RESEARCH SHOP

"know what's out there!"

Process Evaluation of the Access Tech Pilot Program

Prepared for

Empowerment Squared

In

August 2022

By

Sana Mohammad
Jacqueline Trink
Joana Dilipkumar
Claire Gage
Jayati Khattar

Table of Contents

Executive Summary

Access Tech is a pilot program geared towards providing newcomer and marginalized families in Hamilton with tech devices (laptops, desktop computers, tablets, and others) and the digital literacy skills to use them. Empowerment Squared requested support from the McMaster Research Shop to evaluate the implementation of two aspects of the program: 1) a technology drive run in partnership with McMaster University's Sustainability Office, and 2) digital literacy workshops provided by Empowerment Squared.

To evaluate the tech drive, we interviewed project personnel from McMaster to assess achievement of its objectives and opportunities to scale the program. To evaluate the digital literacy workshops, we surveyed workshop participants and interviewed a partner organization to understand participants' motivations for attending the workshops, their satisfaction with the workshops, and ways that partners and participants could become more engaged.

Regarding the tech drive, McMaster staff interviewees indicated that the quantity and quality of tech donations were often unpredictable, processing donated devices was time-consuming, and limited staff were available to manage its operation. Regarding the digital literacy workshop, survey respondents were most interested in attending the workshops to learn basic computer functions. They were generally satisfied with the digital literacy workshops; however, some suggested increasing the number of sessions, providing workshop notes, and covering additional topics. The partner organization interview indicated that the workshops successfully accommodated the individual and cultural needs of the participants; however, the workshops could be expanded by increasing the number of staff and delivering the workshops at additional community locations. Limitations to this research exist because we did not survey registered individuals who did not attend the workshops and we only conducted one interview with a partner organization.

Our findings from interviews with McMaster staff indicated a few actions that could improve the implementation of the tech drive:

- McMaster can dedicate additional personnel to the tech drive to accommodate more device donations and to keep the tech drive office open for collections on a consistent basis.
- McMaster can optimize the processing of devices by investing in a stockpile of pre-cleaned hard drives or additional equipment to support faster hard drive cleaning.
- Empowerment Squared can provide additional outreach to organizations in Hamilton outside the McMaster community for donations.
- Empowerment Squared could set parameters around the quality of tech devices that they desire and communicate them with staff at McMaster.

This report can be used by Empowerment Squared to inform changes to the Access Tech program aimed at improving its implementation and scaling up its operations.

Introduction

Access Tech is a pilot program geared towards providing newcomer and marginalized families in Hamilton with tech devices (laptops, desktop computers, tablets, and others) and the digital literacy skills to use them. The COVID-19 pandemic increased reliance on devices as many services moved online while also exposing inequities in access to technology for marginalized people. Thus, the program aims to provide families with support in obtaining and using devices, which could subsequently help them improve access to educational, employment, and other social, economic, and cultural opportunities. The pilot program is a collaboration between Empowerment Squared (the community partner), McMaster University, the Hamilton Community Foundation, and other organizations serving newcomer and marginalized communities in Hamilton.

The Access Tech program includes: a technology drive, digital literacy workshops, and training for youth digital literacy specialists to provide ongoing technological support in communities. Empowerment Squared approached the McMaster Research Shop seeking support with a process evaluation of the Access Tech pilot program, focusing on the technology drive and the digital literacy workshops, to help inform the program design moving forward. We aimed to answer the following evaluation questions:

Tech Drive

- To what extent did the tech drive go as planned (e.g., achievement of service objectives)? If it did not go as planned, why?
- What would it take to increase the number of devices collected during the drive?

Digital Literacy Workshop

- What motivated participants to attend the digital literacy workshops?
- To what extent were participants satisfied with the digital literacy workshops? What could be improved?
- To what extent, if at all, were partner organizations engaged in referring their clients to the digital literacy workshops? What were the reasons for high and/or low engagement?

The findings from this evaluation can be used by Empowerment Squared and their partner organizations to make program modifications with the goal of developing a sustainable and impactful program model.

Methods

Tech Drive

To evaluate the implementation of the tech drive, we conducted interviews with individuals from McMaster University who were directly involved with the tech drive in varying roles and could share diverse perspectives on its successes and limitations, and how to improve and scale up its implementation in the future (see Appendix 1 for the interview guide).

