A Proposal Requesting Funding from Apple and ConnectED to Brightwood Elementary School in Springfield, MA for the 2019-2020 Academic Year

Prepared By

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Issued To

Apple ConnectED Initiative

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Dear Apple:

On behalf of Springfield School Volunteers, I submit this proposal to Apple and the ConnectED Initiative to consider Brightwood Elementary School in Springfield, Massachusetts as the next school to receive Apple products in their classrooms. Springfield School Volunteers is a nonprofit organization that provides educational resources and mentoring to students in Springfield Public Schools. Due to being nonprofit, we rely on donations to help our students reach their full potential. Brightwood Elementary is a diverse environment, with grades ranging from kindergarten-5th grade. The school is vastly underserved, with 97% of the students being qualified for free or reduced lunch.

The first objective in this program is the implementation of Apple products in Brightwood Elementary School. This includes a MacBook for every teacher, an Apple TV for every classroom, and an iPad for every student and teacher. The second objective is to implement Apple Support for Technology Integration, which includes an Apple Development Executive to work closely with the school principal around instructional leadership, and a designated Apple Professional Learning Specialist who will devote 17 days onsite working with teachers during the first year of implementation. The third objective will be to monitor and assess how Apple technology affects the participation and grades of the students.

The proposal seeks a donation in the form of the stated Apple Products, and for the implementation of ADE including 17 days for an APL Specialist to monitor and assist the 2019-2020 academic year. We thank you for considering Brightwood Elementary School as the next recipient of Apple technology.

Sincerely,
Megan Wolley
Volunteer of Springfield School Volunteers

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1.1 Statement of the Problem

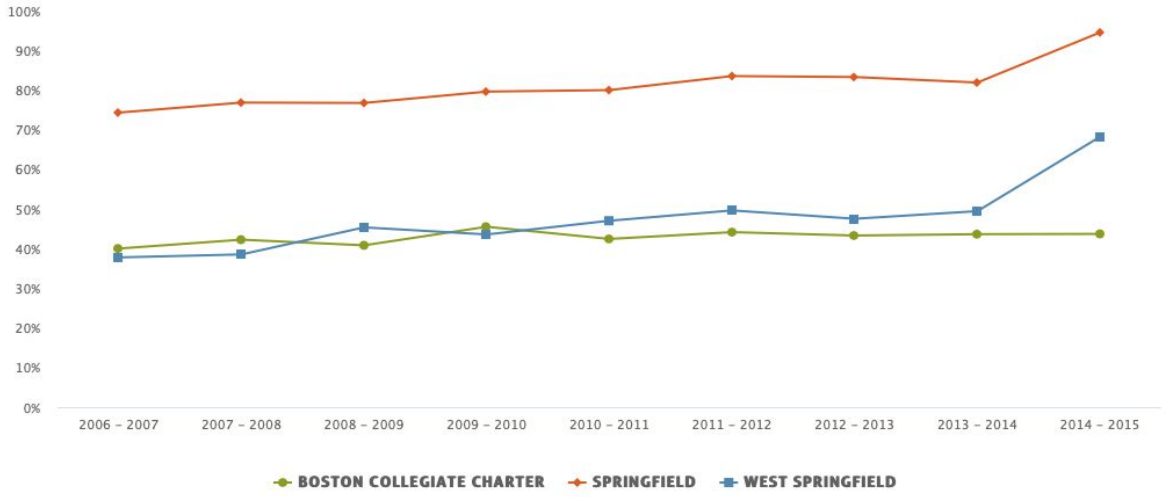
The following section explains the poverty problem in Springfield, MA, and how this affects the learning environment for poor students.

1.2 Definition of Problem

Springfield, Massachusetts is among the most poverty-stricken school districts in the state. Brightwood Elementary, located in Springfield, is ranked the third poorest school in Massachusetts by masslive.com, with 99.4% of students falling under the poverty line. 97% of Brightwood Elementary students were eligible for free or reduced lunch in the 2009-2010 school year (ProPublica).

