STCC to Go: Internet Access for Low-Income Students

Introduction

Springfield Technical Community College (STCC) is located in Springfield, MA, a city of 150,000 on the Connecticut River in Western Massachusetts equidistant from New York and Boston. Settled in 1636, the "City of Firsts" has played an outsized role in the history of the United States throughout decades of invention. Creations attributed to people and companies in Springfield include basketball and the first gas-powered automobile (Pioneer Valley Planning Commission, 2015). Springfield swelled to prominence on the shoulders of a large industrial base; when the Springfield Armory closed in 1968, taking with it thousands of middle-class jobs, it sealed the decline of a once-great city.

Springfield in 2016 is quite a city apart from its peak of wealth and prestige. Recent Census data shows that over 25% of the population has less than a high school diploma (US Census Bureau, 2014b), household median income is only 51% of the Massachusetts average at $34,731 (US Census Bureau, 2016), and 46.7% of children residing in Springfield live below the poverty line (US Census Bureau, 2014c). The Springfield Public Schools faces similar, or even direr, issues in its student population. The district classifies 77.7% of its students as high need, which is defined as a student who is an English Language Learner, has disabilities, or is economically disadvantaged (MA Department of Elementary and Secondary Education, 2016).

As the city is the largest feeder community for the College, STCC's demographics are slowly shifting to match greater Springfield. As of 2013, the College is an Hispanic-Serving Institution, a designation achieved once the full-time equivalent of students who identify as Hispanic reaches 25% or greater; almost 43% of Springfield is Hispanic (US Census Bureau, 2014a). For several years now, more than half of all STCC students have received federal Pell Grants for low-income students. Additionally, the College has noted a 15% increase in the number of homeless students in the past year (Lederman, 2015).

The STCC Library serves the College population with a broad range of physical and electronic reserves. The library is open 61.5 hours each week. It belongs to the Cooperating Libraries of Greater Springfield, which entitles students at member colleges to use the library resources of other local institutions. Librarians routinely present to classes and also offer both a one-credit Introduction to Basic Research class to further acquaint students with library resources and a three-credit honors course on the history of information. The library's web page offers students access to e-materials ranging from reference books and monographs to periodical articles and streaming video. STCC Affiliates can access these virtual collections with appropriate ID from anywhere in the world with internet access. Students highly value the services provided; one developmental writing class noted in a survey that they used the Library twice as much as their professor's office hours.

In recent years, the City of Springfield's library budget has been slashed so drastically that two branches were closed and converted for other uses (Goonan, 2015). To help make library resources familiar and accessible to students who may not have used school or public libraries previously, the Library has sponsored a number of other innovative outreach initiatives. These initiatives have included a roaming outreach librarian visiting student study spaces on campus and a series of Tech Talks to help students understand the technology necessary to succeed in their coursework.

Statement of Need

The Central and Western regions of Massachusetts, which are largely rural, have struggled for decades to fully participate in the age of the Internet. In 2005, the Central and

Western libraries received a grant to install WiFi dishes in libraries without access to broadband; parking lots were full at all hours of the night with laptop users. More recently, in 2014, the Commonwealth of Massachusetts completed an ambitious program to connect the towns of the region to broadband Internet service at a cost of almost $90 million (MA Broadband Institute).

However, the availability of broadband Internet does not imply that residents in the service area, particularly in the high-poverty areas of Springfield and Holyoke, are able to afford that service. The most recent Census data indicate that while 76.1% of Springfield households own a computer, only 61.8% have a broadband Internet subscription (US Census Bureau, 2014b). The City of Springfield recently announced a new pilot initiative to provide free WiFi in public parks in the downtown area, but this will also be of limited utility to students without computers or those who need to complete coursework at night or during poor weather (Kinney, 2016).

STCC has begun many initiatives within the past three years in an attempt to help address non-academic needs that students have which prevent them from succeeding in and completing a college degree. Most notably, the College has opened a Center for Access Services which houses a federal benefits screening program, a food pantry, tax preparation assistance, and referrals to community services. Because of the high numbers of low-income students (particularly those who are parents) and the increase in students without housing, College leadership is committed to providing every resource it can to the neediest of its student population.

In light of both the lack of access to high-speed Internet and the low income of the majority of STCC students, the STCC Library proposes a circulation system (*STCC to Go*) for WiFi hotspots and Chromebooks. A WiFi hotspot is a small device that can provide Internet from a cellular network to a computer, tablet, or phone that is capable of sending and receiving data over wireless Internet. Chromebooks are ideal for lending, as they are small, inexpensive, and entirely Internet-based, so the potential for downloaded viruses and inappropriate content is limited. The Library will lend these out on a short-term basis so students may take them home for a weekend or during an exam period and have ready access to their classwork and tests through the College's online curriculum management system. The Coordinator of Reference and Instruction will work with the vendor and IT staff to set the homepage to the Library's website, ensuring immediate access to the Library's wide range of academic resources.

