Before the

FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Telecommunications Carriers Eligible to Receive Universal Service Support	)	WC Docket No. 09-197
	)	
Kajeet Inc.	)	
	)	
Petition for Streamlined Designation as a Lifeline Broadband Provider Eligible Telecommunications Carrier	)	
	)	

KAJEET INC.
PETITION FOR STREAMLINED DESIGNATION AS A LIFELINE BROADBAND PROVIDER ELIGIBLE TELECOMMUNICATIONS CARRIER

Daniel J.W. Neal
CEO & Founder
KAJEET INC.
7901 Jones Branch Drive
Suite 350
McLean, VA 22102
(240) 482-3480

October 11, 2016

TABLE OF CONTENTS

EXECUTIVE SUMMARY i

I. About Kajeet 2

II. Kajeet's Proposed Lifeline Offering 3

III. Kajeet Is Eligible for Streamlined Treatment 5

A. Kajeet Serves at Least 1,000 Non-Lifeline BIAS Customers 6

B. Kajeet Has Offered Broadband Services to the Public for at Least Two Years, Without Interruption 6

IV. Kajeet Satisfies the Five Criteria for LBP ETC Status 7

A. Kajeet Will Comply With All Applicable Service Requirements, Including Future Updates 7

B. Kajeet Is Able to Remain Functional in Emergency Situations 7

C. Kajeet Will Satisfy Applicable Consumer Protection and Service Quality Standards 8

D. Kajeet Is Financially and Technically Capable of Providing the Lifeline Service 8

E. The Terms and Conditions of Kajeet's BIAS Plans Not Only Satisfy, But Exceed the Commission's Requirements 10

V. Kajeet Satisfies All the Commission's Other Requirements for ETC Designation 10

A. Kajeet Is a Common Carrier, and Will Provide Lifeline Services by Reselling Its Underlying Carriers' Service. 11

B. Kajeet Will Comply with the Commission's Advertising Requirements 11

C. Kajeet's Proposed Service Area 12

VI. Designating Kajeet as an LBP ETC Will Promote the Public Interest 13

VII. Anti-Drug Abuse Certification 14

VIII. Conclusion 14

EXECUTIVE SUMMARY

Kajeet Inc. ("Kajeet") seeks designation as a Lifeline Broadband Provider ("LBP") eligible telecommunications carrier ("ETC") pursuant to 47 U.S.C. § 214(e)(6) and the Commission's regulations. This application proposes an exciting new use case designed specifically to target Lifeline funding to close the "Homework Gap," consistent with key Commission policy goals.

As described herein, Kajeet qualifies for (1) LBP ETC status, and (2) sixty-day streamlined treatment of this application. Kajeet therefore respectfully requests the Commission grant this petition per the agency's expedited process.

First, Kajeet meets all qualifications for LBP ETC designation. Kajeet certifies that it will comply with all applicable service requirements, including future updates; the company also certifies that it is able to remain functional during emergency situations, as a reseller of 4G LTE service from two of the nation's premier nationwide wireless carriers. Kajeet also fully complies with – and certifies continuing compliance to – CTIA's Consumer Code. The company is financially and technically capable of offering the Lifeline service, and the terms and conditions of Kajeet's proposed BIAS plans exceed the Commission's current minimum service requirements.

Second, Kajeet meets the necessary criteria to be eligible for streamlined treatment of its Petition. The Commission has stated that to be eligible, a provider must (1) currently service at least 1,000 non-Lifeline BIAS customers, and (2) have served the public for at least two uninterrupted years. Kajeet serves tens of thousands of customers currently and has offered broadband service to the public since 2012.

Finally, in regard to the Commission's other requirements for ETC designation, Kajeet is (1) a common carrier, (2) will comply with the Commission's advertising requirements, and (3) outlines in this filing its proposed service area.

This application would squarely address a real concern that the Commission has appropriately recognized – lack of access to technology and the Internet outside of the classroom makes it difficult and sometimes impossible for students to complete their homework assignments and projects, and ultimately impedes their ability to effectively compete in the broadband era. Without question, grant of the application would serve the public interest. Kajeet, accordingly, requests that the Bureau allow this petition to be granted by operation of law consistent with the streamlined process established in the *Lifeline Modernization Order.*

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Telecommunications Carriers Eligible to Receive Universal Service Support	)	WC Docket No. 09-197
	)	
Kajeet Inc.	)	
	)	
Petition for Streamlined Designation as a Lifeline Broadband Provider Eligible Telecommunications Carrier	)	
	)	

KAJEET INC.
PETITION FOR STREAMLINED DESIGNATION AS A LIFELINE BROADBAND PROVIDER ELIGIBLE TELECOMMUNICATIONS CARRIER

Kajeet Inc. ("Kajeet"), pursuant to Section 214(e) of the Communications Act of 1934 as amended ("Act") and Sections 54.201 and 54.202 of the rules of the Federal Communications Commission ("FCC" or "Commission"), hereby requests streamlined designation as a Lifeline Broadband Provider ("LBP") eligible telecommunications carrier ("ETC") in all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands, for the purpose of receiving universal service Lifeline support for the provision of broadband Internet access service ("BIAS").[1]

As discussed in more detail below, this application proposes a unique use case, within the context of Kajeet's Education Lifeline™ initiative, to target Lifeline funding specifically to close

[1] *Lifeline and Link Up Reform and Modernization, Telecommunications Carriers Eligible for Universal Service Support, Connect America Fund*, WC Docket Nos. 11-42, 09-197, 10-90, Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962 (2016) ("*Lifeline Modernization Order*").

the Homework Gap, consistent with key Commission policy goals. Kajeet satisfies the Commission's requirements for both LBP ETC designation and streamlined treatment of this petition. Because granting Kajeet's Petition will serve the public interest by helping to further close the Homework Gap for U.S. schoolchildren, Kajeet respectfully requests the Commission act in accordance with the streamlined timetable and designate it an LBP ETC.

I. ABOUT KAJEET

Kajeet is a Delaware C Corporation with two operating divisions: the Kajeet Education Division ("Education Division") and the Arterra Mobility Division ("Arterra"). Kajeet was founded in 2003, and over the past thirteen years has become the industry leader for safe mobile student Internet connectivity. Kajeet has offered child-focused connectivity services to subscribers since 2007, and has served the K-12 broadband education market since 2012. Kajeet's wide range of customers include mobile virtual network operators ("MVNOs"), specialized messaging providers, marketing enterprises, schools, libraries, non-profits, and the United States Library of Congress.

The company's Kajeet Education Division already offers safe, affordable mobile broadband solutions through its Education Broadband™ program, which connects disadvantaged students to the Internet outside of school. The Education Broadband program serves schools, libraries, non-profits, and other organizations with products that provide mobile broadband to students and library patrons nationwide. Customers receive Kajeet's Sentinel® broadband management platform to manage end-users, their devices, and broadband policies such as filtering and usage allocation. The Education Division also provides its own carrier-certified device programs – SmartSpot® and SmartBus™. The SmartSpot is a 4G LTE mobile hotspot that relies on Verizon and Sprint's nationwide networks to ensure each student has the access necessary to complete required assignments and homework. It supports the latest, most

advanced security and is compatible with all industry-standard Wi-Fi capable devices across all operating systems. SmartBus is a similar 4G LTE-embedded vehicle Wi-Fi router.

Kajeet's Arterra Division, meanwhile, provides the complete technology platform, engineering, systems integration, operations support systems / business support systems ("OSS/BSS"), access to multi-carrier network services, logistics, and customer care support on which the products and services of the Education Division are based. The Education Division is, in effect, an internal customer of Arterra. For outside clients, Arterra provides mobile virtual network enabler ("MVNE") and mobile virtual network aggregator ("MVNA") services on 3 national cellular networks: Sprint, Verizon, and T-Mobile. Arterra designs, engineers, builds, operates, and supports highly robust, scalable, secure, carrier-grade, and highly differentiated white-label wireless MVNE services that other companies and organizations brand and offer to their own customers. Arterra provides the central operating support system/business support system ("OSS/BSS"), and an application programming interface ("API") hub, for integration to existing client systems. Arterra also oversees Kajeet's aforementioned commercial off-the-shelf cloud-hosted Sentinel platform. Sentinel enables customers of both Kajeet's operating divisions – Education and Arterra – to manage their mobile broadband devices and services (*e.g.*, activation/de-activation, suspension, policy management, data usage allocation, web filtering, data usage analytics, and IP traffic management) via an intuitive, web-based user interface.

II. KAJEET'S PROPOSED LIFELINE OFFERING

Kajeet is excited to participate in the Commission's Lifeline program to bring a new product to U.S. schools – Education Lifeline. Kajeet's Education Lifeline program will unite resources from local communities, schools, districts, states, and other funding sources with Lifeline support for qualifying low-income households. Kajeet has already deployed its preexisting (non-Lifeline) Managed Education Broadband service to nearly 250 schools and

districts in over 40 states – serving tens of thousands of students in the process. The growth in this solution and the connection of more students will be greatly accelerated with the new Education Lifeline program.

As the Commission has observed, "Lifeline can help bridge [the] homework gap by providing more opportunities for students to meaningfully access the Internet at home."[2] Education Lifeline is specifically designed to serve this policy goal by leveraging Lifeline support to ensure that children in Lifeline-qualifying households have access to high-quality broadband service at home.

Kajeet will partner with accredited schools and school districts to identify households whose enrolled K-12 students lack adequate broadband access for a modern digital education. Among these households, Kajeet will further identify those eligible for FCC Lifeline support via standard federal program participation, income documentation and/or NLAD verification. Promotion and awareness of the program will be driven with participating schools – via paper flyers, websites, school text messaging systems, school mobile apps and at in-person events, such as mandated annual Title I informational meetings or National School Lunch Program enrollment events. By partnering with schools, more eligible households with targeted enrolled students will be reached quickly and via trusted local advocates. The Kajeet Education Lifeline program will be a new initiative with a unique aggregation approach targeting the Homework Gap for participating K-12 schools.[3]

During enrollment, households will be offered a free Kajeet SmartSpot with connectivity via Sprint or Verizon's nationwide 4G LTE network. To participate and to receive this device,

---

[2] *Lifeline Modernization Order*, 31 FCC Rcd at 3966 ¶ 14.

[3] Education Lifeline is consistent with the Commission's intention to explore Lifeline aggregation projects. *Id.* at 4015-16 ¶ 144.

for free, households will agree to allow their participating school or school district to manage the broadband environment for appropriate educational use. The Kajeet Sentinel platform will be used to reduce or eliminate inappropriate, unsecure, and illegal use – including, for example, access to content harmful to minors, malware, and illegal content distribution. The platform will also provide school and district instructional staff with actionable data on instructional materials utilization, student engagement, student preparation activities and more to improve personalization of instructional strategy. Each subscriber device will receive up to 6 GB of 4G LTE Education Broadband access per month, exceeding the FCC Lifeline requirements for both speed and allotment.

