FALL CONNECTIVITY REPORT

Continuing Assessment of the Digital Divide Across Kansas City Schools

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BACKGROUND
LEANLAB Education is a Kansas City based nonprofit whose mission is to launch transformational education innovations that have national impact. Over the last 7 years, LEANLAB has focused its work on collaboratively developing education innovations (technologies and services) in partnership with the communities they serve—parents, students and educators.

INTRODUCTION
When the onset of COVID-19 first began in March of 2020, school leaders across the metro were forced to transition to virtual, or distance learning. A digital divide, the gap between students with computer and internet access and those without, became more and more apparent. LEANLAB Education made it a priority to partner with Kansas City schools to assess the internet connectivity and technology needs in Kansas City households for students to equitably participate in distance learning.

GOALS OF THIS REPORT

1. Assess current needs for internet connectivity for public school students in the Kansas City area.

2. Illuminate progress made toward closing the digital divide since the spring.

3. Present timely reports of the remaining need to key funders and influencers who can create change.

“INTERNET CONNECTIVITY SHOULD BE AS BASIC AS ELECTRICITY AND EVERYONE SHOULD HAVE ACCESS TO IT.”

-School Administrator
PRIOR CONNECTIVITY EFFORTS

PRIOR FINDINGS COLLECTED FROM BRIDGING BARRIERS REPORT OF EDUCATIONAL DIGITAL DIVIDE IN KANSAS CITY

In June 2020, LEANLAB Education assessed the technology and connectivity needs of 22 participating schools and released the findings in the Bridging Barriers Report. These schools were categorized into three tiers: Tier I includes 17 charter schools, Tier II includes 4 other public school districts, and Tier III includes the Kansas City, Kansas School District, the only participating school district in the state of Kansas. In total, the 22 schools included 59,110 students, of which 2,562 (or 4% of the student population) needed devices, and 12,757 (or 21% of the student population) needed internet access. Additionally, 33% of surveyed teachers named connectivity as their biggest barrier to providing distance learning.

In order to address these outstanding needs, LEANLAB Education made data-informed recommendations to area philanthropists and individuals interested in supporting immediate connectivity needs. Specifically, LEANLAB worked with SchoolSmartKC—a funder specializing in strategic investments for charter and district schools within the Kansas City Public School District boundaries—on an effort to allocate financial and instructional resources through an accelerated grant-making process to meet short-term needs. In the Spring, SchoolSmartKC allocated $467,360 to the 17 charter schools partnering with LEANLAB, which allowed the 17 charter schools to purchase 360 devices (15% of the total charter need) and 719 hotspots (65% of the total charter need). They additionally allocated $611,000 to Kansas City Public Schools for technology and COVID-19 needs for their first fund.

Moreover, LEANLAB Education worked with the Ewing Marion Kauffman Foundation, Greater Kansas City Community Foundation and the KC Civic Council, recommending further investments in school districts to assess and purchase connectivity solutions. LEANLAB also worked with SchoolSmart Kansas City on the creation of a second, expanded KC Connectivity & Technology Access Fund, which launched in the summer of 2020 and awarded $730,000 of support for device and computer needs in area schools. This second fund supported the purchase of 2,445 laptops/tablets across 13 schools districts, including Center School District and Hickman Mills.

Many organizations stepped up in the spring to provide short-term connectivity solutions.

- The Kansas City Coalition for Digital Inclusion coordinated the efforts of local organizations, including the public library system, transportation authorities, nonprofits, and private industry to provide emergency connectivity and technology to students and families in need.
- Connecting for Good secured donations of devices and hotspots from local businesses and government agencies, and distributed to families with students attending schools within Tiers I, II and III, as well as to the general public in need throughout Jackson County.
- The Kansas City Public Library system made open access Wi-Fi available 24-hours a day in the parking lots of all branch locations.
- From April to May, Kansas City Public Schools and Student Transportation of America, a transportation vendor, placed Wi-Fi-equipped school buses at library locations throughout the city in areas that were identified as "digital deserts," meaning they contained large disconnected populations.

"YES, WE’RE ABLE TO AFFORD TO CONTINUE TO PROVIDE INTERNET CONNECTIVITY, BUT AT THE PRICE OF A SIZABLE BUDGET REDUCTION ELSEWHERE AND/OR GOING INTO CASH RESERVES"

-School Administrator

PRIOR COLLABORATIVE EFFORTS TO PROVIDE CONNECTIVITY
Between October 23 and November 20, LEANLAB sent 28 school systems new surveys to assess their continued needs in regards to the digital divide. Of those, 25 responded. The chart below shows all participating schools by type. Our goal was to assess progress since the spring assessment and Bridging Barriers report, and to assess what needs remain.