The combination of the hotspots and the Chromebooks makes sense for the demonstrated needs of the STCC student. In recent years, the College has made attempts to address both the lack of computer access and the lack of Internet access, but neither has addressed both issues simultaneously and off-campus. Select programs have opted to make laptop purchases mandatory, which means they may be covered by financial aid, but this has had two adverse effects. First, it dissuades students from entering those programs due to high start-up costs (especially if they would need a loan to purchase the laptop); and second, the lack of standardization has created problems for the College's IT office in attempting to support a wide variety of devices.

STCC has had more success in addressing the need for Internet, but none of these initiatives allow the student to work from home. With an increase in hybrid and fully-online course offerings and a college-wide push for faculty to adopt less expensive online Open Educational Resources (OER) as class materials, students have a greater need than ever for continuous, reliable Internet access to complete their coursework and classes. The College has opened WiFi lounges in each of the academic buildings, which are often filled to capacity; the Library also offers Internet access during operating hours, with some students staying until close

attempting to finish coursework while they have the means to do so. When the College is closed, or the students are not on campus, they must find another way to log-on and work.

The most immediate performance goal of this project is to have continuous circulation of all the devices. It is imperative that students use the hotspots and Chromebooks to see educational benefits. In the short-term, this should allow students to more easily complete their work online, improving log-in rates and assignment completion. In the medium- and long-term timeframe, students who could not otherwise afford home Internet and a laptop will experience improvement in their course grades, their retention at the school, and ultimately, graduation rates. The success of this pilot – the *STCC to Go* program – will also help faculty feel more confident in moving assignments and course materials online, knowing that students who need Internet access can obtain it through the school.

Traditionally, colleges, and academic libraries especially, are places of learning. Institutions of higher education, researchers, and policymakers are increasingly realizing that learning cannot take place for low-income students without non-academic supports that enable them to focus on their coursework (Guo, 2014). The proposed project directly speaks to the Institute of Museum and Library Services (IMLS)' Community goal of "strengthen[ing] museums and libraries as essential partners in addressing the needs of their communities." It is crucial that libraries of the present and future provide not just the tools of knowledge; in this increasingly digital age, they must also provide the means of access.

Impact

Results from this project will demonstrate the necessity of providing a means of Internet access in underserved communities and for underserved populations in order for patrons to take full advantage of Internet-based resources and educational opportunities. Students will be able to register for, work in, and complete online and hybrid courses, fully use free or inexpensive Open Educational Resources offered by faculty, and build both information and technological literacy skills by completing papers, presentations, and research with a computer. Data collected directly from the students, Library staff, and staff and faculty on campus and from the circulation data management system will demonstrate the impact of the availability of this equipment on student achievement in an increasingly digital academic environment.

The Coordinator of Reference and Instruction (Coordinator), with the assistance of the Access Services Manager (Manager), will have primary responsibility for the operation, oversight, and evaluation of the *STCC to Go* program. Each has more than a decade of experience in the STCC Library, bringing a deep familiarity not only with the library and its functions but also with the College's students and their needs, as well as state and local administrative procedures. They are amply qualified to run the evaluation of this program and subsequently use the results to tangibly improve the program. In addition to Library staff, the College currently employs a Great Ideas Manager who oversees a college-wide system of process improvement; the Manager will also be available to help problem-solve and build cross-functional relationships with other departments if necessary.

Data about the student's use of and experience with the equipment will be captured at the time of return in a paper survey handed to the student by the Circulation Desk. Students will be asked to indicate what kind of work they used the equipment for (classwork, exam, research, etc.), their perception of the impact of the program on their grades, and their experience with the circulation process as well as suggestions for improvement. The Manager will review evaluations on a regular basis to improve major flaws in the program and review cumulative results from student feedback with the Coordinator of Reference and Instruction each semester.

At the end of the semester, Library staff will be emailed a survey through the College's survey system, inclusive of the Performance Measure Statements for Grantees, assessing their take on the impact of the program and means of improvement. Campus staff and faculty will also be emailed a survey at the end of each semester, inclusive of the Performance Measure Statements for Community Partners, soliciting their thoughts on the utility of the program for low-income students and feedback on potential improvements. The two program staff will review these data after the submission period closes, in order to make any changes necessary before the start of the next semester.

Administrative data from the Circulation Desk will be paired with qualitative feedback from participating students, library staff, and campus community partners to provide a holistic view of the program for evaluation. The number of times students check the equipment out, the on-time return rate, and other quantitative data points will provide evidence of the utility of the program. The Coordinator will create a report consisting of the aggregated data retrieved from each constituent survey and the administrative data, and then review it with the Manager. Together, they will then design a plan of action for incorporating suggestions into the program.