Finally, participating schools and school districts will also have the option to purchase SmartSpots and Kajeet Managed Education Broadband service for students whose households are not eligible for a Lifeline subsidy or whose households are already using their FCC Lifeline subsidy with another provider. This will allow a school or district to have a single unified program and platform for connecting all households with need, leveraging FCC Lifeline resources only where appropriate, ensuring compliance with the Children's Internet Protection Act, improving educational outcomes, and facilitating their transition to digital learning – *without* furthering the digital divide.

III. KAJEET IS ELIGIBLE FOR STREAMLINED TREATMENT

In the *Lifeline Modernization Order* and subsequent *Public Notice*,[4] the Commission enumerated how a company can (1) qualify for streamlined sixty-day "deemed granted"

[4] *Wireline Competition Bureau Provides Guidance Regarding Designation as a Lifeline Broadband Provider and Lifeline Broadband Minimum Service Standards*, Public Notice, WC Docket Nos. 11-42, 09-197, DA 16-1118 (rel. Sept. 30, 2016) ("*LBP PN*").

treatment of its LBP ETC application,[5] and (2) receive LBD ETC designation.[6] Kajeet details its eligibility for expedited designation here, and its eligibility for LBP designation below.

A. KAJEET SERVES AT LEAST 1,000 NON-LIFELINE BIAS CUSTOMERS

To qualify for expedited review, a broadband provider must "serve at least 1,000 non-Lifeline customers with . . . BIAS service" at the time of application.[7] Kajeet well exceeds this number. As highlighted above, at the time of application the company has deployed its (non-Lifeline) Managed Education Broadband service to nearly 250 schools and districts in over 40 states, and currently serves tens of thousands of students. Therefore, Kajeet satisfies the Commission's first criteria.

B. KAJEET HAS OFFERED BROADBAND SERVICES TO THE PUBLIC FOR AT LEAST TWO YEARS, WITHOUT INTERRUPTION

Additionally, a broadband provider must "have offered broadband services to the public for at least the two years preceding the filing, without interruption."[8] Again, Kajeet easily meets this requirement, having offered broadband services to the K-12 education market since 2012 that exceed the minimum service standards adopted in the *Lifeline Modernization Order*.[9]

With both of the Commission's criteria for streamlined designation satisfied, and all other requirements for LBP ETC designation met as described below, the Commission should grant

---

[5] *Lifeline Modernization Order*, 31 FCC Rcd at 4066 ¶ 278; *LBP PN* at 2 ¶ 6.

[6] *Lifeline Modernization Order*, 31 FCC Rcd at 4067 ¶ 282; *LBP PN at* 4-5 ¶¶ 10-11.

[7] *Lifeline Modernization Order*, 31 FCC Rcd at 4066 ¶ 278; *see also LBP PN* at 2-3 ¶¶ 6-8.

[8] *Lifeline Modernization Order*, 31 FCC Rcd at 4066 ¶ 278; *see also LBP PN* at 2-3 ¶¶ 6-8.

[9] Kajeet, *Frequently Asked Questions: How Long Has Kajeet Been in the Business of Serving the K-12 Education Market?*, http://www.Kajeet.net/faq#K12Market (last visited Oct. 10, 2016).

Kajeet's request for streamlined designation to enable the company to quickly accelerate efforts to further close the Homework Gap for students in Lifeline-eligible households.

IV. KAJEET SATISFIES THE FIVE CRITERIA FOR LBP ETC STATUS

The *Lifeline Modernization Order* also laid out five criteria for LBP ETC designation, which the Commission clarified in the *LBP PN*. Kajeet satisfies (and certifies as to, where relevant) all of these criteria.

A. KAJEET WILL COMPLY WITH ALL APPLICABLE SERVICE REQUIREMENTS, INCLUDING FUTURE UPDATES

First, the Commission requires LBP ETCs to certify compliance with all applicable service requirements, including future updates to the Lifeline program.[10] Kajeet certifies that it will comply with all service requirements applicable to the support it receives, including the applicable minimum service standards currently in effect and that it will continue to comply with any future additions to or amendments of the Lifeline program rules.

B. KAJEET IS ABLE TO REMAIN FUNCTIONAL IN EMERGENCY SITUATIONS

Second, the Commission requires LBP ETCs to demonstrate the "ability to remain functional in emergency situations," including through adequate back-up power.[11] Kajeet certifies that the network over which it will over Lifeline-supported service is capable of remaining functional in emergency situations. As discussed in Section II, *supra*, Kajeet relies on Verizon and Sprint's extensive, well-established nationwide 4G LTE networks and facilities to provide broadband services for students through the Kajeet SmartSpot device. Both companies'

---

[10] *Lifeline Modernization Order*, 31 FCC Rcd at 4067 ¶ 282; *LBP PN* at 4 ¶ 10.

[11] *Lifeline Modernization Order*, 31 FCC Rcd at 4067 ¶ 282; *LBP PN* at 4-5 ¶ 10 (permitting providers to demonstrate such "by certifying that its network or the network over which the Lifeline-supported service is provided is capable of remaining functional in emergency situations").

networks are capable of managing the traffic irregularities that may occur during emergency situations, including rerouting traffic in the event of damage to facilities and both nationwide carriers have sufficient back-up power to ensure functionality during emergencies.

C. KAJEET WILL SATISFY APPLICABLE CONSUMER PROTECTION AND SERVICE QUALITY STANDARDS

Third, as the Commission has explained, a provider may show that it will satisfy applicable consumer protection and service quality standards by "certifying that it understands its consumer protection obligations" through "a commitment to comply with the Cellular Telecommunications and Internet Association's Consumer Code for Wireless Service and any amendments thereto."[12] Kajeet fully complies with applicable consumer protection requirements, and commits to complying with the CTIA Consumer Code. Notably, Kajeet already displays a commitment to consumer protections and service quality as evidenced by its Education Broadband program's customer support apparatus (which includes not just a phone support line, but an online Knowledge Center for users, a clear and transparent Support team email process, and the ability to check on an individual device's status online).[13]

D. KAJEET IS FINANCIALLY AND TECHNICALLY CAPABLE OF PROVIDING THE LIFELINE SERVICE

Fourth, the Commission's rules require an LBP ETC applicant to demonstrate that it is financially and technically capable of providing the Lifeline service in compliance with the Commission's Lifeline rules.[14] Kajeet's multi-year success in providing broadband service to

---

[12] 47 C.F.R. § 54.202(a)(3); *Lifeline Modernization Order*, 31 FCC Rcd at 4066 ¶ 282; *LBP PN* at 5 ¶ 10.

[13] *See* Kajeet, *How Can We Help You?*, http://www.Kajeet.net/home-contact-us (last visited Oct. 10, 2016).

[14] 47 C.F.R. § 54.202(a)(4); *Lifeline Modernization Order*, 31 FCC Rcd at 4066 ¶ 282; *LBP PN* at 5 ¶ 10.

schools and students in hundreds of school districts across the country, without reliance on Lifeline or any other federal government subsidies, demonstrates that the company is clearly financially and technically capable of providing the Lifeline service.

Financially, Kajeet is a profitable, debt-free, and growing privately held company in excellent financial health. The company has multiple lines of commercial business that together generate well-diversified revenues streams and strong cash flow. Kajeet's operations are not dependent on Lifeline reimbursements; the company will not need such subsidies in order to maintain its robust financial health. The company is well capitalized and does not need – and has no current plans – to raise additional capital. Access to Lifeline funding will, however, enable Kajeet, and more importantly the school districts that Kajeet partners with, to accelerate the deployment of its Education Broadband program and continue to close the Homework Gap.

Technically, Kajeet already focuses on closing the Homework Gap with innovative and patented products such as SmartSpot and SmartBus, delivered on its Sentinel cloud-based platform utilized by hundreds of schools and districts in over 40 states. As discussed in more detail above, Kajeet also already serves a number of commercial enterprises and a new Federal client via its Arterra Division, which helps a wide range of enterprises launch and provide private-labeled wireless services. Kajeet's over ten years of experience in designing, engineering, building and operating its own consumer- and education-oriented MVNO and over 40 other MVNOs make it uniquely positioned and qualified to successfully operate an FCC-certified Lifeline Broadband program, in partnership with schools and school districts. As described above, Kajeet's services are delivered over the Verizon and Sprint nationwide 4G LTE networks. As such, Kajeet is technically prepared to offer Lifeline-supported BIAS that meets the program's minimum service standards throughout its entire proposed service area. Kajeet

also acknowledges that as an LBP ETC it is subject to all Lifeline program rules and that it will comply with such rules, including rules regarding subscriber eligibility verification, certification and recordkeeping, and auditing requirements.[15]

E. THE TERMS AND CONDITIONS OF KAJEET'S BIAS PLANS NOT ONLY SATISFY, BUT EXCEED THE COMMISSION'S REQUIREMENTS

Finally, the terms and conditions of Kajeet's BIAS plans for Lifeline subscribers satisfy the Commission's requirements.[16] The Commission requires that mobile broadband products must provide "3G or better" speeds to be Lifeline-eligible,[17] with a phased-in minimum data usage allowance starting at 500 MB/month, and set to rise to 2 GB per month by December 1, 2018.[18] Kajeet is already set to surpass these minimum requirements on day one. Each participant in the Federal Lifeline program that Kajeet services through its Education Lifeline product will receive up to 6 GB of 4G LTE Education Broadband access per month, at no cost to the Lifeline-eligible household.

Thus, as demonstrated, Kajeet satisfies all of the Commission's criteria from the *Lifeline Modernization Order* and from the *LBP PN* for LBP ETC designation.

V. KAJEET SATISFIES ALL THE COMMISSION'S OTHER REQUIREMENTS FOR ETC DESIGNATION

In addition to the five LBP ETC criteria discussed above, Kajeet also satisfies (and certifies to) all other Commission requirements for LBP ETC designation.

---

[15] *LBP PN* at 6 ¶ 12.

[16] 47 C.F.R. § 54.202(a)(6);

[17] *Lifeline Modernization Order*, 31 FCC Rcd at 3998 ¶ 96.

[18] *Id.* at 3996 ¶¶ 93-94.

A. KAJEET IS A COMMON CARRIER, AND WILL PROVIDE LIFELINE SERVICES BY RESELLING ITS UNDERLYING CARRIERS' SERVICE.[19]

Kajeet is a common carrier as a provider of BIAS to the public.[20] Kajeet plans to offer its common carriage Lifeline services through the resale of another carriers' services, per Section 214(e)(1)(A) of the Act and Section 54.201(d)(1) of the Commission's rules.[21]

B. KAJEET WILL COMPLY WITH THE COMMISSION'S ADVERTISING REQUIREMENTS

As detailed in Section II, *supra*, Kajeet will comply with the Commission's advertising requirements.[22] As clarified in the *Lifeline Modernization Order*, meeting the Section 214(e)(1)(B) requirement to advertise the availability of Lifeline service via "media of general distribution" can be achieved by advertising via "any media reasonably calculated to reach the general public or, for an LBP, the specific audience that makes up the demographic for a particular service offering. For example, for an LBP partnering with a school to offer Lifeline-discounted BIAS to that school's community, 'media of general distribution' may include flyers, newspaper advertisements, or local television advertisements in that school's geographic area." Consistent with this guidance, promotion and awareness of Kajeet's Education Lifeline program will be driven through such mediums as paper flyers, websites, school text messaging systems,

---

[19] 47 U.S.C. § 214(e)(1) (conditioning ETC status on a given provider being a common carrier).