**Students in Need of Connectivity**

Based on the survey results, as of early December there were 808 students in need of internet connectivity solutions across the 25 school systems that participated in the fall study. Six hundred of these students are from rural public schools, while the remaining 208 are from urban charter schools.

This number represents a significant decrease from the original need as assessed in June 2020. We’ve seen 7,892 connectivity solutions (hotspots or broadband) provided, in large part thanks to the SSKC grant and other local grants, Connecting For Good, and the 1Million Project. Urban public schools have been able to provide 4,600 solutions, rural public schools have been able to provide 972, and urban charters have been able to provide 2,460.

However, schools are bearing a substantial cost in order to meet these connectivity needs. Urban charter schools are spending an estimated $556,040 collectively; rural public schools are spending an estimated $104,500; and urban public schools are spending an estimated $45,000, totalling a cost of $705,540 across the region. This translates into a median cost of $17,500 per school and an average cost of $32,070 per school system.

**Students in Need of Connectivity - Fall 2020**

<table>
<thead>
<tr>
<th>School</th>
<th>Students in Need of Internet Connectivity</th>
<th>Estimated Cost</th>
<th>Previously Provided Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Charters</td>
<td>208</td>
<td>$556,040</td>
<td>2460</td>
</tr>
<tr>
<td>Rural Public Schools</td>
<td>600</td>
<td>$104,500</td>
<td>972</td>
</tr>
<tr>
<td>Urban Public</td>
<td>0</td>
<td>$45,000</td>
<td>4600</td>
</tr>
<tr>
<td>TOTAL</td>
<td>808</td>
<td>$705,540</td>
<td>8032</td>
</tr>
</tbody>
</table>

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School Administrator

**“We are getting free hotspots from the 1Million Project, but still currently have around 600 families on a waitlist because we haven’t gotten enough hotspots from them to give out.”**

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**Students in Need of Connectivity**

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**Participating Schools**

### School Name | Type
---|---
Academy for Integrated Arts | Urban Charter
Allen Village | Urban Charter
Belton School District #124 | Rural Public
Brookside Charter School | Urban Charter
Center School District | Urban Charter
Citizens of the World | Urban Charter
Clinton County R-III School District | Rural Public
Crossroads Charter Schools | Urban Charter
De La Salle Education Center | Urban Charter
Ewing Marion Kauffman School | Urban Charter
Fort Osage R-I School District | Rural Public
Frontier Charter Schools | Urban Charter
Genesis Charter School | Urban Charter
Gordon Parks Elementary School | Urban Charter
Guadalupe Centers Education System | Urban Charter
Hogan Preparatory Academy | Urban Charter
Hope Leadership Academy | Urban Charter
Independence School District | Rural Public
Kansas City Girls Preparatory Academy | Urban Charter
Kansas City International Academy | Urban Charter
Kansas City Kansas Public Schools | Urban Public
KIPP: Endeavor Academy | Urban Charter
Lee A. Tolbert Community Academy | Urban Charter
Scuola Vita Nova Charter School | Urban Charter
University Academy | Urban Charter
We also tracked changes in internet connectivity needs across the school districts that participated in both the spring and fall needs assessments. Of the 17 Tier I (charter) schools assessed in the spring and reassessed in the fall, there was an 8.58% decline in reported internet connectivity needs. While Tier I schools initially reported a need of 1100 connectivity solutions in the spring, they also reportedly distributed 1698 hotspots since then, and have reported a remaining need of 208 hot spots. These numbers suggest that the need for internet connectivity is dynamic and changing over time. One charter school leader noted, “We are continuing to assess almost daily family needs for connectivity. We are finding there is a pretty significant increase in connectivity needs at this time.”

Suburban and rural school districts making up Tier II (Belton, Fort Osage, Independence and Clinton County) reported a 24.33% decrease in connectivity needs. Tier II reportedly distributed 972 hot spot solutions to students in need, suggesting that spring estimates of need were higher than actual need.

Finally, Tier III school districts (Kansas City, Kansas Public Schools) purchased 4600 hotspot with intent to distribute against an estimated need of 4800 students.¹

¹ At the time of this report (December 18, 2020), KCKPS is currently surveying their student population to assess remaining needs.