The evaluation summary and subsequent actions planned based on it will be shared with Library staff and campus constituents to ensure they understand not only the importance of their feedback but also the ways in which the Library will make changes to improve the program. Sharing the results and the improvements will help spread the word about the *STCC to Go* program, further increasing its utilization. The Coordinator will also share the evaluation results and action steps with IMLS in the interim as well as final performance reports.

To encourage broader adoption of this successful program, results from the pilot will be presented at regional and national conferences to other academic librarians, particularly other community college librarians. Model policies and the improvements made due to stakeholder feedback will be broadly shared to help other campuses adopt a working model with a minimal investment of startup time. Curious colleagues will be invited to the STCC Library to see the program in action and meet with the Manager for an in-depth discussion of the valuable lessons learned from starting an Internet access program in a low-income, urban community college.

Project Design

The STCC Library staff, with many decades of experience serving community college students among them, are fully prepared to design, manage, evaluate, and disseminate this initiative and its results. The Coordinator will oversee the completion of the project, serve as the project contact, and be responsible for filing reports. The Coordinator will complete the purchase of equipment and manage the monthly hotspot payments in coordination with the College's IT and Purchasing offices; the Manager will work with the Coordinator to create policies and manage the circulation of equipment once the program is rolled out.

The project will be simple to implement. Chromebooks will be purchased from a College vendor at a discount; the mobile hotspot vendor has also been identified and priced at a discount. Purchase, shipment, and delivery of the equipment should take no longer than six weeks. Concurrent with the purchase of the equipment, Library staff will finalize circulation policies for the equipment and verify enforcement of those policies with appropriate College staff, especially the Registrar, who will be asked to place a hold on student accounts for broken or damaged equipment. Librarians have begun to collect information on policies, practices, and vendors from other academic and non-academic libraries offering technology circulation in order to shorten the time needed to adapt and implement lending policies for this program. Once the units are

received, the Manager and other technical staff will prepare the units for circulation, including creating records in the lending system and marking the equipment with barcodes.

STCC expects to begin to offer equipment checkout to students in December 2016, just in time for finals. The Manager will ensure other circulation staff are trained on policies and procedures and will adjust practices as necessary, reporting routinely to the Coordinator on the project's progress. In February and August, the Coordinator and the Manager will meet to discuss the results of student and staff surveys and administrative data to evaluate both the program's success and the areas in need of improvement. Staff will implement ideas, practices, or policies suggested by stakeholders to improve the system and address longer-term issues (e.g., replacement of broken equipment).

Resources required for this project consist of funding to purchase the equipment for circulation and staff time devoted to creating the program's structure, managing and evaluating the program after it debuts, and ensuring IMLS financial and programmatic requirements are met. Beyond the funding provided by IMLS for purchase of the equipment, the Dean of Library Services has committed whatever staff time is necessary to ensure the success of the project. Additionally, STCC has been fortunate to receive millions of dollars in federal funding since its founding and has an outstanding team comprised of a Grants Manager, a Financial Grants Coordinator, and a Grants Accountant with more than two decades of award management experience among them. They will work with the Coordinator to ensure all reporting and fiscal requirements are met in a timely fashion.

Results of the project will be gathered and assessed at regular intervals to guide ongoing operations and make changes as necessary to improve the experience for staff and students. Survey instruments will be developed for students using the equipment, as well as Library staff, and other staff and faculty on campus to determine effectiveness; surveys for Library staff and campus staff and faculty will include the IMLS Performance Measure Statements. Evaluation results will be reviewed on an on-going basis by the Access Services Manager and, at the end of each semester, by both the Manager and the Coordinator of Reference and Instruction.

Aside from the required white paper, STCC's librarians are active members of several regional and national professional associations and will seek to use those venues to disseminate the evaluation findings of this project. These groups include the New England and national chapters of the Association of College and Research Libraries, the Massachusetts Library Association, the New England Library Association, the Central/Western Massachusetts regional library system, and the Community and Junior College Libraries Section of the American Library Association. Additionally, the local Cooperating Libraries of Greater Springfield consortium provides many formal and informal opportunities for the area's academic librarians to meet and share best practices; this model will also be disseminated in these venues.

Schedule of Completion

Activity	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	April 2017	May 2017	June 2017	July 2017	Aug 2017	Sep 2017
Purchase hotspots and Chromebooks	■	■										
Develop circulation policies	■											
Prepare units for circulation		■										
Circulate equipment			■	■	■	■	■	■	■	■	■	■
Evaluate model and incorporate feedback					■				■			