[20] *Lifeline Modernization Order,* 31 FCC Rcd at 3977 ¶ 39 n. 92 (citing *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601, 5743-45 ¶¶ 331-35 (2015), among other sources).

[21] 47 U.S.C. § 214(e)(1)(A) (common carriers are eligible to receive USF support for services offered through their own "facilities and resale of another carrier's services (including the services offered by another eligible telecommunications carrier)"); 47 C.F.R. § 54.201(d)(1) (a common carrier designated as an ETC must "[o]ffer the services that are supported by federal universal service support mechanisms . . . either using its own facilities or a combination of its own facilities and *resale of another carrier's services*") (emphasis added).

[22] *See* 47 C.F.R. § 54.201(d)(2).

school mobile apps, and at in-person events, such as mandated annual Title I informational meetings or National School Lunch Program enrollment events, at participating schools.[23] Partnering with schools will empower Kajeet to reach more eligible households with targeted enrolled students more quickly than otherwise possible, especially with the assistance of trusted local advocates.

C. KAJEET'S PROPOSED SERVICE AREA[24]

Also as detailed in Section II, *supra*, Kajeet will partner with accredited schools and school districts to identify households whose enrolled K-12 students lack adequate broadband access for a modern digital education. Among these households, Kajeet will further identify those eligible for FCC Lifeline support via standard federal program participation, income documentation and/or National Lifeline Accountability Database ("NLAD") verification. Kajeet will partner with any school or school district in all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. Thus, Kajeet seeks a nationwide designation for all census blocks in all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. Kajeet is aware that as an LBP ETC it is required to offer Lifeline-supported BIAS service throughout the entire designated service area for which it is designated.[25] Thus, Kajeet intends to offer Lifeline-supported BIAS in the entirety of that geographic area through partnerships with schools and school districts.

---

[23] *Lifeline Modernization Order*, 31 FCC Rcd at 4094 ¶ 364.

[24] 47 U.S.C. § 214(e)(6) ("the Commission shall upon request designate such a common carrier . . . as an eligible telecommunications carrier for a service area designated by the Commission"); *LBP PN* at 5 ¶ 11.

[25] 47 U.S.C. § 214(e)(1)(A).

VI. DESIGNATING KAJEET AS AN LBP ETC WILL PROMOTE THE PUBLIC INTEREST

As the Commission properly acknowledged in the *Lifeline Modernization Order*, "the lack of access to technology and the Internet outside of the classroom makes it difficult and sometimes impossible for students to complete their homework assignments and projects, resulting in student academic unpreparedness as well as decreased academic performance and classroom engagement in school. As a result, student access to the Internet has become a necessity, not a luxury."[26] Kajeet could not agree more, and this LBP ETC application is specifically designed to target Lifeline-eligible households with students who are at risk of falling into the Homework Gap.[27] Kajeet's innovative Education Lifeline program serves the public interest by working to help ensure no child is left on the wrong side of the Homework Gap. The new Education Lifeline program is consistent with the Commission's objective to ensure K-12 students have equitable access to educational resources via a modern broadband connection virtually anytime and anywhere. As the Commission rightly emphasized in the *Lifeline Modernization Order* itself, hotspots and hotspot-enabled devices, provided through the Lifeline program, have a critical role to play in bridging the Homework Gap – and consequently, the Digital Divide.[28] LBP ETC designation will empower Kajeet to do just that – as clear a case of "serving the public interest" as is possible.

---

[26] *Lifeline Modernization Order*, 31 FCC Rcd at 4096 ¶ 369.

[27] *See* Daniel J. W. Neal, *Closing the Homework Gap: A Guide to Increasing Student Success with Home Connectivity*, Kajeet, *available at* http://www.kajeet.net/hubfs/Closing_the_Homework_Gap.pdf (last visited Oct. 10, 2016).

[28] *Lifeline Modernization Order*, 31 FCC Rcd at 4096-112 ¶¶ 366-78.

VII. ANTI-DRUG ABUSE CERTIFICATION

Kajeet certifies that no party to this Petition is subject to denial of federal benefits, including FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988.[29]

VIII. CONCLUSION

For the reasons detailed above, Kajeet respectfully requests the Commission act in accordance with the streamlined timetable and designate Kajeet an LBP ETC.

Respectfully submitted,

KAJEET INC.

By: ___*//s//*_____

Daniel J.W. Neal
CEO & Founder
KAJEET INC.
7901 Jones Branch Drive
Suite 350
McLean, VA 22102
(240) 482-3480

October 11, 2016

[29] 21 U.S.C. § 862.

APPENDIX A

kajeet
More than just Internet™

CLOSING THE HOMEWORK GAP

A GUIDE TO INCREASING STUDENT SUCCESS WITH HOME CONNECTIVITY

Written By: Daniel J. W. Neal

This book is dedicated to the tireless efforts of the hundreds of educators who are providing equal access for *all* students regardless of their socio-economic situation.

"Literally millions of kids do not have the ability to do Internet-based homework – or even e-mail their teacher – once they leave school grounds. This insidious Homework Gap is deadly to the academic advancement and life success of these disconnected kids. What's more, as each day passes and more educational material is moved to the Internet, the Homework Gap widens. Many people talk about the Homework Gap. But more and more, hundreds of passionate educators take action. These heroes are putting equal opportunity directly into the hands of young students who want to, and will, succeed, if only they are given access to the educational resources and opportunities that 'the rich kids' take for granted."

— Daniel Neal, CEO, Kajeet

"School-aged kids without broadband access at home are not only unable to complete their homework – they enter the job market with a serious handicap. And that loss is more than individual. It's a loss to the collective human capital and shared economic future that we need to address."

— FCC Commissioner, Jessica Rosenworcel

Copyright © 2016
Daniel J.W. Neal

Published by Kajeet, Inc.
7901 Jones Branch Drive
Suite 350
McLean, Virginia 22102
www.kajeet.net

kajeet
More than just Internet™

TABLE OF CONTENTS

Foreword: The Homework Gap as a Stepping Stone to Life-Wide Learning 4

Chapter 1: What is the Homework Gap? 7
How Big is the Gap? 7
How the Homework Gap Affects Students, Teachers and Administrators 8
How a School or District Determines Its Need 9

Chapter 2: Homework Gap Challenges 11
Funding Options 11
Private Foundations and Grants 11
Federal Funds 11
Gaining Community Support 13

Chapter 3: Districts Closing the Homework Gap 15
USE CASE: Advanced Placement (AP) Blended Learning 15
AP Courses for All 15
Student and Teacher Learning 16
Student Success 17

USE CASE: ESOL Programs 17
The Pilot Project 18
Moving Forward 18

USE CASE: Pre-Kindergarten Preparation 19
The GROW Project is Born 19
Looking Forward 20

USE CASE: Check-Out Model 20
Laying the Groundwork 20
The Check-Out Model: Serving More Kids for Less 21
Staff Training, Simplified 21
The Results 21

USE CASE: Test Preparation 22
Internet Connectivity for All 22

USE CASE: Create Smart Digital Citizens 23
A Device for Everyone 23
Access for All 23
Creating Smart Digital Citizens 24
Lessons Learned 24
What's Next for Affton? 25

USE CASE: Embedding Connectivity 25
Determining the Need 25
Chromebooks: An Affordable Solution 26
Embedding Education Broadband into the Chromebook 27
Benefits 27

USE CASE: Keep Students Focused 28
Computers with No Internet Access 28
Internet for Education Purposes 28

USE CASE: Filtered Data for a Tight Budget 29
A Struggling School District 29

Tracking and Reporting 29
Kajeet in Action 30

RESULTS: Student Success 30
Engaged Students 30
Improved Test Scores 31
Simpler Instruction 31
Education Broadband to the Rescue 32

About the Author 33

About Kajeet 34

Appendix 35

Glossary 37

Bibliography 39

FOREWORD: THE HOMEWORK GAP AS A STEPPING STONE TO LIFE-WIDE LEARNING

By Chris Dede, Harvard Graduate School of Education

As this book documents, the "Homework Gap" is a very important issue for educational equity and social justice. Many meritorious efforts are attempting to ensure that, while in school, children have equivalent opportunities to learn regardless of their socioeconomic status. However, if equivalent broadband access outside of school is not addressed, then teachers are hampered in using powerful forms of digital learning. Either they must privilege some students at the expense of others, or they must forgo effective, technology-based instructional strategies that could help all students. The fundamental issue is whether we limit learning to the school place and the school day, or instead make learning life-wide.

Civilization has changed in radical ways during the past few decades, and dramatic shifts are likely to continue for much of the 21st century, so the past is not a good guide to the future (Fishman and Dede, 2016). The world today presents a landscape deeply shaped by technologies—transportation, communications and computing—that place new demands on schooling to prepare today's students with knowledge and skills that were not necessary for prior generations. This challenge has profound implications for teachers and the work of teaching, in terms of both what it means to teach and how one teaches. In particular, mobile devices could enable a new, life-wide model for 21st-century teaching and learning—as different from current industrial-era schools as those schools are from the one-room schoolhouses that characterized the agricultural era (U.S. Department of Education, 2016).

The fundamental issue is whether we limit learning to the school place and the school day, or instead make learning life-wide.

Students from elementary school through high school are increasingly engaging with advanced wireless devices to collaborate with peers, access-rich digital content, and personalize their learning experiences. Always-on and always-connected, smartphones and tablets provide today's students with a ubiquitous gateway to a new ecosystem of information, experts and experiences, regardless of the physical assets and resources (or lack thereof) in their own communities. However, substantial barriers and challenges remain in effectively utilizing these new technologies, in school and out, and in implementing the types of best practices that have been proven to overcome these obstacles.

In *The 8 Essentials for Mobile Learning Success in Education,* a Qualcomm/Wireless Reach funded white paper, (Baker, Dede, and Evans, 2014) have identified eight essential components of a successful mobile learning initiative in primary and secondary education. This research-informed collection of eight essential components addresses that vital need and provides valuable input to inform local plans and initiatives:

- **Planning purposefully for mobile device usage**
- **Leveraging mobile-empowered content and curriculum**
- **Understanding the power of Internet access**
- **Preparing educators effectively**
- **Securing leadership buy-in**
- **Building personal learner efficacy and capacity for self-directed learning**
- **Measuring project results with meaningful metrics**
- **Creating a sustainable, scalable ecosystem**

Evaluation results from Wireless Reach projects indicate that the thoughtful application of these strategies in combinations that meet local context substantially increases the probability of a mobile learning initiative's successful implementation.

This book describes a model from Kajeet that fulfills these eight essential components. As such, it is valuable not only in presenting strategies for addressing the Homework Gap, but also for illustrating important principles that should underlie every mobile learning initiative.

