NAVIGATING THE DIGITAL DIVIDE

A Public-Private Partnership Between Seattle's Tech Industry and Public Schools

July 2020

sea.citi

INTRODUCTION

In mid-March, as the COVID-19 crisis ramped up in Washington, state officials moved to close schools as part of the effort to contain the spread of the virus. As the initial two week closure extended into the rest of the school year, districts grappled with how best to continue providing learning opportunities and basic needs support to students. In response, local corporate, philanthropy and nonprofit leaders rallied resources to enhance districts' efforts.

In Seattle, Amazon donated nearly 9,000 laptops to Seattle Public Schools (SPS) families in need. To maximize the impact of Amazon's donation, sea.citi drove the creation of the Family Tech Support Center (FTSC) — a public-private partnership between sea.citi, SPS, Alliance for Education, Amazon in the Community, Amazon Web Services, Google, Microsoft, and parent and tech volunteers. The Center leveraged donated hardware and software, volunteer power, and cross-sector coordination to help address families' in-home technology needs as they navigated remote learning.

Recognizing the urgency to get students connected, partners worked quickly to operationalize the FTSC. Though it was not set up as a research project, sea.citi was able to gather data to help the district understand the impacts of remote learning, especially for students who are furthest from educational justice. This report aims to highlight the complexity of the digital divide and provide insights to help inform SPS's planning for remote learning going forward.

OVERVIEW

As state officials ordered then prolonged school closures, Seattle Public Schools was firstly focused on providing the type of basic needs services that many students depend on schools for: meals, connections to social services, and childcare for essential workers. With the extension of school closures through the end of the school year and guidance to provide instruction remotely, the district ramped up distribution of laptops and hotspots. Students without stable housing and high schoolers who fall into one of the populations the district calls "furthest from educational justice," especially Black male students, were prioritized for receiving equipment. The district's capacity was limited, both in how much equipment it had to distribute and the kind of support it was able to provide to students receiving hardware.

Amazon's permanent, direct to student donation of nearly 9,000 Acer Chromebook laptops, was directed to elementary students, providing all SPS students with access to a device so they could participate in those parts of continuous learning that called for online access. SPS prioritized distribution of laptops to elementary students who did not have access to a device at home.

Because many of the families receiving donated laptops did not already have a device at home, sea.citi and our FTSC partners were determined to provide assistance, ensuring that households with limited digital literacy could put devices to use quickly, thereby reducing the number of days students were disconnected from learning.

With donated software and technical support from Amazon Web Services, the virtual call center initially launched to help families who had received donated laptops. These families may have been in touch with teachers, school staff or SPS's community-based partners but technical support and access to hardware was piecemeal and decentralized. As the call center's capacity grew through volunteer recruitment and process improvements, FTSC and SPS marketed the information broadly across the district to support all district families.

TIMELINE

MARCH

March 11 – Governor Inslee makes an emergency proclamation closing all schools in King, Pierce and Snohomish counties.

March 12 – SPS stops all classroom instruction, athletics, club sports, preschool, child care, enrichment programs, etc.

March 17 – Governor Inslee mandates the closure of all Washington schools.

March 23 – SPS begins creating and broadcasting guided educational activities through SPS TV, social media channels, and their website. For students who do not have regular access to internet or local TV, SPS begins distributing aligned, printed activities at 26 student meal distribution sites.

March 30 – in response to revised guidance from the Office of the Superintendent of Public Instruction (OSPI), all educators are asked to begin providing ongoing, remote learning for grades PreK-12.

APRIL

April 6 – Governor Inslee makes an emergency proclamation extending the closure of all schools through the end of the school year.

April 6 – Amazon announces a donation of 8,200 laptops for SPS students.

April 13 – The first meeting of stakeholders from tech companies, the district, nonprofits, and sea.citi to design and deploy the Family Tech Support Center.

Week of April 20 – distribution of donated Chromebooks begins and Amazon announces a donation of an additional 750 laptops.

Week of April 20 – a team of Googlers start answering questions about Chromebook setup.

April 29 – Family Tech Support Center launches with 90+ live support volunteers, operating 12 hours a day, five days a week.

JUNE

June 5 – SPS and sea.citi host a volunteer outreach event to contact 1,000+ SPS families who are the furthest from educational justice and received a donated laptop but have not called into the FTSC.