Initially, the community partner provided contact information with key individuals working for the tech drive, who we invited to participate in a 20 to 30-minute Zoom interview. We then used “snowball sampling” to recruit more participants, where we asked those participants to provide contact information for additional individuals knowledgeable on the tech drive who we could invite to interview. Given the variation in participant roles with the tech drive, we created a shortened version of the interview guide to ensure that our questions were relevant for each interview participant. In total, we reached out to 10 individuals and conducted 8 interviews. We recorded and transcribed the interviews, and then analyzed them for key themes.

Digital Literacy Workshop

To evaluate the implementation of the digital literacy workshops, we conducted a survey for workshop participants and interviews with Empowerment Squared’s partner organizations.

The Research Shop team developed a survey aiming to understand participant motivations for attending the digital literacy workshops and to seek feedback on the workshop implementation (see Appendix 2 for the survey questions). The community partner distributed it to 8 participants from the first and second cohorts in attendance during their final workshop sessions from June – August 2022. The survey consisted of categorical and open-ended questions. For categorical questions, we reported the number and percentage of respondents who selected each response option, and for open-ended questions, we summarized key themes.

We also invited representatives from five organizations that were part of Empowerment Squared’s official partner network for the Access Tech program to participate in a 20 to 30-minute Zoom interview about the workshops. We aimed to understand how partner organizations referred participants for the digital literacy workshops, as well as their perspectives on what motivated participants to attend the workshops, and their insights on any barriers to participation (see Appendix 3 for the interview guide). We were only able to conduct one interview, which we recorded, transcribed, and analyzed for themes.

Findings

Tech Drive

Interview participants from McMaster University involved in operating the tech drive provided feedback on several aspects of its implementation. Below, we present the major themes that participants highlighted during the interviews.

Promoting the tech drive

Participants discussed how various forms of media were used to mass promote the tech drive. They reported that communication took place primarily online through Instagram posts, emails, and the program website. Access Tech have made significant changes to their website to help spread awareness of the drive. A new communication's manager was hired who updated the website "to make it more user friendly" (9343) and one participant reported that "[they] did a really great job of getting the word out…" (3163). Additionally, individuals with large social media presences, such as the Chief Information Officer (CIO) of University Technology Services (UTS), were asked to promote the event online. They also indicated that other forms of communication included news articles and physical posters.

One participant noted that different forms of communication worked well for different audiences. For example, Instagram was an efficient platform for reaching students while mailing lists and emails were more effective for staff and faculty. Although mass communication allowed for promotion towards diverse audiences, there were limitations to this approach. Communicating effectively with the student population is difficult when many events are promoted through social media and email. The result is "information overload" (9977) for the students that prevents the tech drive from standing out through mass communication.

Five participants discussed communicating directly with various McMaster departments and faculty to bring awareness to the program. Specifically, they reached out to Tech Leads from large departments who are responsible for deciding when technology within the department should be upgraded or changed. Access Tech has begun attending tech roundtable departmental meetings and meetings with the UTS (University Technology Services) department to increase communication with this group of people about the tech drive

The Access Tech program coordinated their drives with notable annual events and other programs to increase participation. One participant mentioned that the tech drive was hosted on Earth Day which may have increased the likelihood of individual's participating in sustainable practices. To reach a more targeted audience, the program

conducted outreach with student bodies such as the McMaster Engineering Society and the Electrical Society. Additionally, the tech drive targeted engineering students to refurbish devices by hosting events in the engineering buildings and donating used technology.

Three participants mentioned that incentives promoting diverse participation during the tech drive were planned. For example, music and raffle draws for working devices have been used to increase the number of people attending the event. A participant stated that these incentives "advertise to the greater community...beyond McMaster" (9977).

To better cater the drive towards Empowerment Squared, the addition of a community partner representative to the student cohort was proposed. This volunteer would help provide perspective of the program and would allow for Access Tech to "assist [the community partner] in other ways" (9241).