### Change in Connectivity from Spring to Fall

<table>
<thead>
<tr>
<th>TIER</th>
<th>Total Student Population (SPRING)</th>
<th>Reported Need of Connectivity Solutions (SPRING)</th>
<th>Percent of Pop. in Need of Internet Connectivity (SPRING)</th>
<th>Reported Need of Connectivity Solutions (FALL)</th>
<th>Percent of Pop. in Need of Internet Connectivity (FALL)</th>
<th>Number Change Spring to Fall</th>
<th>Percent Change Spring to Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>10,484</td>
<td>1,100</td>
<td>10.49%</td>
<td>208</td>
<td>1.98%</td>
<td>892</td>
<td>8.58%</td>
</tr>
<tr>
<td>II</td>
<td>25,724</td>
<td>6,857</td>
<td>26.66%</td>
<td>600</td>
<td>2.33%</td>
<td>6257</td>
<td>24.33%</td>
</tr>
<tr>
<td>III</td>
<td>22,902</td>
<td>4800</td>
<td>20.96%</td>
<td>Assessment ongoing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REPORTED NEED OF CONNECTIVITY SOLUTIONS**

![Graph showing reported need of connectivity solutions from spring to fall](image-url)
**TOTAL STUDENTS**

<table>
<thead>
<tr>
<th>Tier</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier I</td>
<td>10,484</td>
</tr>
<tr>
<td>Tier II</td>
<td>25,724</td>
</tr>
<tr>
<td>Tier III</td>
<td>22,902</td>
</tr>
</tbody>
</table>

**HOTSPOTS PURCHASED / DISTRIBUTED**

<table>
<thead>
<tr>
<th>Tier</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier I</td>
<td>1,698</td>
</tr>
<tr>
<td>Tier II</td>
<td>972</td>
</tr>
<tr>
<td>Tier III</td>
<td>4,600</td>
</tr>
</tbody>
</table>

**PERCENTAGE OF STUDENTS WITHOUT CONNECTIVITY**

- **Tier I**
  - Spring: 10%
  - Fall: 2%

- **Tier II**
  - Spring: 27%
  - Fall: 2%

- **Tier III**
  - Spring: 21%
  - Fall: No Data

**TIER DESCRIPTION**

- **Tier I**: Kansas City, MO charter schools
- **Tier II**: Suburban and rural districts surrounding Kansas City, MO
- **Tier III**: Kansas City Kansas Public Schools
Schools and nonprofits should work with funders and partner organizations to fulfill urgent needs within KCPS boundaries for the remaining school year.

Our survey asked school districts open-ended questions about challenges related to connectivity at home. Our results indicate 808 students across Kansas City and the surrounding metro are in need of internet connectivity solutions. To bridge this gap, schools will need the help of funders to continue to navigate this volume of needs for students.
Entrepreneurs, innovators and community groups should pilot long-term, alternative internet connectivity solutions for families.

As COVID drags on, it’s impossible to ignore that Internet in the home is no longer a luxury for students and families— it’s now a basic need. Although some school districts included in the survey can afford providing internet connectivity for the next 12 months, it is not the ideal solution for the school districts’ budgets. It was commonly noted the cost is eating into reserves, and that the need has been continually fluctuating.

It follows that there should be more widely available, affordable internet options for families and student households. Entrepreneurs and innovators, then, should develop alternative internet service provider options that can provide reliable, accessible and lower-cost internet to households. Community groups and centers should offer long-term community Wi-Fi areas and computer labs.
RECOMMENDATIONS

Advocacy groups should advocate for long-term subsidy programs that increase internet affordability for school districts and low-income households.

Of the 25 school leaders that we surveyed, 8 admitted that they would not be able to sustain the cost of internet for students for the next 12 months, and 17 of those schools are only able to continue to provide internet for the next 12 months due to the aid of grants, funding and limited cash reserves. School subsidy programs, like E-rates, should be expanded to increase the likelihood of long-term affordability for schools, offsetting budgetary concerns. Additionally, subsidy programs for internet providers should be expanded to incent the offerings of low-cost, easily accessible internet options for low-income families and communities.
The results of the connectivity needs survey provide a real look at how important digital equity is for students in Kansas City. School districts across the metro have emphasized the challenges of providing internet and technology for students.

School leaders indicated that even after receiving hotspots, families still had difficulty staying connected to the internet depending on the bandwidth available and access to unlimited data.

To achieve sustainable digital equity, we will need to implement a dynamic, multi-faceted strategy—one that leverages philanthropy, innovation and public policy. We must continue philanthropic emergency relief efforts, while building urgently toward a more sustainable future.