At this point in history, the primary barriers to a 21st-century educational system are not conceptual, technical or economic, but instead psychological, political and cultural (Fishman and Dede, 2016). Some people oppose any form of educational change that is not fully understood, arguing that traditional schooling was effective for them and that innovators should not "experiment on children." But the most dangerous experiment we can perform is to keep our current systems of schooling in place, hoping that various small changes and the introduction of new technologies will make up for their shortcomings.

Over time, the disconnect between what society needs and what industrial-age educational models can provide is widening, and cohort after cohort of students has needlessly high rates of failure, creating terrible consequences for those learners and our nation. With the right investment, we can have the means necessary to implement life-

wide, technology-enhanced models of education that prepare all students for a future very different from the immediate past. Whether we have the stakeholder commitment and societal will to actualize such a vision remains to be seen.

REFERENCES

Baker, A., Dede, C., & Evans. J. (2014). The 8 Essentials for Mobile Learning Success in Education. San Diego, CA: Qualcomm. *https://www.qualcomm.com/media/documents/files/the-8-essentials-for-mobile-learning-success-in-education.pdf*

Fishman, B., & Dede, C. (2016). Teaching and technology: New tools for new times. In D. Gitomer & C. Bell (Eds.), Handbook of Research on Teaching, 5th Edition (American Educational Research Association), pp. 1269-1334. New York, NY: Springer.

U.S. Department of Education, Office of Educational Technology. (2016). Future Ready Learning: Reimagining the Role of Technology in Education. Washington, D.C.: US *DoEd. http://tech.ed.gov/netp/*

CHAPTER 1: WHAT IS THE HOMEWORK GAP?

All around the world, equity and technology advocates talk about the ill effects of the "digital divide," better known as the gap between those who have access to the Internet and technology (access and technology that is increasingly mobile in nature) and those who do not.

However, a new and more disturbing gap is emerging today, one which affects millions of school-aged children. These children do not have high-speed Internet access outside of the classroom, and thus are not able to complete homework and after-school assignments. This new gap, the "Homework Gap," leaves these children at a measurable disadvantage compared to their more affluent peers, resulting in lower test scores, lower grades and—ultimately—lower graduation rates. As more and more U.S. school districts implement digital and web-based learning programs requiring students to work and collaborate on assignments outside the classroom, a large number of low-income students are finding themselves caught in the Homework Gap and struggling to keep up.

Roughly seven in 10 teachers assign homework requiring broadband access at home; however, one-third of all households with school-aged children across the United States lack adequate home Internet access, according to the Federal Communications Commission (FCC)[1].

How Big is the Gap?

A Pew Research Center study found that 82.5 percent of U.S. homes with school-aged children do, in fact, have broadband access to the Internet. However, the study also uncovered that 5 million households with school-aged children do not have high-speed Internet service at home. Low-income households make up the largest share of that 5 million.

Approximately one-third of households with incomes of less than $50,000 and children under age 17 do not have a high-speed Internet connection.[1] This low-income group makes up about 40 percent of all families with school-aged children in the United States.

On the flip side, only 8.4 percent of households with annual incomes over $50,000 lack broadband Internet connection at home.[1] That means low-income families are four times more likely to be without broadband access than those with higher incomes. Additionally, researchers found that minority students were similarly underserved, with 38.6 percent of black families and 37.4 percent of Hispanic families currently without broadband access.

How the Homework Gap Affects Students, Teachers and Administrators

Today's students embrace digital learning. A recent study shows that more than 50 percent of students in grades 6 through 12 are online weekly to find resources for assignments and homework. Additionally, 30 percent of high school students use the Internet every day to complete their schoolwork.[2]

Students who don't have Internet access at home are at a major academic disadvantage. They cannot perform online research, watch instructional videos, or complete their homework on time or in the comfort of their own homes. They cannot email their teachers, collaborate with their peers online or participate in any real-time learning opportunities. Ultimately, this systemic disadvantage jeopardizes the student's access to essential resources, grades, self-esteem and academic performance. According to a recent study from the Hispanic Heritage Foundation, the Family Online Safety Institute and My College Options, nearly 50 percent of students say they have been unable to complete a homework assignment because they didn't have access to the Internet or a computer. On top of that, 42 percent of students say they received a lower grade on an assignment because they didn't have access to the Internet.

46% of district technology leaders say Internet outside of school is one of the most challenging issues.[3]

For teachers and administrators, the Homework Gap poses an even bigger dilemma. Digital equity, including student access to the Internet outside of school classrooms, is a growing concern among district technology leaders. According to a Project Tomorrow survey, 46 percent of district technology leaders say it is one of the most challenging issues they face today.

Teachers are being asked to teach 21st-century workplace skills and are, in many cases, the only adults helping students learn how to navigate the online world and be smart, safe digital citizens. In the worse-case scenario, the Homework Gap stops teachers from assigning work that will help prepare students for college and careers. In the best-case scenario, teachers must alter their lesson plan to only give homework where the Internet is required on weekends, so students can (sometimes) more easily

gain access to the Internet at local businesses or public libraries. According to the Bill and Melinda Gates Foundation's Teachers Know Best 2014 study, 42 percent of teachers cite student access as a barrier to digital adoption in their classroom.

How a School or District Determines Its Need

Access to high-speed broadband has become as essential in K–12 education as traditional textbooks, chalk/whiteboards and lesson plans—educators just can't teach without student access to the Internet. Although many districts have solved the on-campus connectivity issue (with varying degrees of success), districts are just starting to recognize their off-campus connectivity dilemma and struggling with the needs, challenges and limitations of this difficult issue.

Schools and districts that have deployed, or are in the process of deploying, 1-to-1 initiatives are most vulnerable to students falling into the Homework Gap. The obvious intent of all this empowering and useful technology is to ensure students have access to modern tools and technology, so they can compete and learn in a modern world. Yet if districts do not also have a plan for connectivity outside the classroom, a number of their students will fall further behind.

So how does a district determine its need for off-campus connectivity? Start by asking the teachers.

- **What are their expectations for learning outside the classroom?**
- **How many of their students complain about not having Internet access at home?**
- **Do they have to alter their lesson plans because a few (or a majority) of their students don't have easy availability to the Internet on a school night?**

If your teachers use online platforms that let them create and organize assignments, provide feedback, and communicate with their students (such as Google Classroom, Microsoft Office 365, Edmodo or Blackboard), then Internet connectivity at home becomes even more critical.

By understanding your teachers' expectations, you'll have a good start at determining your need. Some districts hear of families without Internet access from school counselors or social workers, as these professionals often have insight into what happens at home. Such professionals are a great resource for finding out which families may not have connectivity.

To quickly scope the issue, Kajeet has learned from its client base a "general rule of thumb:" Approximately 15–25 percent of students participating in the Free Meal Program (not Free and Reduced) will not have adequate broadband access outside of school.

The more accurate way to determine the need for connectivity is to conduct a formal survey of students and/or parents. Here are a few tips:

1. Be sure to clarify the type of Internet access they may or may not have. For example, a student or parent may consider a smartphone as "having an Internet connection," but a smartphone is not an adequate tool or resource to complete most homework and school assignments. Be clear about high-speed Internet that can be accessed by a laptop, computer, Chromebook, netbook or tablet.

2. It may sound simple, but remember, if the household does not have Internet connectivity, it cannot answer an Internet-based survey form. Provide a paper-based, in-school survey; a text-based message survey; and/or a phone-based survey to reach all households.

3. The households most easily missed are often those with the students in greatest need. If necessary, involve your existing community outreach resources (Title I coordinators, migrant program staff, homeless program staff, counselors and home advisors) to catch all households in need.

To assist you, Kajeet has created a *sample student connectivity survey* based on the best questions asked by hundreds of our clients. Please feel free to use this survey in whole, in part or as a starting template for your own survey.

CHAPTER 2: HOMEWORK GAP CHALLENGES

Technology requires funding, and funding continues to be one of the biggest challenges facing schools. Therefore, funding should be a part of your digital strategy and budget.

Funding Options

The good news is that there are private foundations, local grants and federal funds that can be used to fund (or assist in funding) off-campus connectivity. Many districts are already tapping into those funds to help close the Homework Gap, purchase and develop new or existing technologies, enhance students' computer skills, offer professional development for educators, increase parent involvement, and work with data to improve academic achievement for all.

Initial funding to launch a program is a great start, but there should be a commitment to sustain it for the future. Once Internet access is provided to a student who needs it, and the utility of such access is realized, it is painful to take it away.

Private Foundations and Grants

For districts that don't qualify for federal funding or need additional dollars to help close the Homework Gap, grants are another viable solution.
Stevens Point Area Public School District in Wisconsin believes that 10 percent of its students do not have connectivity at home. Thanks to a grant from the Sentry Insurance Foundation, more than 1,800 students in the district have received a laptop and, when needed, a Kajeet SmartSpot®. This program has been successfully implemented for five years and counting.

Kajeet has created a free, online database of more than 100 foundations and grants that can help schools close their Homework Gap. Visit *HomeworkGapFunding.com* to find grants that may be available for your school and project.

Federal Funds

Title I funds help close the achievement gap between high-performing and low-performing

students. They are based on a formula that counts the number of families living in poverty within a school attendance area. In schools where the number of children living in poverty is 40 percent or greater, a school can make use of what is called a "school-wide model," where funds are used across the entire school's population.

Many districts, including *Fayette County Schools in Georgia*, have been using Title I funds to loan out laptops to students with a demonstrated need. Earlier this year, Fayette County's Title I coordinator discovered she could also use Title I funds to provide Internet access in the form of Kajeet SmartSpot devices to her district's low-income students.

Round Rock Independent School District in Texas (and several other districts) have also used Title I funds to equip their students with devices and Internet access.

Race to the Top, a competitive K–12 federal funding program, has awarded $3.5 billion worth of grants to 12 states. Applicants must design a personalized learning environment that uses data-based strategies and 21st-century tools to deliver instruction and individualized support so all students develop skills for college and a career.

"I heard about Kajeet two years ago but didn't have any way to fund it. I went through all the various ways to subsidize it. There doesn't seem to be any interest from corporations to help subsidize connectivity for kids who cannot afford it. When we got the grant money for the second time, we knew we were going to get Kajeet."

—Brian Casey
Director of Technology,
Stevens Point Area Public School District

School Turnaround grants, also called School Improvement Grants (SIG), are competitive funds designed to raise achievement in Title I schools that are failing to meet their academic achievement goals. Family and community engagement programs may be supported with SIG funds.

Migrant education funds help migrant children succeed academically in a regular school program, meet the same academic and content standards that all children are expected to meet, and graduate from high school.

Title III funds are used to help English-language learners attain proficiency and meet a state's academic content and student academic achievement standards. Districts can also use these funds to develop training programs for teachers who work with English-language learners.

For more information on all of these resources, download Kajeet's white paper: *Helping to Close the Homework Gap: Funding Student Mobile Broadband.*

Gaining Community Support

In the past, parent involvement meant baking cookies for a fundraiser or attending PTA meetings. Today, districts are reaching out to families, relatives, caregivers, businesses and community groups to help improve academic achievement.