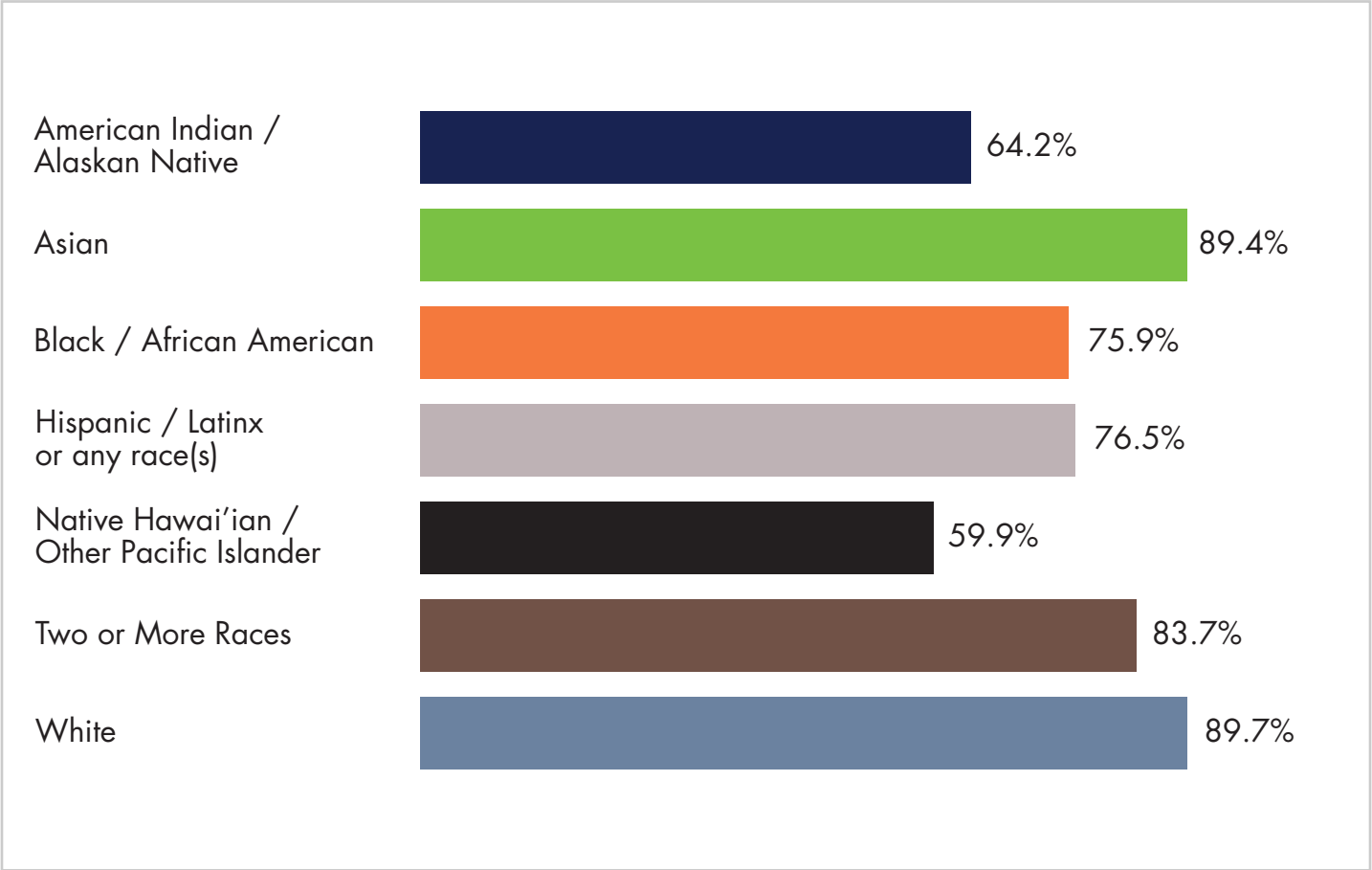
June 18 – last day of school and normal FSTC operations.

