); willing to give something a second chance
- **Advocate -** learners advocate for themselves
- **Goals -** LF mentions learner goal-setting and meeting goals
- **Challenge -** LF describes these actions as a challenge for learners

Community

This principle consists of multiple Instructional Look Fors including *Connectedness* – the positive relationships that learners have with their peers as well as with the adults who act as role models and provide emotional support when needed and *Upholding Norms* – the process by which learning facilitators maintain physical and emotional safety as well as a sense of predictability and routine.

- **Learner Feelings/Action**
    - **Belonging -** learners feel as though they are part of community
    - **Cared For -** learners feel as though LF cares for them
    - **Fair -** learners feel as though rules and norms are fair
    - **Safe -** learners feel safe in the community
    - **Support -** learners feel as though they can get the emotional support that they need; they also give support to peers
- **LF Feelings/Actions**

    - **Celebration -** provides positive language and support; celebrates learners and praises upholding class norms
    - **Compassion -** demonstrates compassion and understanding towards learners
    - **Expectations -** provides clear guidelines and expectations about behaviors and norms
    - **SOP -** creates concrete guidelines and procedures for operating in a remote environment
    - **Model -** models positive attitudes and feelings
- **Comfortable -** learners feel comfortable to ask questions, seek help, or share feelings
- **Compliant -** LF indicates that learner upholds *their* norms
- **Face -** showing face on Zoom indicates a feeling of connectedness or safety
- **Connected -** in vivo code; LF states that learners feel connected
- **Free -** in vivo code; learners feel free to voice opinions
- **Positive -** LF receives positive comments from learners (e.g., comments in emails are positive, respectful, sweet, caring)
- **Challenge -** LF notes that it's "hard to tell" or "cannot get in their heads"
- **Showing Up -** LF associates attendance/basic participation with feeling safe/supported
    - **Reaching Out -** communication via email, Zoom, or other platforms
    - **Share -** learners are willing to share
- **Need Protocols -** LF states that learners are struggling and need more clear protocols or expectations for the future
- **Fun -** LF indicates they are playing games or other social activity; fun creates a sense of community
- **Negative -** learners not happy with remote context
- **Emotion -** LF indicates that learners are happy or react positively to seeing them (particularly for TK-2 learners)
- **Statement -** generic statement
- **Thank -** families or learners are appreciative
- **Technology -** explicit mention of a tool only

About this Project

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