Whether it's a teacher inviting a local scientist to do a Q&A Skype session or a principal asking a store to donate craft supplies, when districts and communities work together, students tend to earn higher grades, attend school more regularly and enroll in higher-level programs.

Research shows that strong school-community partnerships lead to more motivated students. [4]

What happens before and after school can be as important as what happens during school. When students head home equipped with broadband devices and filtered Internet access, their family members can communicate with long-distance relatives, apply for jobs or participate in free online learning opportunities. The value and benefits are endless. [5]

Schools can hold information sessions and offer training for parents and community stakeholders so that everyone in the community knows what is going on.

"At the end of the day, it's about relationships. It's vitally important to establish relationships with everyone involved to be successful."

—Debra
Crawford Blended Learning Coordinator, Cincinnati Public Schools

Communication

When districts begin implementing 1:1 programs and/or decide to provide students with Kajeet SmartSpot devices or other at-home connectivity devices, it is essential to keep parents, caregivers and the community in the loop.

First and foremost, students must understand what is expected of them in terms of taking care of and protecting the equipment. They have to know when to bring the equipment back to school and any other rules the district has put in place. More than anything, students must be up to date on the district's Internet use policy and know that those same rules apply outside of school.

Parents need to be on board as well. And of course, teachers and staff members have to be informed so they can help students who need Wi-Fi hotspots use the resources available to them.

Districts can make everyone aware of their device loaner programs by publicizing the information in

handbooks, on back-to-school-night flyers, at PTA meetings and during any event that draws families to school. They can also include information about laptop and SmartSpot rentals in email newsletters and in any emails from the district's technology department. Teachers can publicize the information on their websites, as well.

Some districts are coming up with more creative ways to get the word out. Forsyth County Public Schools in Georgia developed a publicity campaign that involves students producing public service announcements. Cincinnati Public Schools involves students and their parents from the beginning of its blended AP courses, which were opened to more students through the creative use of curriculum adjustments made possible by Kajeet SmartSpot devices.

Building Relationships

Communication within the district is equally as important as communicating outside of it. A successful program is one where technology and curriculum teams work closely together.

In Cincinnati Public Schools, the technology and curriculum teams formed the Digital Learning team. "Relationships are vitally important to make our Blended Learning Program a success, and we have pulled in everyone who is involved," says Blended Learning Coordinator Debra Crawford. "As a result, we have a board that fully supports what we do."

CHAPTER 3: DISTRICTS CLOSING THE HOMEWORK GAP

Across the country, more and more districts are launching 1-to-1 initiatives to extend the impact of mobile devices and close the Homework Gap. At the same time, districts are finding ways to provide mobile Internet access for students who don't have it once they leave school.

One affordable way districts can offer home Internet access for students is with Kajeet Education Broadband™. Kajeet Education Broadband includes a Wi-Fi hotspot that is easy for students to use. Districts have peace of mind knowing that the CIPA-compliant filters, as well as their ability to manage student Internet access times and content (while only paying for the data being used), will keep students focused.

Districts of all sizes—including *Green Bay Area Public Schools* in Wisconsin, *Richland School District Two* in South Carolina, and *Detroit Public Schools* in Michigan have successfully provided home Internet access.

USE CASE: Advanced Placement (AP) Blended Learning

With close to 72 percent of their student population considered economically disadvantaged, school administrators for Cincinnati Public Schools know that a brighter future begins with a better education—and they are determined to help create that future for their students. To better prepare students for their chosen career paths, the district launched its My Tomorrow*ed program last year.

AP Courses for All

During the 2013–2014 school year, only 50 percent of Cincinnati Public Schools' high schools offered AP classes. With the district focused on equity of learning, administrators knew that many students were missing out on valuable experiences and opportunities because of the lack of AP courses.

The technology and curriculum team quickly joined forces over the summer to roll out an AP Blended Learning test program. Students voluntarily enrolled

in the program. One teacher would instruct students at the seven schools, and would be physically present in the classroom only once per week to make sure everyone was on track. However, little did they know that their test program would turn into the AP Blended Learning program for advanced academic coursework, which other districts would look to as a pioneer in the field.

Starting on a positive note, each student was equipped with a Netbook, a Kajeet SmartSpot (a portable wireless MiFi hotspot that offers safe, filtered Internet for educational purposes), and access to software and applications that help organize and enhance the learning process. Students worked through their lessons and communicated regularly with their teacher and classmates. Many of these students would never have had access to AP courses before, but this game-changing technology introduced them to rigorous coursework.

What started in 2014–2015 with one AP Human Geography course offered to 90 students in seven schools grew into an expansive roll-out for the 2015–2016 academic year, which now offers five AP courses (Human Geography, Psychology, English Literature, Statistics and Environmental Science) and has the capacity to serve up to 520 students. This pedagogical and financial success was achieved by carefully integrating adjustments to the curriculum, teaching methods and technology.

"At Cincinnati Public Schools, we encourage our students to think beyond graduation and take steps toward identifying and transitioning into meaningful careers," said Laura Mitchell, Deputy Superintendent and Chief Academic Officer. "We wanted to expand our AP offerings so that more students have the opportunity to earn college credits early and experience more of the rigor they will face in post-secondary studies."

For the 2015–2016 school year, the administrators at Cincinnati Public Schools are taking an even more creative and planned approach to AP course implementation. The district hosted week-long "Boot Camps" at local universities to introduce students and their parents to the academic challenges of AP courses, as well as to the technology they will use to do coursework. As a result, the students came to class with a stronger skill set and were better prepared for this unique classroom set-up. Crawford notes that, for many students, this may be the only opportunity to experience life on a college campus. For one week, they slept in the university dorms, ate in the university cafeteria, and talked with university students about their experiences.

Student and Teacher Learning

Because Cincinnati's AP teachers are not tied to one particular school (where they would have daily interactions with fellow teachers and staff), the AP Blended Learning team hosts its own staff meetings

so instructors have a sense of community. According to Crawford, this pedagogical change has been valuable to observe over the past year.

When the teacher is only with the class for one to two days a week, they must be very engaging in order to keep the students' attention. They must rise to the challenge of delivering more in less time. And they do.

"The teachers are doing a phenomenal job with their classes," Crawford says. "They have had to change their teaching style. When they are not in the classroom, they are making videos, or hosting Skype chats and Google Hangout sessions."

In addition to coursework that will prepare these students to take AP exams in the spring, Crawford points out that the students are gaining many valuable life skills as part of this program. Because the students do not have a teacher in the classroom each day, they must learn to manage their time better and reach out to classmates and their teacher when needed.

"They are finding a sense of community with other students taking the course even if they are at another school," she says.

Crawford's team continues to learn along the way. After the first year, they determined student/teacher face-to-face interaction once a week just wasn't enough. Both teachers and students needed face-time more frequently. As a result, teachers now visit the physical classroom at least two to three times a week and are limited to instructing no more than five classes.

Student Success

The first year results showed great success for the students of Cincinnati Public Schools, with 64 program students taking the AP Geography exam in the spring. "These are experiences these students wouldn't have had before this," Crawford says.

As the technology and curriculum team sees improved student outcomes with technology at school and at home via the AP Blended Learning program, they are looking to expand the take-home learning program within other classrooms to provide similar filtered Internet access at home. By providing this opportunity to more of its low-income students, school administrators are seeing renewed classroom engagement, improved time management skills, and an increased interest in post secondary education—all clear indicators of a brighter future for their students.

USE CASE: ESOL Programs

There are many struggles for first-generation immigrants to overcome when they move to this country. South Carolina's Richland School District Two is hoping to position these families for success

by offering at-home filtered wireless Internet access after school. In a district where innovation is important, and where technology is incorporated into most aspects of learning, how does one equip students and families with limited access to technology?

"Bridging the digital divide is very important to us," says Donna Teuber, team lead for technology integration at Richland Two. "We have a lot of blended learning initiatives, and we want to make sure that all our students have access to the tools they need after school."

While many districts around the country are incorporating 1-to-1 or Bring-Your-Own-Device (BYOD) programs into their schools, few districts are doing both at the same time—and successfully. Richland Two has been committed to integrating technology into the classroom and is just as committed to making sure technology is available to all their students outside the classroom, as well. According to Teuber, equity of access is essential to the successful implementation of these programs.

The Pilot Project

Though most students in Richland Two have their own devices through BYOD programs or Chromebook loans from the school, there are still some who don't have Internet access at home. By using mapping data, the district was able to see which families lacked home Internet access as well as how that impacted student test scores and grades. They identified 25 families and found these families were mostly Hispanic; many were first-generation immigrants. "When you're struggling just to pay for rent and food, Internet access doesn't come up high on the list," says Ron Huff, Richland District Two's Hispanic family liaison.

Currently, 7.5 percent of Richland's population is Hispanic, and that rate is expected to grow to 10 percent in the next five years. After identifying the families, Richland Two partnered with Kajeet to offer 25 Kajeet SmartSpot devices for safe, filtered Internet broadband. Over the summer, Huff's team showed them how to use the Kajeet SmartSpot. He explained that the Kajeet devices weren't just for kids to get better grades but also for the entire household to use to access community resources and search for jobs—a benefit for every family member.

"We are able to look at test scores, grades, and graduation rates to measure the results, and we've seen some good results so far," says Huff. "Using Kajeet SmartSpot devices gave these kids avenues to complete all their homework. We even had some students who were able to bring their grades up to honor roll status from so-so grades."

Moving Forward

Through the initial success of Richland Two's pilot partnership with Kajeet, they have increased the next phase of their program to include 100 devices.

The program has been expanded to include other ESOL students, as well as other needful students identified.

"Being able to offer filtered Internet content was key," says Teuber, who is very pleased with the outcome of the program. "The Kajeet SmartSpot devices have been a great way for us to get Internet access into those homes, and from what we are seeing, it is having a tremendous impact!"

USE CASE: Pre-Kindergarten Preparation

How do we equip rising kindergartners with the early-reading skills they need to succeed? In states where universal preschool is not a requirement, the risk for these children is even greater. Parents are on their own to make sure their children are prepared for the challenges of kindergarten. But even in states with robust preschool programs, struggling students who lack early-reading skills are at a disadvantage when they enter kindergarten.

That is the problem that Chad Jones, director of technology development for Lamar Consolidated Independent School District (Lamar CISD), is helping to solve. How did the idea get started? According to Jones, "Mandy Bryan, one of our technology development specialists, came back from a conference and asked, 'What would happen if we took the preschoolers who need the most help before heading into kindergarten and we gave them each a laptop, Internet access and access to an online reading program for the summer?' And since we had computer carts going unused over the summer, we figured out a way to make it happen."

The GROW Project is Born

Inspired by the success of Utah's UPSTART program, which offers early-reading support to rising kindergartners who haven't had access to preschool, the technology team at Lamar CISD founded the GROW Project.