BACKGROUND & BASELINES

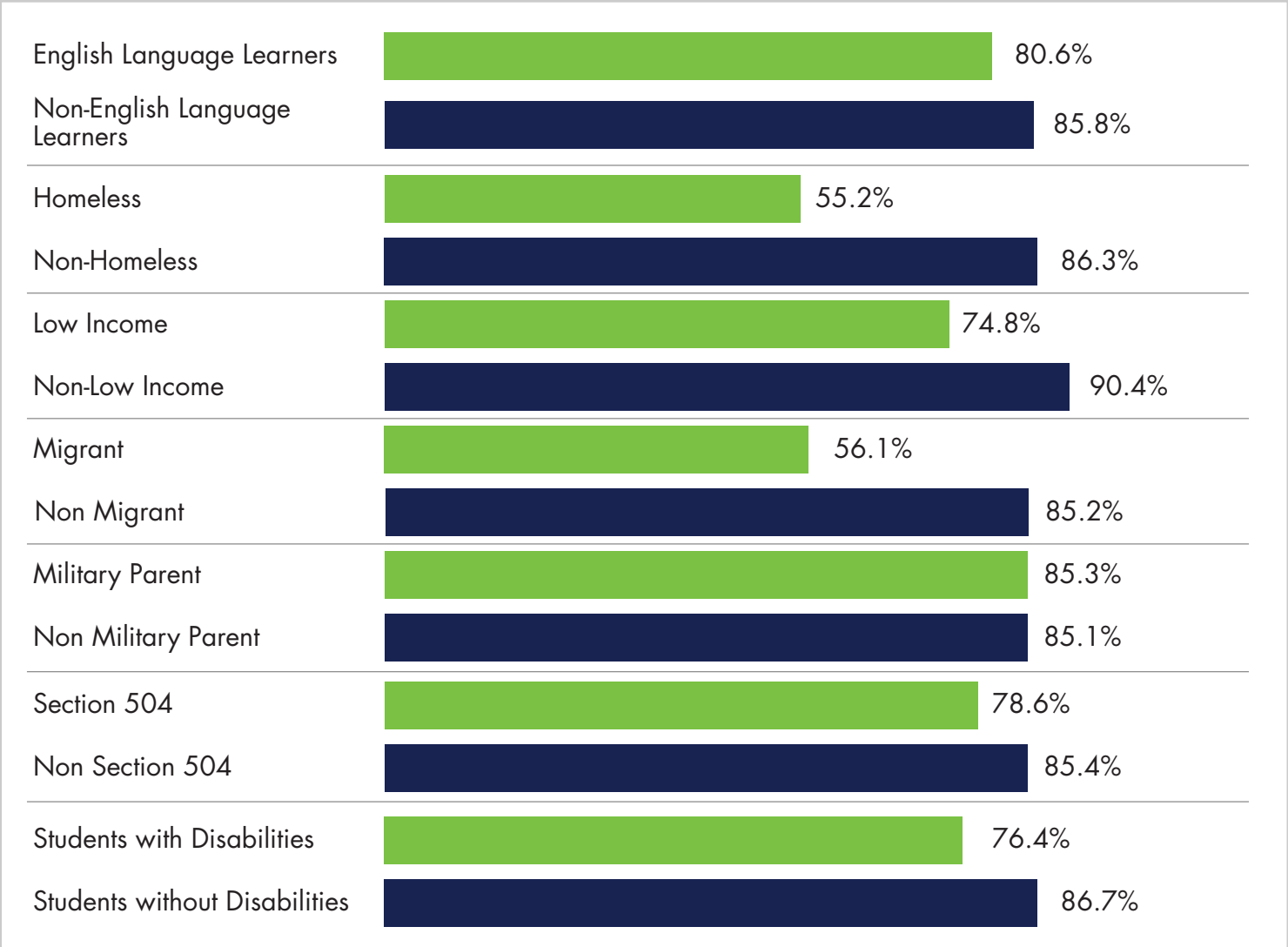
Seattle Public Schools is the largest school district in Washington. In the 2018-19 school year, 55,844 students were enrolled, representing approximately 35,000 families. In that same academic year, SPS employed 3,745 classroom teachers and had an average of 19 students per classroom.

On average, 85.1% of students had fewer than two absences per month — which the Department of Education recognizes as the minimum threshold for a student to be considered as regularly attending school. However, when disaggregated by race/ethnicity and specific student programming, there are disparate outcomes for different student groups.

Percentage of Students Regularly Attending School by Race/Ethnicity:



Percentage of Students Regularly Attending School by Student Program:



The data above coupled with findings from the City of Seattle's Office of Information Technology that determined key risk factors for lack of home internet access, point to the potential to exacerbate the barriers some students face to regularly attend remote classes.

From City of Seattle's Office of Information Technology's 2018 Technology Access and Adoption Study:

Digital Equity Differences

There are significant differences in access rates across demographic groups. Key risk factors for lack of home internet access include:

- Living in poverty (at or below 135% of the Federal Poverty Level): 5 times more likely not to have internet access.
- Household member living with disability: 3 times more likely not to have internet access.
- Primary language other than English: 2 times more likely not to have internet access.
- Older adults (65 years of age plus): 1.8 times more likely not to have internet access.
- Single adult households (may or may not have children):1.8 times more likely not to have internet access.
- Non-White residents (members of race or ethnic minorities): 1.6 times more likely not to have internet access.

Education level correlates directly with internet access. One out of five residents without any college have no internet access in the home.

Certain groups are more likely than others to report barriers to using the internet more often.