Unpredictability in donations

Participants indicated that there has been unpredictability in the quantity and quality of donations of devices received during each collection event for several reasons. Three participants mentioned how McMaster departments operate with different replacement cycles:

> "There are replacement cycles of different units around campus. So, they're not necessarily replacing them on a consistent basis through each year. It might be a lot one year, and then a lot less next year […] and there's not really a lot of insight into that replacement schedule that we would be able to provide people." (9241)

Given the tech drive staff's limited knowledge of the replacement cycles for each department, it has been challenging to predict the number of devices that may be donated. Three participants stated that the onset of the COVID-19 pandemic also made it difficult to collect devices because there were fewer students and staff on campus. Ongoing hybrid work schedules for staff may have potentially limited the donation of devices. Three participants also noted that the quality of the devices donated was poor at times, which further limited the quantity of devices that were retained:

> "The amount of it that's collected is large, it looks visibly large. But then the amount that is usable, and like has the quality for donation seems much smaller. […] I also know that […] discouraging […] donation because of I don't know, age or quality of the donation will just deter people from doing it. So we want to make it as low barrier as possible. So the idea of like, are we collecting a lot? Well, yes. But does that mean that we're collecting enough to be used by Hamiltonians in need? I don't think so" (8941)

Availability of human resources

Participants noted that a lack of availability of human resources at McMaster has strained individuals currently involved in operating the tech drive. One participant indicated that many of the staff or students involved in the tech drive program have other primary responsibilities and that "the challenge is in making sure there's some dedicated personnel who can take on the activities necessary to keep this [program] moving forward" (8516).

The lack of available human resources has prevented the program from running as efficiently as possible. One participant suggested that bringing in additional personnel from "other student groups [or] volunteers" would help distribute the workload that only "a handful" of members are currently responsible for handling. There have been attempts to fill this staff shortage in the tech drive program, as one participant stated: "At first… one student lead [was hired] and then three, [but] one just went on parental leave" (9343). Despite attempts to increase staffing, the summer months have made it difficult for the donations office to be open consistently with "one team member away, one not here, and one not available during business hours… there's no one in the office" (9343). The result is that there are not enough people working for donations to be collected on a regular basis: "[The staff] aren't as effective in getting as many devices as possible because [they] just don't have [enough staff or] hours" (9977). Thus, providing a team of dedicated staff that have the availability to be in the office consistently would relieve some of the stress on current staff members.

Previous iterations of this program brought in outside volunteers to aid in the processing of tech donations. As one participant stated, the previous program "had a lot more personnel that were dedicated towards getting the systems ready, getting the[m] loaded up with software and getting them prepared" and in some circumstances outside volunteers "would do some of the data sanitization… and [take] on the distribution to people" (9241). Recruiting additional volunteers could provide a solution to increase human resources while also being able to "engage [the] community and provide opportunities to upskill in IT… and [may also] be an opportunity to get the resources in to reduce that window on the loading of software [with some] additional benefits as well" (9241).

Processing protocol for devices

Processing the donated devices is one of the most time-consuming elements of the device collection and delivery. Devices first undergo some basic testing "to ensure that whatever devices that are going to be passed on to Empowerment Squared are functional…and usable" (6602). Next, students begin the processing of equipment which includes "[taking] apart the devices, [taking] out the hard drives, [and sanitizing] the hard drives" which removes the operating system and is then required to be reinstalled (1877). Sanitizing hard drives ensures that all McMaster donated equipment

has no “residual information on it that [is being passed on]” (6602). One participant shared how challenges with providing licensed Microsoft products has slowed down device turnaround: “They changed some of their licensing model around providing licences to charitable organization, and we’re unable to put a license on those pieces of equipment” (9241). The participant did not explain how this challenge was overcome over the past year. Once the equipment has been wiped, students assess the devices for quality and “... make a judgement call whether it should go for student reuse, like at McMaster, or recycling, [or to Empowerment Squared]” (9343). Typically, students “look for an I5 or I7. That is 2014 and newer” (1877). However, as noted by two participants, it can still be challenging to assess if devices are of good enough quality to be donated to Empowerment Squared “because [they] can fall into those criteria, but still not be a good model, and then [cannot be donated]” (1877). This ambiguity poses a challenge when students are trying to determine whether donated tech is of sufficient quality to be delivered to Empowerment Squared and “[staff are] still working with [Empowerment Squared] to figure out what standard of item they want” (9343).