To be eligible for free lunch, students must live in households up to 130% of the federal poverty level (FPL). Students living in households between 130% and 185% of FPL qualify for reduced lunch. Students are categorically eligible for free meals if they are homeless or if anyone in the household is on Transitional Aid to Families with Dependent Children or Supplemental Nutrition Assistance Program, meaning that many children between 130-200% of federal poverty level still have access to free school meals. In 2015, it was reported that 94% of students in Springfield fell under these categories for free or reduced lunch. Based on the data acquired from the Massachusetts Department of Elementary and Secondary Education, Analysis of Meal Count Data (National School Lunch Program), Springfield schools can expect an upward projection in this percentage in more recent years. The ConnectED Initiative requires that schools have a minimum of 96% students who quality for free and reduced lunch in order to apply, we can conclude from the data presented by Kids Count Data Center of free and reduced price lunch

enrollment rates by school district that there is a projected influx in the percentage of students receiving free or reduced lunch in the 2018-2019 school year:



Free And Reduced Price Lunch Enrollment Rates By School District

Massachusetts Budget and Policy Center
KIDS COUNT Data Center, datacenter.kidscount.org
A project of the Annie E. Casey Foundation

Figure 1

https://datacenter.kidscount.org/data/tables/7417-free-and-reduced-price-lunch-enrollment-rates-by-school-district#detailed/10/7967,8004/false/1484,1457,1228,1070,1022,892,784,685,684/any/14498

From this data over nine years, there has been a clear projection in the percentage of students who qualify for free or reduced lunch in Springfield. In the academic year 2006-2007, only 74% of students in Springfield qualified. By the 2014-2015 academic year, this number increased to 94%. According to Springfield News-Leader, the poverty rate has grown in the majority of Springfield elementary schools during the past decade. In 2014, the rate ranged from

15 percent at Gray Elementary to 94 percent at Weaver Elementary. In 2010, multiple schools in the Springfield School District reached over 96% of students being eligible for free or reduced lunch: Lincoln Elementary School, White Street Elementary School, and South End Middle School at 96.9%; Elias Brookings Elementary School at 97.2; Public Day Elementary School at 97.8%; William N. Deberry School at 98.1%; and Brightwood Elementary School at 99.4% (PVPC). Based on the upward projection of poverty in Springfield, these percentages can be expected to increase.

1.3 Evaluation of State-of-the-Art Equipment for Solving the Problem

The Apple and ConnectED Initiative pledges an iPad for every student, an iPad and MacBook for every teacher, an an Apple TV for every classroom. A total of 114 schools have participated in the initiative, and 98% of teachers from these schools agrees that the initiative has been valuable for their schools.

There is extensive research on Apple and ConnectED Initiative's beneficial impacts in the classroom. The following information comes directly from SRI Education. First of all, there is an influx in technology use in the classrooms who received Apple funding. Teacher's use of technology became more frequent. By spring of 2017, teachers were using technology more often and in more varied ways, for a longer in class each day. SRI Education states that "the largest increases in teacher technology use were for activities related to monitoring students' learning and adapting instruction to individual students' needs, highlighting the value of technology for offering insight into student progress and understanding." Teachers also began using the technology for presenting instructional information to students.

Students' technology use also increases with the implementation of Apple products in the classroom: "Students indeed increased their use of technology, with the percentage of teachers reporting daily student use in their classroom growing from 31% in 2015 to 75% in 2017." 70% of student survey respondents reported that they used the technology to look up information at least weekly. 75% of teachers reported that their students used learning games at least weekly. Elementary students played more learning games than older students, which would be a helpful addition to Brightwood Elementary School. Students also began using technology in more innovative ways. Teachers of students who more frequently used the technology reported more initial confidence in technology use, finding appropriate digital content, and managing workflow (SRI Education).

2.1 Executive Summary

The following sections explains how donating Apple technology as part of the Apple and ConnectED Initiative would be beneficial to Brightwood Elementary School.

Springfield School Volunteers is a nonprofit organization that serves pre-K through 12 grade students in the Springfield public school system. Volunteers can mentor and tutor students, including reading aloud and teaching early literacy to kindergarteners. We also provide other forms of academic support, such as providing remedial skills in the core academic subjects to students with below grade-level achievement. As we are a nonprofit organization, we rely heavily on volunteers and generous donations.

Based on data reported by U.S. News, the poorest schools receive the least amount of state funding. This deprives students of educational resources that school districts with higher incomes are gifted with. The percentage of students achieving proficiency at Brightwood Elementary in Math is 35-39% for the 2015-16 school year, which is lower than the Massachusetts state average of 64%. The percentage of students achieving proficiency in Reading/Language Arts is 25-29% for the 2015-16 school year, which is lower than the Massachusetts state average of 71%. Brightwood Elementary School is placed in the bottom 50% of all schools in Massachusetts for overall test scores.Their math proficiency is bottom 50%, and reading proficiency is bottom 50% for the 2015-16 school year (Public School Review). Because of the lack in funding, economically disadvantaged schools in Springfield such as Brightwood Elementary do not receive assistive technology and thus, their education suffers. This deprivation of updated technology in the classroom puts disadvantaged schools like Brightwood Elementary in the lower percentages for academic proficiency.