Fifty students at an early-learning center were identified as needing reading assistance. They were given a pre- and post-test to assess the effectiveness of the program. The students were then given repurposed laptops, a Kajeet SmartSpot and an early-reading curriculum provided by the Waterford Institute. Parents were encouraged to work with their children over the summer to prepare them for the kindergarten curriculum using the materials provided. Data collection is still ongoing, but one thing is clear: both teachers and parents love the program.

Shauna Dubec, the parent of a rising kindergartner who was in the test group last year, is extremely pleased with the results she's seen in her child. "He is ahead of other kids in his class now and has been all year," she says. "It's really helped him. He learned so much from the program and he loved

doing it. We used it every day—sometimes more than once."

Looking Forward

Lamar CISD is continuing their commitment to helping at-risk preschoolers get ready for kindergarten. For the 2015–2016 school year, the district provided more children with the combination of laptops, Kajeet SmartSpot devices and the Waterford pre-reading program.

Dubec is also looking forward to this summer, when her youngest child will be a part of the GROW Project and follow in his brother's footsteps. "He watched his brother use it last summer and can't wait to get started himself," she says.

USE CASE: Check-Out Model

The Green Bay Area Public School District, like many across the country, is focused on how to successfully integrate technology into their teaching process. With 41 schools and more than 21,000 students, 60 percent of whom qualify for the free or reduced-cost lunch program, ensuring digital equity both inside and outside the classroom can be a challenge—even when it is such a high priority. "We're focused on developing technology-rich lessons as part of the District's curriculum goal," says Diane Doersch, chief technology and information officer for Green Bay Area Public Schools. "Using digital learning, students can collaborate together on documents and communicate with their teachers in and out of the classroom. Providing student mobile broadband gives teachers an opportunity to enhance their lessons and not hold back on assignments because some students may not have Internet access at home."

When Doersch was charged with making sure all the students in Green Bay had access to the Internet after school, she knew the key to success would be a thoughtful, organized system that could be easily managed across the 10 schools in the pilot program.

Laying the Groundwork

As a first step, Doersch's technology team evaluated several options for Internet connectivity and decided on the Kajeet SmartSpot device because of its filtered and managed service, and its access to CIPA-compliant Internet content that can be easily monitored and controlled remotely. They wanted the focus to be on the students' educational needs and on student safety—with the same protections and filters provided in school.

The technology team then test-drove several Kajeet SmartSpot devices to make sure that once they were in the hands of their students there would be no problems with device compliance, network connectivity or ease of use.

"It's so easy for the students to use," says Doersch. "There are not a lot of buttons—just on, off, right or

left. We can even turn off the devices during sleep hours."

The Check-Out Model: Serving More Kids for Less

In order to offer Internet connectivity to as many students as possible, Green Bay Area Public Schools' technology team implemented a check-out model in each school. Students would be able to check out Kajeet SmartSpot devices, as well as laptop computers, for up to three days at a time. With help from Kajeet, the district created permission slips and a responsibility agreement that were managed through the school office. Once the forms were signed, the secretary put a flag in the student information system granting that student permission to check out a device.

Next, the district used Google Docs to house a spreadsheet, accessible to all staff, listing the number of Kajeet SmartSpot devices and laptop computers available, the names of the students who had checked them out, and the dates they were due back. It was up to teachers to determine student need and to assign devices.

Staff Training, Simplified

Prior to launching the program and delivering the Kajeet SmartSpot devices to the schools, the technology team conducted meetings to train every teacher and staff member on checkout procedures, how to use the Google Docs form, and how to operate the Kajeet SmartSpot devices. Now it was finally time to deliver the MiFis to each school and get them into the hands of the students who needed them. Along with the devices, a how-to video was sent to the staff to cover any residual questions they might have, as well as to provide training to new staff members.

The Results

The teachers at Green Bay Area Public Schools could not be more pleased with the program. They can now create lesson plans that incorporate technology without concern for whether all their students will be able to fully participate.

"I serve several students who don't have access to reliable computers and/or Internet," says Darryl Buck, a teacher for Green Bay Area Schools. "I am trying to create an environment where electronic communication is, if not the norm, a major component of our communication. Electronic publication is the final step in the writing process for my students; without Kajeet, this wouldn't be possible for far too many of them. Without this option, I don't feel that they would be prepared for the demands they would encounter beyond graduation."

Buck's sentiments are echoed across the school system.

USE CASE: Test Preparation

As students in Fayette County, Georgia, get ready to take the Georgia Milestones Assessment this year, Title I Coordinator Clarice Howard is concerned about how students in her district with limited access to technology will perform. "Students will be required to read passages, extract details and complete assignments on their devices," she says. For those students who lack experience using technology, how will their test scores compare to their technology-fluent peers?

Like many state-mandated assessments across the country, the Georgia Milestones Assessment is transitioning to an exclusively online administration. It measures student performance in language arts, mathematics, science, and social studies for students in grades 3 through high school, and it contributes 20 percent towards the student's final course grade. Kimberly R. is a single parent to a child at Bennett's Mill Middle School, a Title I school in Fayette County. "[My son] struggles in school," she says. "Sometimes it takes him a really long time to grasp something. I'm trying to teach him to use the Internet to get help when he needs it."

Between long work hours and caring for her family, finding a way for her son to use the Internet when he needed it was always a struggle. "We used to use my cell phone when he needed help with his homework, but I had a really small data limit plan, plus the screen was too small [to complete the assignments]. We would get in the car and go to my mom's house or the library, if it was still open."

Internet Connectivity for All

Fayette County Schools is a Bring Your Own Technology (BYOT) district, but students with a demonstrated need are given access to school-loaned devices through Title I funding. Since Internet access is critical for completing homework assignments, especially for those students who need the extra help, Howard discovered she could also use Title I funds to provide Internet access to her district's low-income students. Working with Title I parent liaisons within the elementary and middle schools, families in need are identified and provided school-loaned equipment, as well as safe, affordable broadband Internet access with Kajeet SmartSpot.

"When kids needed paper and pencil, we provided that," says Howard. "All students need access to devices. Title I provided devices for those who couldn't afford them. As the school day extends outside the class, we needed to make sure students had what they needed, and that includes safe access to the Internet."

And for students like Kimberly's son, access to the Internet after school with Kajeet Education Broadband has made a world of difference. "It was very easy to set up," she says. "[My son] has been working harder and his homework is a lot less

stressful. Now we can keep up with his homework through the school website, and if he has a question, we can use the Internet to look up an answer."

USE CASE: Create Smart Digital Citizens

In 2012, technology was in a sorry state at Affton School District. The infrastructure was fragile, there was inadequate wireless connectivity in the school, students were using antiquated computers and instruction lacked the effective use of technology tools.

The technology staff rose to the challenge. "We did 10 years of work in three years," says Robert Dillon, former director of technology and innovation for Affton School District, and the author of Engage, Empower, Energize: Leading Tomorrow's Schools Today (Rowan & Littlefield Publishers, 2014) and Leading Connected Classrooms (Corwin, 2015). "Our goal was not to just catch up but to jump ahead."

And jump ahead they did. The district laid down the proper foundation, purchased devices, and partnered with BrightBytes, an educational research and analysis organization, to help teachers learn how to infuse digital learning into their lessons in an authentic, engaging way.

A Device for Everyone

Affton School District launched its 1-to-1 program in August 2014 by handing out Dell Chromebooks to all of its 800 high school students. The plan was to go 1-to-1 at the middle school in two years, but the high school program went so well that the district launched the middle school 1-to-1 program in August 2015.

Throughout the 1-to-1 rollouts, Dillon and his staff were cognizant of the fact that close to half of district students qualified for free and reduced meals, and around 10 percent of these students did not have home Internet access. "Some of our older students' parents work second shifts," Dillon says. "The older kids take care of their siblings and then do their homework. They can't go to McDonald's or the library at 9 p.m. We had to find a way to provide 24/7 access for everyone."

In 2014, Dillon attended an edtech conference, discovered Kajeet, and knew he'd found a solution.

Access for All

Now, Affton families without Internet access can take home a Kajeet SmartSpot, which lets them connect to a 4G network for free. Using various resources, Dillon and his staff identified which students needed to borrow SmartSpot devices. For instance, he met a grandmother at a parent-teacher meeting who told him she was raising two girls and needed help. School counselors also provide him

with the names of families lacking Internet access. Last but not least, teachers keep track of students who don't turn in homework assignments.

"Once we know there's a need, we call folks and tell them about the SmartSpot devices," says Dillon. "We let them tell us if they're interested. This has worked out very well for us."

The only rule for borrowing a SmartSpot is that students need to check-in with the tech department after a couple of weeks. This is for several purposes. One purpose is to make sure the devices are optimally functioning. Another purpose is to provide an opportunity to check in with students about their progress and success at school.

"As a former middle school principal for 15 years, I know that you can't surround children in need with enough adults," says Dillon. "We can have a quick conversation with a child when they return the SmartSpot, but the point of that talk is more about checking in on an emotional level."

Because the technology staff has little day-to-day connection with students, Dillon asks his seven-person team to handle check-ins. This enables them to routinely experience why they're doing the important work they do.

Creating Smart Digital Citizens

One reason the technology staff likes Kajeet is that its management console allows them to easily turn the SmartSpot devices on and off at certain times, and also allows them to check-in on student use. "We get notifications from Kajeet if something is unusual, but we work from a basis of trust," says Dillon. "Our filtering is invisible but compliant." If a teacher or student asks Dillon to open up Facebook, Twitter or YouTube, he's happy to comply. In fact, the district was recognized as a Common Sense Digital Citizenship: Certified District in 2014 for teaching its students to be safe, smart and ethical digital citizens. Teachers go through digital citizenship modules developed by Dillon's staff and incorporate what they learn into their lessons when it makes sense. By modeling smart online behavior, they help students understand the importance of using technology safely and respectfully.

Lessons Learned

By working with Kajeet, Dillon has been pleasantly surprised by what he's learned regarding student usage.

First of all, students are using their SmartSpot devices both later at night and more productively than originally expected.

"We used to turn them off at midnight, but a student told me he didn't get home from work until 10:30 p.m. and asked if we could keep them open until 1 a.m.," says Dillon. "We thought there'd be more streaming traffic, but the students are doing

what they're supposed to be doing. They don't abuse them."

Another surprise is that having Internet access opens doors for the entire family. Parents work on resumes, and younger siblings conduct research.

What's Next for Affton?

Dillon says his biggest challenge is to make sure that every project he starts is sustainable. Innovation is tough, and he wants to be sure that communication stays strong and the culture continues to change. "We have to keep the energy high," he says. "And we need to celebrate our successes."

For the 2015–2016 school year, his goals were simple: make sure the 1-to-1 program at the middle school was successful; provide mentoring and additional support for high school teachers who didn't lean into the 1-to-1 shift last year; and launch a makerspace for kindergarten through second grade.

"We made huge strides last year in shifting a number of learning spaces," says Dillon. "We turned computer labs into open idea spaces and libraries into design studios. Now we're ready to move what we've done into some of our classrooms."

Creating innovative learning spaces has become a passion of his, particularly because these redesigned rooms pay off in student happiness.