To help speed up the processing time, the program recently purchased “a high-quality system to sanitize hard drives in mass” (9343, 9241). Previously, drives were sanitized “one at a time and it [would take] hours upon hours to sanitize each hard drive” (9343). Despite this additional support, the processing of tech still takes a significant amount of time and labour. A participant noted that there are only 1 or 2 people that are dedicated to this process, so even though “equipment [has been provided] to help expedite the sanitization of hard drives” (9241) the process can only be sped up to a limited degree. In light of these challenges, there are some potential opportunities to further speed up the processing of tech. For example, “there’s the potential [to] build a small stockpile of hard drives that are pre-cleaned… so if the hard drive cleaning is slowing things down then [if there are] a dozen or so drives ready to go…then we can immediately put those into systems and hand them over for the next stage” (9241). Lastly, Access Tech “could continue to invest in additional supporting equipment [such as software or hardware] that could wipe hard drives faster or more hard drives faster” (9241).

Availability of space to collect donations

Five participants indicated that they experienced challenges storing devices collected from each tech drive. After the tech donations have been collected, they are stored on campus while being processed prior to delivery to Empowerment Squared. However, “the access tech team has storage limits… on how much they can store at a time while they refurbish and sanitize [tech donations]” (8941). Space limitations have prevented the program from being able to accept all donations given as “[the storage space] is quite small, so once [it is] full, [people and their donations are turned away]” (9977). While the amount of space available for holding donated tech has been small, a participant noted that the space itself “has lots of shelves and power outlets” allowing for processing to occur and can be easily found by most people on campus as “people know where the Life Science Building is and they can [easily] find the basement” (9343). The creation of a constant space for collections has helped to streamline the process. However, participants indicated that the storage space used to hold donations until

delivery dates typically overflowed into areas that were not part of the storage room. One suggested that "setting up a dedicated location [to contain tech storage] with adequate space would go a long way. It would need to be near somewhere you can load it onto a flatbed truck or van [to make deliveries easier as well]" (9241). Finally, one participant noted the benefits of having a separate space where donations can be dropped off year-round:

> "Rather than having to be [an episodic] tech drive… [could provide a space that] is always available. [This would allow] there to be a more regular flow of technology, and then this could be an opportunity for Empowerment Squared to help more people" (8516).

Transportation challenges

One participant indicated that deliveries to Empowerment Squared have only been made once a sufficient number of devices were collected: "And then they store them up until they have something worth deliveries, they won't deliver if they have like two computers…" To improve delivery of the devices, tech drive staff obtained support from facility services who were able to provide a staff member to drive the donations to downtown Hamilton. Coordinating drop-off times with Empowerment Squared has also been difficult at times.

Scaling up the tech drive

Participants shared several ways to scale up the tech drive. Two participants suggested focusing efforts internally by increasing participation at the departmental level within McMaster. Staff involved with Access Tech found that tech leads and department heads are among the greatest points of contact to promote the tech drive. When these individuals who have access to a lot of technology are aware of the tech drive program, they can help increase awareness and engagement with the program from their own department. Engaging these individuals can involve providing annual presentations to the departments about the program and to give them regular reminders. It could also take the form of having volunteers go department to department to speak to departmental staff in person and ask them to spread the word – getting "ambassadors within the departments" (8941) to promote the drive. One participant suggested providing support to department leaders to disseminate communications about the collection events, such as drafting emails to send to their teams and preparing posters to put up in the office. To further increase participation, a participant indicated that a proposal to amend the University policy is in progress to improve sustainability, which would increase motivation to donate devices to future collection events if it becomes University by-policy to donate devices no longer being used.

Two participants also suggested that the drive could be scaled up by increasing Empowerment Squared's engagement with organizations outside of McMaster. Some attempts have been made to reach out to other organizations in the Hamilton community that have expressed interest in participating. For example, the Hamilton

Public Library have previously been in contact, and they have a lot of old devices. Participants noted that it would be helpful if Empowerment Squared increased direct engagement with the community and that McMaster staff could support that process. Participants also indicated that additional advertising may also be necessary, because many people are still unaware of the drives, and may be throwing their devices out.

Along with increased direct outreach to the community, a participant stated that more involvement between Empowerment Squared and the McMaster team may be beneficial, since there has been a limited interaction between Empowerment Squared and the students. A participant stated that in earlier experiences with the tech drive, the community partner attended meetings with students and played a more direct role in "determining the outcomes of the program". They indicated that "when we had the community partner engaged and involved with the students as part of the learning outcomes, [there was a clearer] understanding [of the university's role] and a better understanding of some of the things that we have to address, and coming up with solutions and approaches" (9241).

