As the transition to remote learning illuminated the digital divide and the technology needs of Kansas City public school students, it also changed the way educators taught and engaged with students and families. For students that did not have connectivity or access to technological devices, the instructional options for teachers were extremely limited. For students without connectivity or devices, schools resorted to sending paper packets of instructional materials to families without internet access or devices through food distribution channels, while continuing online remote learning for students with access. LEANLAB wanted to understand the challenges educators were experiencing and the creative solutions they were developing in response to this remote learning context and, in particular, in contexts with limited access to technology. By uncovering teacher challenges and innovations—new and creative processes and/or tools, which helped teachers overcome the challenges they were experiencing—LEANLAB is able to illuminate both gaps and “bright spots” of our teacher’s remote instructional practices, and use this data to inform future instructional supports and interventions.
SURVEY DEMOGRAPHICS
LEANLAB distributed a teacher survey across the entire Kansas City metro area in early April in collaboration with Kansas City Education Collective (KCEC) and the Latinx Education Collaborative, two local start-up education non-profits focused on building collaborative learning opportunities for educators across the Kansas City metro. A total of 197 teachers from charter schools responded and 61 teachers from non-charter schools responded. Of the 258 respondents, 58% teach in an elementary school, 30% of respondents teach in a middle school, and 12% of respondents teach in a high school.
Teachers were given an open-ended question that asked them to identify the main challenges they were having related to teaching in a virtual format. Responses were then categorized accordingly, and the results are illustrated above. The most common challenge among teachers was a connectivity barrier, as they described not being able to virtually connect with many of their students that didn’t have access to the internet at home. Many teachers were concerned of how a lack of connectivity was creating unfair advantages for some students:

• “If students live in a home without a workspace or the resources needed to learn at home, I’m afraid they won’t be on-level with peers.”
• “Students who have support at home are doing very well. [Connectivity] is widening the gap for our students.”
• “Virtual learning highlights the digital divide. Students with access to reliable Internet, safe & quiet places to work and adults at home with the knowledge to support them are doing OK. Students without those advantages are being left behind. This is a huge widening of the opportunity gap.”

The second most common challenge that teachers reported was low student engagement. Teachers found it hard to keep students engaged in the material and assess progress, stating that a virtual context cannot replicate in-person instruction, nor peer interaction:

• “There is nothing that can replace being in a classroom.”
• “Some students require more hands on learning and engagement [than] virtual learning is able to do.”

The third most common challenge for teachers related to virtual instruction was that they found it difficult to communicate with their students in a virtual context.

• “Since there is not a set schedule at home, I am unable to communicate on a regular basis with all of my students. Our working hours are not the same.”
• “Only being able to communicate with students via a chat system and not a voice conversation is difficult. It takes a lot of typing and reading for a student to follow assistance when needing help rather than a quick conversation.”

Finally, the fourth most common teaching challenge was that teachers were either unfamiliar with instructional technology tools, or their students or caregivers were unfamiliar with the tools, making instruction laborious and challenging.

• “Students are not prepared to properly use technology independently.”
• “Getting parents to understand/use the technology. Many will give up before trying.”
The survey asked teachers an open-ended question about challenges related to social-emotional learning - the process of developing and using social and emotional skills - and the top challenges are illustrated in the figure above.

The top three challenges for teachers related to the difficulty of establishing necessary social-emotional learning conditions that were not easily duplicated out of a traditional classroom setting - 1) “in-person contact,” 2) an “authentic environment,” and 3) “being able to use instinct”:

- “Some students need the connection we can’t give them virtually.”
- “I cannot interpret their responses behind just written words.”
- “Knowing that the social-emotional supports in school are not always available at home. It is hard when students reach out to say ‘HI’ and ‘I miss you’ and we can’t see eye-to-eye or give that hug.”
- “Social-emotional learning is most authentic when put into the context of real-life situations, such as an argument with a peer, a moment where we calm down together.”
- “I can’t see the kids. I can’t gauge by their faces, tone, body language how they are doing. Are their parents frustrated with this too and yelling at them or even worse? Are they using the tools we’ve taught them when they are upset or scared? It’s really hard right now.”
WHEN IT COMES TO SOCIAL-EMOTIONAL LEARNING OF YOUR STUDENTS, WHAT HAVE YOU NOTICED ARE THE BIGGEST CHALLENGES FOR STUDENTS

The survey also asked teachers an open-ended question about what they believed were the biggest challenges for the students regarding the students’ social-emotional learning. The responses were categorized accordingly and the results are illustrated above. The most common response was that teachers believed students were “missing their friends,” resulting in a negative emotional toll on the students.

- “Many students feel very isolated, and want to be back in school. I see students who miss their routine, the structure, the love and support from staff and teachers, and feel very uncertain about the future. This weighs on them heavily.”
- “They miss the community of the classroom. That is not something that can be replicated virtually.”
- “They miss the actual classroom experiences that come with building friendships and receiving support from their peers.”