According to an article from Capella University, there are major reasons to incorporate technology into the classroom. The article explains that technology engages students and creates active learners, encourages individual learning and growth, facilitates peer collaboration, prepares students for the real world, and creates more engaged and successful teachers. In a research project conducted by the U.S. Department of Education, it was reported that using technology as a tool puts students in an active role rather than a passive role of receiving information given to them by a teacher or textbook. It allows them to interact with the material, and as technology in everyday life is rapidly increasing, it prepares them for real life skills.

Moreover, the teacher plays the role of facilitator, while setting project goals and providing guidelines and resources. One of the most common teacher-reported effects was an increase in students' motivation. Some teachers reported motivation in respect to working in a specific subject area, while others spoke in terms of more general motivational effects, such as student satisfaction with the immediate feedback provided by the computer and the sense of accomplishment and power gained in working with technology. Although the specific software tools in use will likely change before these students enter the world of work, the students acquire a basic understanding of how various classes of computer tools behave and a confidence about being able to learn to use new tools that will support their learning of new software applications. Also, teachers in the case study nearly unanimously reported that students were able to handle more complex assignments and perform more with higher-order skills (Capella University).

3.1 Description of Proposed Work

The following section explains the proposed donations of Apple technology to Brightwood elementary, including the objectives, methods, and a brief overview of the schedule.

3.2 Objective of Project

In 2014, President Obama announced the ConnectED Initiative, outlining an ambitious plan that includes ensuring students have access to broadband in schools and libraries, making devices and high quality digital education content affordable and available to students, and supporting educators as they transition to a digitally-enabled learning environment. The goal was to provide

99 percent of American students with access to next-generation broadband in their classrooms and libraries by 2018 (The White House Archives).

The Apple and ConnectED initiative seeks to address this issue by bringing technology and comprehensive support that includes planning, professional learning, and ongoing guidance to 114 underserved schools across the nation. The goal is to promote more personalized and student-centered educational experiences that support critical thinking and conceptual understanding and improve learning outcomes for students. The initiative "represents a substantial corporate investment in the goal of improving opportunities, in learning and in life, for students in some of the most underserved communities in the country" (SRI Education).

Brightwood Elementary is a poverty-stricken school that could be greatly improved by a high-tech company like Apple investing in technology for education of underserved students. Because Brightwood Elementary School exceeds the minimum requirement 96% of students who qualify for free or reduced lunch, they would make a suitable candidate for the initiative. Furthermore, based on the upward projection of poverty in Springfield, Brightwood Elementary will be at an increasingly larger disadvantage as time progresses. The objective of bringing Apple technology to Brightwood Elementary School is to improve student involvement and motivation to meet the average test scores in the Springfield district, which Brightwood is behind.

3.3 Methods of Evaluation

Apple and ConnectED Initiative have conducted student, principal, and teacher surveys in participating schools. From these surveys, they have concluded that in their first two years of the

initiative, participating students have increased their technology use and academic success. From these surveys, Apple can assess how the implemented technology affected the learning environment.

To evaluate how the incorporation of technology into the classroom affects the learning experience, we will base the results off student participation, teacher's use of resources, and overall improvement in grades and participation. It is important for students to partake in the initiative, because teachers whose students used technology less often reported more issues with these areas that involved students improved in. Apple Professional Learning Specialists will monitor the students' involvement with the technology for a total of 17 school days, and the overall improvements seen in students who participate in technological use frequently for the first year of implementation.

After the first year, Apple may conduct a survey from students, teachers, and the principal from Brightwood Elementary to evaluate how the Apple technology affected the learning environment. We could also evaluate how Brightwood compares to the district average in terms of test scores, attendance, and overall student participation at the baseline and a year into participating in the initiative, as has been done for past schools.