Percentage of these groups living with a barrier:

54% Of those living at or below 135% of the Federal Poverty Limit

49% Of Black residents of the city

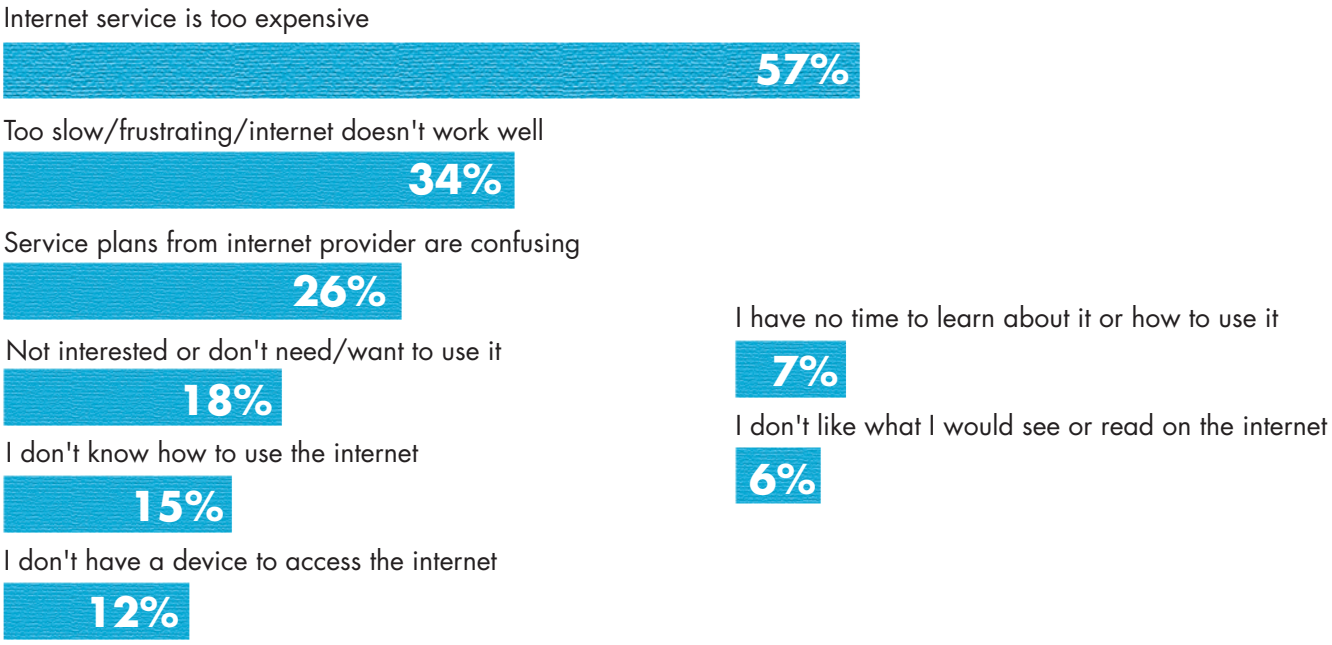
38% Of older adults (65 years of age or older)

33% Of those living in South Seattle (Council District 2)