"Students using the SmartSpot [devices] couldn't be any happier to have the access that they have. They understand their school is counting on them to do great things with them. Staff at the school level are really caring to make sure there is greater equity for access."

—Robert Dillon
Former Director of Technology and Innovation, Affton Public Schools

USE CASE: Embedding Connectivity

When a bond levy was passed in 2012, funding was allocated for technology improvements at Worthington Schools in Ohio. The district created a team of students, teachers, administrators and community members to develop the district's technology plan. The plan in place included replacing Worthington's outdated Microsoft desktops. The team was ready and excited to explore an option to move to more affordable Chromebooks. But purchasing Chromebooks would require Worthington Schools to address the Internet connectivity issue head-on for students who didn't have it at home.

Determining the Need

Worthington Schools, located in the northwestern suburb of Columbus, educates approximately 10,000 students—2,500 of whom are enrolled in the free and reduced cost meal program.

Keith Schlarb, chief technology officer of Worthington Schools, knew that an unknown number of those 2,500 students didn't have Internet at home, but he wanted to make sure they had an accurate count of those who needed connectivity before leading the charge.

"We knew there would be many students who wanted a computer, but we wanted to first address those who needed them—basically, looking at it as a needs versus want situation," says Schlarb. The district asked parents to respond to a questionnaire about their at-home broadband access as part of updating their student information for the fall. The finding: 500 families needed Internet access.

Chromebooks: An Affordable Solution

The Chromebooks purchased allowed the district to expand the number of devices available for instructional use throughout the school day. Each grade level from kindergarten to sixth grade has a minimum of 30 Chromebooks, while grades 7 to 12 have similar quantities available.

The low-cost Chromebooks made providing connectivity a reality for these students. The ease and simplicity of the Chromebooks set the tone for Worthington Schools. With little instructional time needed for either the teachers or the students, migrating to Chromebooks was extremely simple.

Knowing what was on the horizon, a year before their planned Chromebook rollout, Worthington Schools began a pilot program with Kajeet to provide filtered Internet access using Kajeet SmartSpot devices. The district knew it needed to address the connectivity issue for those students in the district who fell into the Homework Gap.

"Connectivity at home is an issue we have been monitoring for several years," says Schlarb. "However, we needed to find a good solution within our budget to close the gap. Since Kajeet expanded its service onto another carrier network, which is already a district vendor, and their pricing options are affordable, it made sense for us to partner with Kajeet."

Wanting to ensure every student had access to the technology and connectivity required for schoolwork, the libraries at all 17 schools with Chromebooks have laptops available for students to check out.

But with only 500 students needing connectivity, Worthington Schools didn't need their 3,000 purchased Chromebooks to have embedded WiFi—only the 500 Chromebooks intended to provide connectivity to the students in need. Embedding mobile Internet within the Chromebook allows a student to connect, via a wireless network, to the Internet anytime and anywhere.

Having already tested the Kajeet solution, Schlarb brought an idea to the Kajeet operations team: Could Kajeet embed its Education Broadband solution onto a Chromebook?

Embedding Education Broadband into the Chromebook

As it turned out, Kajeet was able to make this a reality for Schlarb's team. Working with Verizon Wireless, 500 Chromebooks with embedded Kajeet Education Broadband became available to those students who needed them.

Using the Kajeet Managed plan, very little administrative work was required by Worthington Schools. Students borrowed the Chromebooks from the school libraries and received 500 MB of data every day. Because the Chromebooks were being used for educational purposes only, this amount of data was enough for the student to get to online resources, complete homework, conduct research, and connect with peers and teachers. Kajeet handled all the data management, and unless there was an issue with a device continually hitting its data cap each day, Schlarb and his team were free to take care of their many other job duties. "We have paid for the data, and it's there for the students to use," he says. "I just don't worry about it."

When students need a computer, they come to their school library and fill out an application to check out one. Lori Poleway, the library media specialist at Thomas Worthington High School, says students are very excited to have this available to them. The library's 115 Chromebooks are always checked out, and a waiting list is maintained.

Benefits

Based on survey data, Worthington Schools believes it has closed its Homework Gap. Survey data is providing them with the scope of their gap, devices are continually checked out and homework is being completed.

"The Chromebooks are in the hands of kids who don't have computers, and we are breaking down the barrier and putting kids on an even playing field," says Schlarb.

The program is only in its second year, but the district is happy with what they are seeing already. After the first semester, Poleway said 75 percent of the students have a 2.0 GPA or higher. "Some of these students would likely have maintained a reasonable GPA, but the Chromebook loaner has made it easier for them to do so," she says.

Going forward, Worthington Schools will take a better look at the number of students in need, because the district wants to ensure that every student who needs a Chromebook is able to take one home.

USE CASE: Keep Students Focused

When Melissa Motes, director of instructional technology for DeKalb Independent School District (DeKalb ISD) in Texas, was planning to implement a 1-to-1 technology program for students in grades 8 through 12, she had to be very careful to keep the cost down. "We had a vision for where we wanted to go, but our funding was limited," she says.

Computers with No Internet Access

DeKalb ISD is a small, rural school district near the border of Arkansas and Oklahoma, and has fewer than 1,000 K–12 students. Motes' budget allowed the district to purchase Chromebooks with cases that were made available through a library checkout system for any student in grades 8 through 12. "We didn't have hotspots the first year and that was the first roadblock we ran into," says Motes. "We had a lot of kids without Wi-Fi. Teachers had to be flexible with deadline dates. The Wi-Fi hotspots have made a huge difference."

In a district where 70 percent of students are economically disadvantaged and 60 percent have no computer at home, it was no surprise that so many of them also lacked home Internet access.

Internet for Education Purposes

The decision to partner with Kajeet to offer filtered, wireless Internet access outside of school to students who otherwise lacked it was an easy one for DeKalb ISD.

"From an instructional standpoint, it has changed the way our teachers are able to teach," says Donna Hunt, a biology teacher at DeKalb ISD. "They are not afraid to assign homework because they know everyone can get to it now."

For Hunt, knowing her students all have Internet access at home makes it easier for her to individualize instruction for those who need it. "The biggest change I experienced this year is the fact I can put Internet resources on Google Classroom and all of my students could access what they needed," she says. "I was thrilled that students who do not have computer resources or even cable television in their home were able to check out a hot-spot and access the e-book or sites on my classroom page. This means my students living in a low-income home have just as much opportunity as students whose parents use the Internet and computers at home."

Allowing students to also check out Kajeet SmartSpot devices—portable, wireless MiFi devices that allow anytime, anywhere Internet access that is safe and secure—was a big win for DeKalb ISD. Kajeet Education Broadband allows the district to monitor student Internet usage and filter content to ensure that students are only using the Internet for educational purposes.

In the beginning, Motes and her team preferred the ability to manage their own data consumption on

the SmartSpot devices. They quickly discovered that students were determined to use their Internet connectivity for activities other than education, including social media, gaming and streaming. After only two months, the district switched to the Kajeet Managed service, in which Kajeet automatically filters content and alerts clients when their data limits are close to being reached. This saved DeKalb ISD not only time but money. In the first three months on the Kajeet Managed plan, there was a 77-percent decrease in total MB used, which added up to big savings for this small town. Motes was thrilled with the switch to the Kajeet Managed service.

"The Kajeet Managed program is such a better option for us," she says. "The kids were using the devices a lot and it was impossible for us—even as a small district—to stay on top of it all. We didn't want to focus on that part. We need to focus on instruction. That is our job!"

USE CASE: Filtered Data for a Tight Budget

In a school district where budgets are extremely tight—such as Pontiac School District in the Detroit-area of Michigan—spending more than is absolutely necessary to ensure Internet connectivity for students isn't an option.

Jeff Mozdzierz, director of technology for Pontiac School District, was tasked with finding a way to give students without home Internet access a way to connect after school. "We looked at McDonald's, Starbucks, even churches," he says. "There was some limited access, but with many students staying up until 11 p.m. to do homework, what would they do?"

A Struggling School District

With the loss of jobs in the Detroit area due to major changes in the automobile market, and with families moving elsewhere in search of employment, Pontiac School District has seen its student population decline from 12,000 students at its peak to 4,500 students currently. Of the remaining students, 85 percent are on the free or reduced-cost lunch program. For these students, paying for home Internet access just isn't a possibility.

Pontiac School District, like many school districts around the country, is implementing blended learning into their classrooms. In the coming year, they will be launching a 1-to-1 initiative. In order to ensure this program is successful, all students must have Internet access after school. Many families aren't always able to pay for home Internet access.

Tracking and Reporting

While researching possible solutions for Internet connectivity at home, the ability to track data usage with good reporting capabilities was important for

Mozdzierz and his team. With a limited budget, they could only pay for what they needed.

According to a recent report from network vendor Ericsson, two-thirds of Internet data traffic comes from Facebook, YouTube, Netflix and Instagram. Kajeet Education Broadband enables schools and districts to provide student connectivity that is safe and educational, while blocking non-educational sites that use large quantities of data and distract students from their studies.

"The biggest advantages we've seen with Kajeet are the filtering, making sure that we're CIPA compliant and being able to manage bandwidth and overage charges," says Mozdzierz.

The Kajeet Managed Program allows districts and schools to choose the number of Kajeet SmartSpot devices they need and the number of months they need them. These portable, wireless MiFi devices allow anytime, anywhere Internet access that is safe and secure—without overage charges.

Kajeet in Action

To get the program up and running as quickly as possible, and to get Internet access into the hands of the kids who needed it most, Pontiac School District was able to use operational funds to jumpstart the program for the first year. They are piloting 100 Kajeet SmartSpot devices through a library check-out system in their media center. Students are able to borrow the Kajeet SmartSpot device for seven days and can bring them back for renewal.

"We wanted to make sure that they were using it appropriately–using it for education and not just streaming entertainment," Mozdzierz says. "We know that some kids will try to circumvent it, but we talk to them about prioritizing."

Mozdzierz is looking into using Title I funds and other sources next year that will enable a long-term commitment to the program. "Working with Kajeet has been really beneficial to our students," he says. Pontiac School District is determined to see the program continue.

RESULTS: Student Success

When districts begin to close the Homework Gap, wonderful things happen: graduation rates improve, test scores go up, student engagement increases and attendance is higher.

According to a Federal Reserve study called "Home Computers and Educational Outcomes," high school students with broadband at home have graduation rates 6 to 8 percentage points higher than those without broadband at home.

Engaged Students

"Making Learning Mobile 3.0: The Double Bottom Line with Mobile Learning," a study prepared by

Project Tomorrow for Kajeet, followed fifth-grade students at Falconer Elementary School in Chicago for three years to evaluate the benefits of mobile learning.

A key finding from the first year: tablets increased student engagement in learning within the classroom, and the enhanced home access to learning resources positively transformed student behaviors and self-efficacy around learning. While only 6 percent of the students said they regularly emailed their teacher in fourth grade, 51 percent of the students in fifth grade reported communicating with their teacher at least once a week.