Improving advertising and communication may be another way to scale up the tech drive. Many donations that are currently received come from departments within McMaster and most of these are McMaster devices. Two participants noted that people may not be aware that they can also bring in their own personal devices, since the range of devices that can be donated has not been explicitly communicated. A participant noted that the team has a good sanitization process that ensures removal of any personal information from the hard drives of donated devices to protect the donor's information security. One participant suggested that sharing the story of the devices' impact on recipients' lives may help promote the program by highlighting how the act of donating old devices can support other people. Another participant suggested having Empowerment Squared refurbish devices in-house through volunteers or participants to limit costs and help make the program sustainable. They also encouraged Empowerment Squared to employ a technical lead if they do not already have one, since refurbishing externally is expensive.

Digital Literacy Workshop

Participant Survey

We conducted a survey with digital literacy workshop participants to evaluate their satisfaction of the program and identify areas for improvement. Eight participants completed the survey.

Participant Characteristics

The respondents varied in age, ranging from 21 to 77 years old (Median: 28). Half of the respondents identified as Women/Girls, while the other half identified as Men/Boys. The amount of time respondents reported living in Canada ranged from 5 months to 47

years (Median: 7 months). Most respondents (75%, N=6) reported living in Canada for less than a year. Five out of the eight respondents (62.5%) of the sample indicated that English was their first language, while three (37.5%) respondents said English was not their first language.

Participant Attendance and Learning Goals

All eight respondents reported attending all four of the digital literacy workshops. We asked participants to indicate their learning goals for the workshop, with the option of selecting all that apply (Figure 1). All eight respondents cited wanting to learn how to use basic computer functions as a learning goal, while five out of eight respondents (62.5%) also indicated that they wanted to learn how to easily find a job, how to use a computer to access information, and how to use a computer to access information about school.

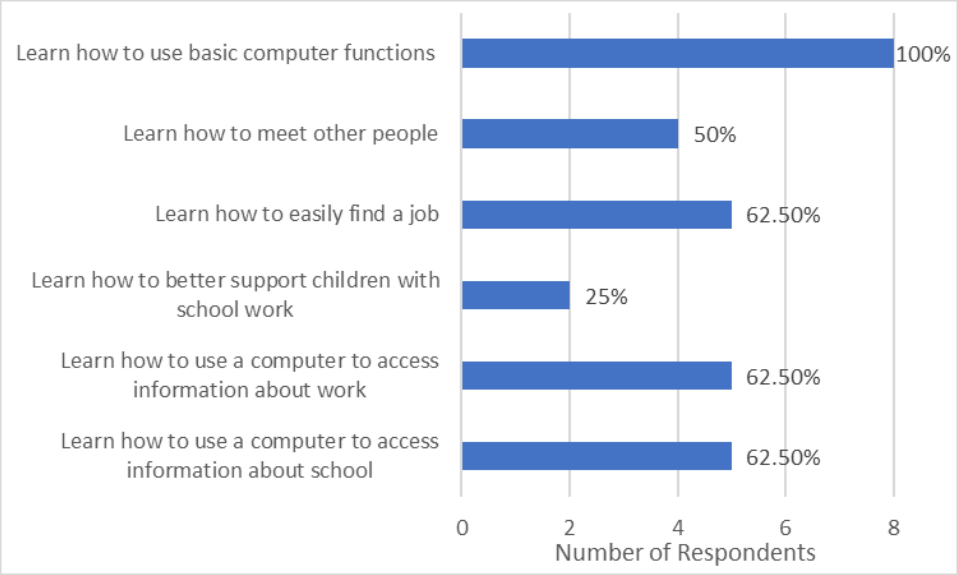

Figure 1: Frequency of learning goals reported by respondents (N=8)

We asked participants whether the workshop helped them meet their learning goals. Half of the respondents reported that all their learning goals were met by the workshop, while the other half reported that only some of their goals were met. Participants indicated that they did not meet learning goals relating to typing, graphic design, word processing and Windows software.