31% Of Asian residents of the city

30% Of those who live alone

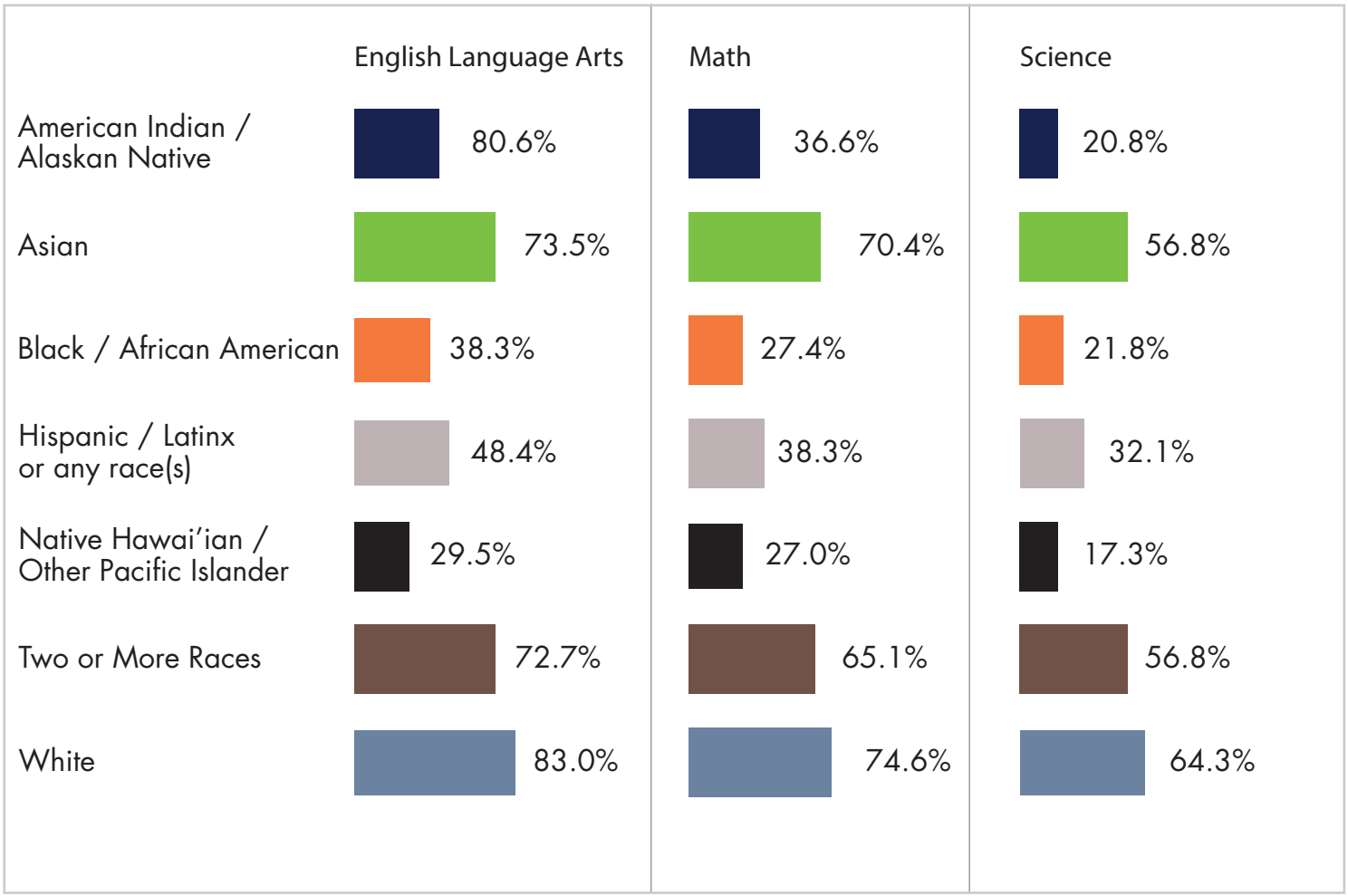
Top reasons why residents do not use the internet more (among those with ANY concerns)*



**Base = Among those reporting a barrier or limitation to using the internet more (n=895)*

According to the National Center for Education Statistics, "Students who attend school regularly have been shown to achieve at higher levels than students who do not have regular attendance." When we consider this along with the percentage of SPS students who met grade level standards in the 2018-19 academic year (see below), we can assume that if remote learning increases barriers to regular attendance, it will also contribute to the opportunity gap.

Percentage of Students Who Met Academic Standards by Race/Ethnicity:



Percentage of Students Who Met Academic Standards by Student Program:

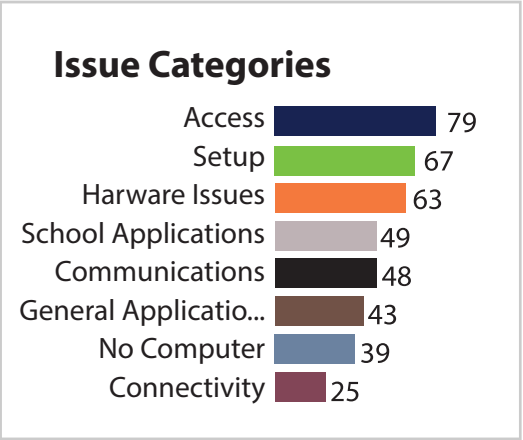
	English Language Arts	Math	Science
English Language Learners	16.7%	21.5%	8.9%
Non-English Language Learners	75.3%	65.9%	55.9%
Foster Care	31%	19.7%	12.7%
Non-Foster Care	70%	61.9%	52%
Homeless	28.6%	21.2%	19.3%
Non-Homeless	71.3%	63.1%	53%
Low Income	44%	35.7%	29.6%
Non-Low Income	82.8%	74.8%	63.6%
Migrant	32.8%	20.6%	9.4%
Non Migrant	69.9%	61.7%	51.9%
Military Parent	78.2%	60.8%	68.4%
Non Military Parent	69.8%	61.6%	51.7%
Section 504	75.5%	58.4%	46.8%
Non Section 504	69.5%	61.8%	52.1%
Students with Disabilities	36.5%	29.7%	27.2%
Students without Disabilities	76.4%	68%	56.1%

Seattle Public School's 2019-2024 strategic plan, Strategic Excellence, outlines commitments to ensure "racial equity in our educational system, unapologetically address the needs of students of color [...], and work to undo the legacies of racism in our educational system." As the district considers options for instruction amidst a pandemic that is unlikely to subside before the beginning of the 2020-2021 school year, it must consider how to guarantee that students who are furthest from educational justice have access to resources and services that are foundational for their academic achievement.