An additional two categories were illuminated from the respondents’ data: increased inconsistency in student’s schedules and routines as well as demanding home environments led to social-emotional learning challenges for students.

- “I think it has been difficult for some students to adjust to at-home/remote learning...students are not used to spending time at home doing their daily school work...they are still adjusting to their individual home/family schedules...their parents are also working at home.”
- “Students are anxious because some of their families are struggling.”
- “Students are concerned about family health, unemployment, and food. Many high school students are taking on more responsibilities like taking care of younger siblings or working at grocery stores to help the family out.”
- “Those students who have homes that don’t serve as a center of safety and security are having the hardest time being there. We have had a few students attempt to run away from home.”
Despite these challenges, teachers reported a number of successes with virtual learning. The top two most common successes identified by teachers centered on online learning platforms. 24% of respondents mentioned a specific online tool that they felt had been particularly useful (i.e. Seesaw, Class Dojo, Zoom) and 20% specifically mentioned Google Classroom as a helpful platform. For those teachers that identified student engagement as a success, almost all of them gave credit to a particular online learning platform.

- “Many students are excited to learn new material and see all of their friends during live lessons. We use zoom and the screen share so that the lesson is not much different than it would be if we were in class.”
- “Students are using a variety of digital tools to access learning and they are also using a variety of tools to show what they are learning. I’ve been able to create and upload videos that incorporate Google Slides next to a video of me teaching the lesson.”
- “I’ve enjoyed doing video chat “Lunch Bunches” with my students that is not academic and really focused on keeping the classroom community alive.”

Finally, teacher collaboration was key to success. 16% of respondents said lesson planning for a virtual context was going well, especially when they collaborated with other teachers. 10% of respondents said that collaborating with other teachers on delivering content to students contributed to their biggest success.

- “Leaning on my grade level team and sharing resources is valuable. We plan together and share videos of us reading.
- “We have split up the tasks among our five member team to make sure we are getting the most attention in every subject. That way, we are not getting burned out on trying to do all everything on our own.”
Four key challenge areas for educators emerged from the survey.

1. **LACK OF CONNECTIVITY**
   - Teachers struggled to provide instruction to students who did not have reliable access to the internet in their homes. A lack of connectivity was the most cited barrier to student learning.
   - Teachers struggled to get in touch with families to check in on the social-emotional health of their students.

2. **STUDENT & FAMILY ENGAGEMENT**
   - Teachers noted that students were missing their friends. Virtual classroom environments are not sufficient replacements for in-person interactions among peers. Similarly, teachers perceived social isolation as having significant consequences for students’ learning and engagement.
   - Teachers noted that the reality of remote learning was contingent upon parent support or adult engagement in the home, but major barriers existed that prevented full parent-engagement, such as parents working full time, families having multiple children in the household, etc.

3. **SOCIAL EMOTIONAL LEARNING & SUPPORT**
   - It was difficult for teachers to build authentic environments with students where they could feel safe, honest, and truly heard.
   - Teachers noted that students were missing their friends. Virtual classroom environments are not sufficient replacements for in-person interactions among peers. Similarly, teachers perceived social isolation as having significant consequences for students’ learning and engagement.
   - Teachers perceived that it was difficult for many students to establish a school routine at home, with many students balancing additional home-life responsibilities.

4. **IT & LEARNING SUPPORT**
   - For many teachers, navigating the plethora of edtech tools was overwhelming and they were unfamiliar with how to effectively use many of them.
   - It was difficult for teachers to adapt and execute lessons for a digital, remote environment.
The results of the teacher survey demonstrate the real-life consequences of the digital divide on teacher instruction and student learning. Again, a lack of connectivity in homes emerged as the primary challenge for teachers in a virtual context. Teachers described how they couldn’t establish personal connections with students virtually and that left them feeling worried for their students’ academic progress and social-emotional well-being. Teachers were particularly concerned about the widening opportunity and learning gap between students with access to the internet and those without. While teachers described the limitations of a virtual context for meaningful peer and teacher interaction and social-emotional learning for all students, the engaging online interactions teachers were able to create were lost for those students without access to the internet.

As a way to support teachers in response to the challenges they identified, LEANLAB is taking steps to partner with other education non-profits to provide collaborative, joint professional development opportunities to support educators navigating the realities of remote learning. Moving forward, teachers will no longer be in a “chalkboard era.” In the words of Kansas City Public Schools Superintendent Dr. Mark Bedell, “[School] will never look the same when this is all said and done. If all we’re trying to do right now is just get through it and survive and then we go back, we will be completely irrelevant post-COVID-19.” This is an opportunity for schools, community organizations, and elected leaders to be creative in the educational solutions we try in schools, at home, and in our community. Through an innovative mindset and willingness to go beyond traditional classroom practices, Kansas City could not only bridge the digital divide and make learning opportunities available for all students, the city could emerge as a leader, having redefined the education frameworks that will yield the next generation of active citizens.