3.4 Schedule

I propose the implementation of Apple technology for the 2019-2020 academic year. This school year begins in late August of 2019, and goes until the end of June in 2020. During the first year of implementation, a designated Apple Professional Learning Specialist (APL Specialist) will devote a total of 17 days onsite working with teachers during. Incorporating the

technology into the classroom can be done over the summer break, between July and August of 2019, in preparation for the academic year.

If Brightwood Elementary School is to be chosen to partake in Apple's ConnectED Initiative, a system of evaluation would have to be put in place. The ConnectED Initiative continues building relationships and provides support for schools who receive Apple technology. Apple Professional Learning Specialists, many of whom are former teachers and maintain teaching certificates, provide administrators, teachers, and students with tailored, onsite support and guidance to help them reach their goals. They also support teachers with online classroom workshops taught by Apple Distinguished Educators and Apple Retail team members (Apple and ConnectED). With Apple Teacher, a free, professional learning program designed to support and celebrate teachers**,** educators are provided with a free, self-paced learning program to build skills on iPad and Mac (Apple Teacher). These programs would go throughout the school year, beginning with the implementation of Apple technology.

4.1 Description of Available Facilities

The following section explains the materials that would be donated to Brightwood Elementary as part of the Apple and ConnectED Initiative.

4.2 Description of Equipment

Figure 2: Apple iPad Figure 3: Apple TV Figure 4: MacBook

The Apple and ConnectED Initiative pledges an iPad to every student and teacher, an Apple TV to every classroom, and a MacBook to every teacher. Standard iPads also include lightning to USB cables and a USB power adapter. A 4th Generation Apple TV includes a Siri remote, power cord, and a lightning USB cable. A 7th Generation MacBook includes a USB-C charge cable and a 30W USB-C power adapter.

5.1 Personnel

The following section explains the personnel that will be included in the implementation of Apple technology in Brightwood Elementary School.

Part of the Apple and ConnectED Initiative includes an Apple Development Executive

(DE) who will work closely with the school principal around strategic planning and instructional leadership, and a designated Apple Professional Learning Specialist (APL Specialist) who devotes a total of 17 days onsite working with faculty during the first year of implementation.

At Berkley Campostella Early Childhood Education Center in Norfolk, Virginia, Principal Dr. Doreatha White says "to truly start closing the digital divide, we have to get our parents and the community to believe in what we're doing as well." Considering this challenge, Dr. White created a community outreach program to help parents understand the transformative power of technology in learning. One of her first goals was to get 100 percent of the students' parents to attend How to Use iPad with Your Child workshops, which might be necessary in classrooms that receive Apple products as part of the ConnectED Initiative. So, in addition to receiving these products to students and faculty, there should also be implementation of technology workshops. This could be done during class with the assistance of the on-site APL Specialist, or an additional after or before school program for teachers and students.

6.1 Budget

The following section explains the total cost of donations to Brightwood Elementary School.

Apple and ConnectED Initiative pledges an iPad to every student, and an Apple TV to every classroom, as well as a MacBook for every teacher. Apple pledges to provide $100 million in iPads, MacBooks, and other products, along with content and professional development tools to enrich learning in disadvantaged U.S. schools (The White House Archives). Overall, a total of 114 schools are currently participating in the initiative.

Brightwood Elementary has 325 students and 28 teachers. The Apple and ConnectED Initiative includes an iPad for every student and teacher, an Apple TV for every classroom, and a MacBook for every teacher. The most recent 2018 model of iPads starts at $329, which we can round up to $330. A 32 GB Storage Apple TV costs $149, which can be rounded up to $150. A 128GB Storage MacBook costs $1,299, which can be rounded up to $1300. The cost of iPads for students is $116,490. The cost for the MacBooks would be $36,400. For Apple TV's, the cost for 12 classrooms is $1,800. The total cost of equipment would come to $154,690. This is an estimated amount, as the models of the products may be changed accordingly.

7.1 Summary and Conclusion

The following sections concludes the proposal, including comparisons to other schools that may receive the grant, a reassertion of the severity of the effects of poverty on Springfield schools, and an urge for Apple to consider choosing Brightwood Elementary School to receive Apple products.

7.2 Comparison of Proposal to Competition

Elementary Schools have been reported to have more drastic improvements with the implementation of Apple technology. Elementary teachers were responsible for most of the increase in deeper learning opportunities. They also increased the frequency of deeper learning opportunities for teamwork, communication, creation, and critical thinking in their classrooms between 2015 and 2017. Elementary schools commonly used adaptive learning games, which drove an increase in personalized learning across levels. These learning games focused on

reading and mathematics and were regarded as helpful for basic skills development, which enhanced test performance. In contrast, at the high school level, teachers reported struggling to introduce digital learning activities without detracting from lessons they believed would more directly support test performance (SRI Education).