FTSC INSIGHTS

The following insights are drawn from data gathered by volunteers in the course of FTSC's operations. Data quality was secondary to volunteers' primary focus: helping families connect their students with online learning resources.

In its eight weeks of operation, the Family Tech Support Center fielded approximately **2,500 calls**, making **631 unique contacts** with families through direct inbound and outbound calls to the FTSC. Outreach calls were made to an additional **997 families** who received a donated laptop and whose children attend the district's highest-needs schools.



sea.citi analyzed the breadth of issues experienced by the 391 families who called in. Data was grouped by issues into general categories — which at first glance seem to be typical tech support issues.

Insight 1

Digital literacy support must be comprehensive and not take basic measures for granted.

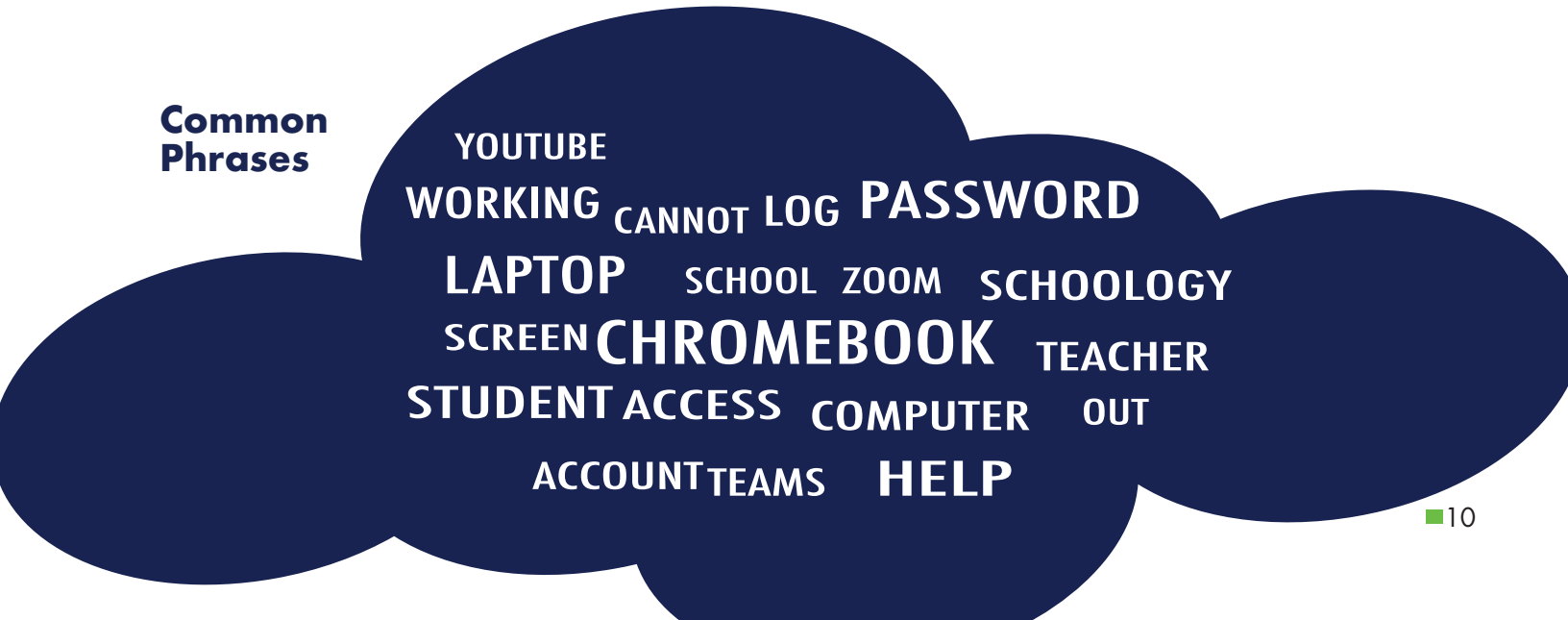
Families needing help with a broken computer had often mishandled the machine — not always knowing proper storage and fragile elements For many families, this was the first laptop they had at home and distribution efforts failed to prepare recipients by not including detailed care instructions.