"When we had to do a project on the tablet it was fun because we got to go online to search for information on the Internet. It was better to do this with the tablet because if we didn't finish it we could take it home and finish our work there."

—5th grade Chicago student

Students reported gaining benefits from devices and Internet access:

- **83% said research skills improved**
- **76% had a greater interest in learning**
- **80% were able to learn at their own pace**
- **65% had a better understanding of class content**
- **63% said "I like school more."**

Improved Test Scores

Perhaps most telling, though, is how Falconer Elementary School students performed on the Northwest Evaluation Association's Measures of Academic Progress in math. When compared with five other schools in the Chicago Public Schools system, Falconer Elementary School had the highest percentage of fifth graders scoring at or above the national average in math. Additionally, Falconer Elementary School had the highest average RIT score for its in math.

Another example is from San Diego Unified School District in California. They also had positive academic results after debuting their Learning-on-the-Go EDU program that handed out Lenovo Netbooks with built-in Internet access to students at Innovation Middle School.

After two years, the students reported that the school-to-home access enhanced their learning. Empirically, they were right. Academic results showed that Innovation Middle School students had a 43-point increase in their API score, the highest increase of any middle school in the district.

Simpler Instruction

Teachers who teach online classes, in particular, see a strong correlation between the use of technology and skills development for college and careers. According to a Project Tomorrow survey, more

than half of these teachers say technology use helps students understand how to apply academic concepts to real-world problems (58 percent), take ownership of their learning (57 percent), and develop problem solving and critical thinking skills (57 percent).

"The biggest change I experienced this year is the fact I can put Internet resources on Google Classroom, and all of my students can access what they need. I was thrilled that students who do not have computer resources or even cable television in their home were able to check out a Kajeet hotspot and access the e-book or sites on my classroom page. This means my students living in a low-income home have just as much opportunity as students whose parents use the Internet and computers at home. It has changed the way our teachers are able to teach. They are not afraid to assign homework because they know everyone can get to it now."

—Donna Hunt
Biology Teacher, DeKalb ISD

Education Broadband to the Rescue

Kajeet provides mobile Education Broadband to connect students to the Internet outside of school. Our Education Broadband solution includes a Kajeet SmartSpot device (a mobile hotspot) and the innovative Sentinel® cloud portal with controls that enable school districts to provide CIPA-compliant, education-only filtered Internet access to keep students focused on school work.

Kajeet has even begun turning school buses into rolling study halls with its SmartBus™ solution, a closely related cousin of the SmartSpot device. Combining these solutions with two nationwide 4G LTE digital mobile networks for extended coverage, along with service teams that work closely with district educators and technologists, Kajeet helps your students connect to any device, anywhere—safely, securely, affordably, and with a demonstrable salutary effect on educational outcomes. We are driven to make this solution affordable so we can connect as many low-income students as possible within the limited budgets of their school districts. Education Broadband is designed to block inappropriate content and minimize non-educational activities that consume bandwidth and drive up costs for the entire system.

Finally, Kajeet SmartSpot and SmartBus solutions enable schools to gain easily-understood data about the mobile Education Broadband their students use. These analytics provide educators and technologists with insights into how to coach students and how to tailor curricula to gain more positive educational outcomes.

The road ahead for thoughtful mobile Internet access that closes the Homework Gap promises expanding benefits for our precious K–12 technology investments.

ABOUT THE AUTHOR

Daniel J. W. Neal
Chairman, CEO and Founder
Kajeet

Daniel J.W. Neal is the chairman, CEO and founder of Kajeet, a mission-driven company he first dreamt about in 1996.
Before launching Kajeet, Daniel served as CEO and vice chairman of VCampus Corporation, a public company that pioneered the delivery of e-learning applications and services for students, business people and government workers. Daniel's early career was in commercial banking, and public service. He worked extensively in local government and later served as a senior staff member with the National Performance Review of the Office of the Vice President of the United States.

Daniel holds an AB in political science from the University of California, Berkeley, and an MBA from the Wharton School of the University of Pennsylvania.

An avid bicyclist, runner and reader, Daniel most enjoys spending time with his wife and children, whose names are incorporated into the word "Kajeet."

ABOUT KAJEET

Our story began in 2003 with three dads figuring out how mobile technology, kids and parents work best. Thinking of our own kids, ("Kajeet" is an acronym of the first letters of the names of the company's founders' children), we designed a service to provide children with everything they need to safely explore the exciting world of mobile technology.
The Kajeet mission: to create great mobile services for children and all those who love them.
We want kids to be agile with technology. We want kids to be empowered and safe. We want to help kids respond with confidence to what's happening in their world. Not incidentally, we also want parents, educators and guardians to be involved, too. Being part of the mobile world isn't just fun, it's a responsibility—a shared responsibility.

Kajeet, the only wireless solution provider dedicated to students and education, is closing the Homework Gap in school and districts across the country. Kajeet provides a safe, affordable and insightful mobile broadband solution that connects economically disadvantaged students to the resources they need to complete required assignments and projects outside the classroom. The Kajeet SmartSpot solution, a portable Wi-Fi hotspot, combined with the innovative Sentinel® cloud portal, enables administrators and teachers to provide CIPA-compliant, customizable, filtered Internet access that keeps students focused on school work and provides off-campus Internet connectivity without worry of data abuse. And the new Kajeet SmartBus™ solution turns school buses into a Homework Zone.

For more information, please visit us at www.kajeet.net

APPENDIX

High school students who have broadband Internet at home have graduation rates 6 to 8 percentage points higher than students who don't. ***Federal Reserve***

According to one *report*, students' average RIT score in math improved by 11.26 points (24 percent higher) with 1-to-1 devices and Internet connectivity. ***Making Learning Mobile 3.0 report***

Roughly seven in 10 teachers assign homework that requires access to broadband. ***Federal Communications Commission (FCC) 2014***

One in three households do not subscribe to broadband services at any speed for reasons such as a lack of affordability and a lack of interest. ***FCC.***

Five million households with school-age children do not have high-speed Internet service at home. Low-income households, especially black and Hispanic ones, make up a disproportionate share of that 5 million. ***Pew Research Center***

Of *households whose incomes fall below $50,000 and with children ages 6 to 17, 31.4 percent do not have a high-speed Internet connection at home.* This low-income group makes up about 40 percent of all families with school-age children in the United States. ***American Community Survey, U.S. Census Bureau***

Only 8.4 percent of households with annual incomes over $50,000 lack a broadband Internet connection at home. In other words, low-income homes with children are four times more likely to be without broadband than their middle or upper-income counterparts. ***Pew Research Center***

More than half of teachers in low-income communities said that their students' lack of access to online resources at home presented a major challenge to integrating technology into their teaching. ***Pew Research Center***

Only 3 percent of teachers in high-poverty schools said that their students have the digital tools necessary to complete homework assignments, compared

to 52 percent of teachers in more affluent schools. ***Stanford Center for Opportunity Policy in Education***

Teachers in high-poverty schools were more than twice as likely (56 percent versus 21 percent) to say that their students' lack of access to technology was a challenge in their classrooms. ***Stanford Center for Opportunity Policy in Education***

Nearly half of teachers (42 percent) say their students lack sufficient access to technology outside of the classroom, and more than a third (35 percent) say their schools lack adequate funding for technology. The Bill and Melinda Gates Foundation: ***Teachers Know Best report***

95 percent of districts have some form of in school Wi-Fi. Only 5 percent of districts have some form of off-campus connectivity plans in place. ***Kajeet District Survey, November 2014***

Even among students who say they have high speed Internet access at home, in many cases students never get to use that access. If there is one family computer that is hard-wired for that high-speed access, students today need to contend for access with siblings who are also trying to do their homework, parents looking for jobs or doing their own work, and mobile learning and family entertainment activities using that computer. Students tell us that having their own mobile device that is not a shared device gives them better, more reliable access to the Internet than trying to use the family broadband connection. ***Project Tomorrow survey***

GLOSSARY

Blended Learning: A formal education program in which a student learns, at least in part, through delivery of content and instruction via digital and online media with some element of student control over time, place, path or pace. (Wikipedia)

Children's Internet Protection Act (CIPA): The Children's Internet Protection Act (CIPA) was enacted by Congress in 2000 to address concerns about children's access to obscene or harmful content over the Internet. The FCC issued rules implementing CIPA and provided updates to those rules in 2011. Schools and libraries subject to CIPA may not receive the discounts offered by the E-rate program unless they certify that they have an Internet safety policy that includes technology protection measures. The protection measures must block or filter Internet access to pictures that are: obscene, child pornography or harmful to minors (for computers that are accessed by minors).

Digital Divide: A gap between those who have ready access to information and communication technology (and the skills to make use of that technology) and those who do not have the access or skills to use those same technologies within a geographic area, society or community. It is an economic and social inequality between groups of persons. (Wikipedia)

Digital Equity: "In simple terms, digital equity means all students have adequate access to information and communications technologies for learning and for preparing for the future—regardless of socioeconomic status, physical disability, language, race, gender or any other characteristics that have been linked with unequal treatment." (Gwen Soloman, 2002)

Education Broadband™: CIPA-compliant, education-only content delivered via a mobile device over a 4G LTE wireless network.

E-Rate: The commonly used name for the Schools and Libraries Program of the Universal Service Fund, which is administered by the Universal Service Administrative Company (USAC) under the direction of the Federal Communications Commission (FCC).

Homework Gap: A term introduced to describe the observable academic achievement gap between households without high-speed broadband service and those homes with high-speed broadband. Children in homes without high-speed broadband are falling behind in school and have difficultly completing homework assignments and after-school assignments because the students cannot access the Internet. It's this gap between the two groups that have educators concerned.

Lifeline: Funded in 1985, the Lifeline program provides a discount on phone service for qualifying low-income consumers to ensure that all Americans have the opportunities and security that phone service brings. In 2005, Lifeline discounts were made available to qualifying low-income consumers on pre-paid wireless service plans in addition to traditional landline service. Lifeline is part of the Universal Service Fund. (www.fcc.gov/lifeline)

Title I: The federal program that provides funding to local school districts to improve the academic achievement of disadvantaged students. It is part of the Elementary and Secondary Education Act, first passed in 1965.

BIBLIOGRAPHY

[1] Horrigan, J. B. (2015, April 20). "The Numbers behind the Broadband 'Homework Gap.'" Retrieved August 9, 2016, from *http://www.pewresearch.org/fact-tank/2015/04/20/the-numbers-behind-the-broadband-homework-gap/*

[2] "Do you Know? Ten Things Everyone Should Know about K–12 Students' Views on Digital Learning." (2013, February 25). Retrieved August 9, 2016, from *http://www.tomorrow.org/speakup/DLD2013_top10.html*

[3] "The New Digital Learning Playbook: Understanding the Spectrum of Students' Activities and Aspirations." (n.d.). Retrieved August 8, 2016, from *http://www.tomorrow.org/speakup/SU13_StudentReport-TEXT.html*

[4] "Parent, Family, Community Involvement in Education." (2008). Retrieved from *http://www.nea.org/assets/docs/PB11_ParentInvolvement08.pdf*