Springfield has the second-highest poverty rate in the state with 87.5% of children falling under the poverty line (Masslive). As stated earlier, schools with less funding have less access to technology and thus, are deprived of educational resources. Brightwood Elementary falls behind the district averages for all test scores, making them a suitable candidate for the implementation of Apple technology to help this problem.

7.3 Reassertion of Seriousness of Problem

Brightwood Elementary School, like most schools in Springfield, is among the most underserved schools in the country. ProPublica's analysis found that often, states and schools provide poor students fewer educational programs like Advanced Placement, gifted and talented programs, and advanced math and science classes. Studies reported by Masslive have linked participation in these programs with better outcomes later in life. This class disparity can put low-income schools behind middle-class students. Joseph Ruscio, the assistant dean of Education at American International College Children, had a long career in public school education that included working as a principal in Springfield. Ruscio states that “many poor children start kindergarten behind their peers whose parents have the resources to buy books, send them to a quality preschool and take trips to museums.” Poor children tend to not start kindergarten with readiness skills such as being able to sit and concentrate for any period of time. Their vocabulary

is much smaller than their middle-income peers' and don't have the abstract language to understand a concept and analyze on their own level. Moreover, impoverished children often do not have the same access to a high-quality preschool that many of their middle-class peers have had since they were a year old, so they are also behind in social development. Bringing technology to Brightwood Elementary, which educates K-5 students, would help this issue of poor children being deprived of resources, vocabulary, academic readiness, and social skills that middle and upper-class students have access to from young ages (Masslive).

7.4 Urge to Action

There are benefits to incorporating technology into Brightwood Elementary School. First of all, Brightwood is a vastly underserved school, with 97% of the students receiving free or reduced lunch. Impoverished schools receive less funding, and thus, less access to state-of-the-art technology. Brightwood is also a minority-based school, with 84% Hispanic and 13% black students. The schools participating in the Apple and ConnectED Initiative are geographically and demographically diverse and serve a wide range of disadvantaged communities, categories that Brightwood Elementary also fall under.

Second, expanding access and increasing student use of technology in the context of high-quality learning activities are important first steps toward the larger goal of digital equity. Students participating in the initiative increase their use of technology, with the majority of teachers reporting daily student use in elementary schools. With the implementation of Apple products into the school, Brightwood's educational resources can improve in the same ways participating schools have. These benefits include an increase of students using technology more

frequently, for varied learning activities, in more innovative ways, and teachers using technology more frequently and for differentiating instruction. 98% of surveyed teachers from the participating schools agreed that the initiative has been valuable for their schools (SRI Education).

Third, the younger students can begin using updated technology, the more adaptable their brains will be to new technology. Apple and ConnectED reported more improvements in elementary schools than in middle and high schools: "Although statistically significant in the aggregate, these changes in teacher practice were concentrated in elementary schools. Middle and high schools tended to report fewer changes in practice. Other differences emerged across schooling levels as well. For example, elementary school teachers tended to maintain their initially positive attitudes toward technology to a greater extent than middle and high school teachers did, with some hesitations emerging over time for the latter groups" (SRI Education). To begin solving the issue of poverty-stricken schools and their access to technology, Springfield School Volunteers proposes the donation of Apple products to Brightwood Elementary School as part of the ConnectED Initiative.

8.1 Appendices

8.2 Figures

This section breaks down the figures of the proposal.

Figure 1: Free and reduced price lunch enrollment rates by school district. The Annie E. Casey Foundation Kids Count Data Center. https://datacenter.kidscount.org/data/tables/7417-free-and-reduced-price-lunch-enrollment-rates-by-school-district#detailed/10/7967,8004/false/1484,1457,1228,1070,1022,892,784,685,684/any/14498

Figure 2: Apple iPad. https://www.apple.com/us_kiosk_127086/shop/buy-ipad/ipad-9-7

Figure 3: Apple TV. https://www.apple.com/us_kiosk_127086/shop/buy-tv/apple-tv/apple-tv-32gb

Figure 4: Apple MacBook. https://www.apple.com/us_kiosk_127086/shop/buy-mac/macbook/space-gray-1.2ghz#

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