Insight 2

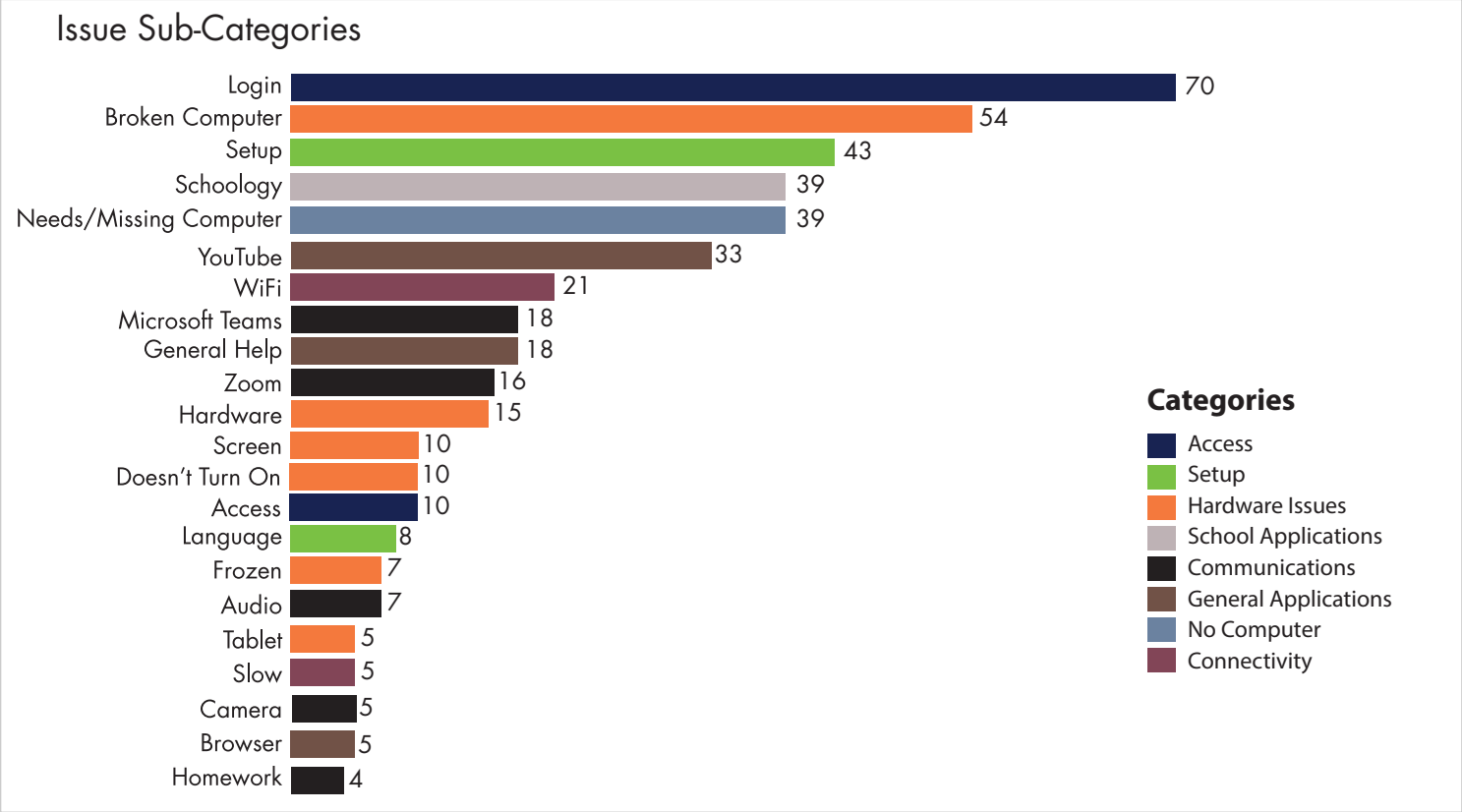
Technology tools from the district were often unfamiliar to families.

Both the "login" and "Schoology" sub-category text summaries indicate that established tech tools used by SPS are not used by families consistently enough for access to be frictionless. Confusion about student email login and Schoology password retrieval might be a sign that engagement with these tools was already low before schools closed. Furthermore, not all interfaces are available in languages other than English.

Common Phrases



Upon deeper analysis of text summaries about the kinds of support volunteers provided, the insights pointed to more foundational digital literacy barriers than expected.



Insight 3

True tech support issues were often complicated by other in-home complexities.

Certainly there were also "pure" tech issues families needed help with like setting up their new Chromebooks and troubleshooting applications. But even some of those problems pointed to the complexity families were trying to navigate. Connecting a new laptop to wifi was further delayed by some families' low-speed or lack of internet service. Thorough resolution of these issues was beyond the scope of the FTSC, in that it required connection to community-based organizations and/or low-cost internet service providers.

Insight 4

Platforms used for content delivery created unexpected barriers.

YouTube's general ubiquity, ease of use and existing use by SPS departments meant teachers often incorporated content from the platform in their lesson plans. Guardians of elementary school students quickly ran into YouTube's minimum age requirement, when using donated equipment. FTSC volunteers were able to help find a workaround but a more standardized approach to developing online content and centralized guidance from the district could have flagged and mitigated this issue.

Insight 5

Decentralized education and multi-channel tech support made navigating challenges difficult.

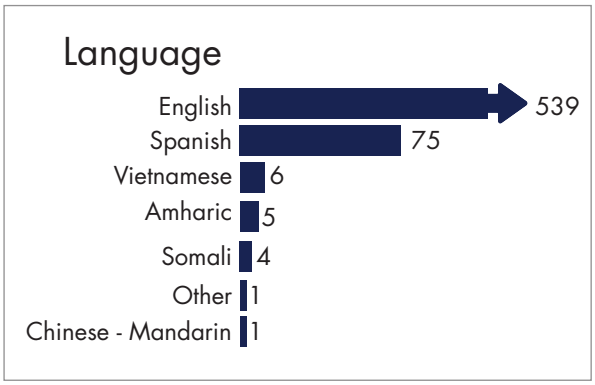
No school district was prepared to quickly switch to remote instruction. While there are SPS approved/supported platforms, educators drew on their deep knowledge and experience to supplement the district's tools to meet specific classroom needs. This meant that a family could potentially need different kinds of help for each teacher that interacts with each of their children. Additionally, the different ways to access tech support for donated and loaned laptops, the myriad ways families could access free or subsidized internet, and the varying levels of digital literacy among families created the need for a labyrinthine handbook to guide volunteers in answering calls for help.

Insight 6

Established communication channels are less effective when divorced from in-person interactions at school buildings.

Another potentially large service gap indicated by who is not "showing up" in the data is the relatively small number of requests for language support.

Seattle Public Schools serves almost 7,000 English language learners who represent 154 spoken by families across the district. Despite efforts to reach families, like distributing flyers about the FTSC in multiple languages at meal distribution sites, the FTSC seems to have been under utilized by families who prefer to receive services in a language other than English. It's possible some families were able to get tech support from culturally-specific social service providers but this gap includes many complex factors and must be further investigated to ensure families aren't falling through the cracks.



FTSC volunteers were resilient, flexible and resourceful and ultimately built an impressive document as new problems emerged and solutions were found. Using the resource guide proved to be akin to system navigation services social service agencies provide — "walking alongside" a client to identify needs and service gaps, then connecting them to the appropriate information, services and resources.

In this short term project, we were not able to track the depth and effectiveness of students' engagement with online learning. A few parents/guardians freely shared the number of hours their students were spending on remote school work, or the variety of challenges their households were experiencing because of school closures. However, for the most part, volunteers did not have time or extensive training to build the kinds of trusting relationships conducive to providing in-depth navigation services.

CONCLUSION

The Family Tech Support Center was a tremendous success, forging new partnerships between the tech industry, the district, nonprofit organizations, and the community. The FTSC filled a necessary gap, enabling hundreds of students' access to online learning that will support their educational success and mitigate setbacks during this time of crisis.

Based on the operations of FTSC and available data, it is reasonable to state that **providing only laptops and internet access to students will not result in consistent and equitable learning,** especially for low-income students or students of color.

> **Only about 75% of low-income students regularly attend school** and living in poverty in Seattle makes households five times more likely not to have internet access.
>
> **49% of Black Seattle residents report barriers** to using the internet more often.
>
> **Household's whose primary language is something other than English** are two times more likely to not have internet access at home.

Providing solutions to internet connectivity does not ensure that families will seek out these services, nor that families can adapt to remote learning.

SPS's strategic goals are bold and noble. To bridge the digital divide and realize these goals, the district must continue to act urgently to find scalable solutions to remote learning. Beyond fixing technical barriers, an effective solution must also address the adaptive challenges families, educators and communities face when in-person instruction is not feasible. Solutions to these challenges must be developed by those most impacted by them and cannot rest solely with the school district. The tech industry and broader community remain committed to helping on this journey.

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Maritz Family Foundation

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