Participant Satisfaction

Participants were asked to indicate their satisfaction with the quality of learning material, length of the workshops, quality of instruction, and location of the workshops on a 4-point scale where 1= very unsatisfied and 4= very satisfied. All participants reported being either ‘satisfied’ or ‘very satisfied’ with each of these aspects of the program, broken down as follows:

- Quality of learning material: 100% (n=8) very satisfied
- Length of workshops: 87.5% (n=7) very satisfied, 12.5% (n=1) satisfied
- Quality of instruction: 87.5% (n=7) very satisfied, 12.5% (n=1) satisfied
- Location of the workshops: 75% (n=6) very satisfied, 25% (n=2) satisfied

Additional Feedback

Participants were asked what they liked most about the digital literacy workshops. They stated that the instructors and assistants were informative, helpful, and patient. They appreciated the style of delivery and noted that lessons were useful, particularly the ones focusing on Word, Excel, and public resources.

Participants were also asked how the digital literacy workshops could be improved. They indicated that the workshops could cover additional topics including typing, graphic design, Word, and Excel. Additionally, participants suggested providing workshop notes for reference. Multiple (50%) participants also reported that it would be helpful to increase the number of workshops and participants.

Partner Organization Interview

Participant Referral

Empowerment Squared hosts the digital learning workshops and is supported by participant referral facilitated by members of their partner network. One of their partner organizations focuses on “academic and social development of the students [they] serve”. The partner organization’s main demographic is high school students, which has made referring participants to the digital literacy workshops during the school year challenging. One participant noted, “We were hoping to [refer] high school students but [digital workshops] were during the day, and [potential participants] were in school”. The result was that that some participants who were referred to these workshops were unable to attend due to scheduling conflicts. Empowerment Squared has looked at hosting workshops during the summer months to see if they can recruit “high school students… or young students that can benefit from the technology [training]”. The partner organization referred individuals to the digital literacy workshops who had some basic English literacy to allow their understanding of Empowerment Squared instructors. Many of the participants that attend these workshops do not speak English as their first language, but through these workshops, “those who are already enrolled in ESL classes can boost their literacy through having more contact with teachers in different formats… [which is] another exposure for them to get further learning”.

The role of Empowerment Squared was to set up these digital literacy workshops, while the partner organization was responsible for recruiting and engaging clients. Empowerment Squared “sends [the partner organization] all the opportunity for the students and families” and ensures that they have “regular correspondence on how

things are going with the project". The recruitment of workshop participants occurs "mostly [by engaging directly] with the family" through their own volunteers, "mostly through the phone… and not by email". This comment suggests that the partner organization's volunteer network is a vital part of participant engagement in these workshops.

Participant Motivation for Engagement

The participant indicated that clients were motivated to attend the digital literacy workshops due to the increased need for technology during the COVID-19 pandemic: "The COVID issue has fairly heightened the need for technology and availability of some kind of device that you can bring home [for work or school]". The uncertainty during the pandemic also motivated clients to enroll in these workshops "to improve [familial digital] literacy because lockdown could come at any time". These workshops have provided parents the ability to better "monitor the internet while [their] children are using it" which could help them ensure that online activities took place safely.

Program Strengths

A key strength of the digital literacy workshops is the degree to which they accommodate client's cultural backgrounds, English fluency, and overall needs. The interview participant mentioned that the staff teach digital literacy by "putting [it] in a context … so the client will understand". Additionally, the participant noted that workshops were delivered at an appropriate pace for clients as it was stated that staff "really take time to explain to the [clients]". They indicated that the focus on accommodating to individual needs contributed to a safe and comfortable learning environment.

Opportunities for Improvement

The participant expressed the need for the project to be extended as they hoped the digital literacy workshops offered by Empowerment Squared "become something permanent in the community". For future iterations of the program, the participant suggested addressing the following items: the number of spaces in the program and the times at which the program is offered. The participant reported that there are not enough spaces available in the program and interest is high amongst clients: "The workshops are great, it's just the number of people that they can accommodate is something that could increase".[1] Additionally, increasing the number of spots within the program will provide clients with flexibility to enrol: "Having more [access to] resources… can build some flexibility to the project".

[1] Empowerment Squared have noted that the digital literacy workshops have never been filled to capacity. While it is unclear how this discrepancy arose, it is possible that the interviewee's perspective came from the workshop flyer, which indicated that spots were limited.

The participant suggested that the program requires additional staffing and technological resources to accommodate larger groups of clients. Additional staff are needed in two areas: running the workshops and community outreach. The number of staff limits the number of clients who can participate in the workshops. Moreover, increasing the number of staff to focus on communicating with various community partners could improve outreach for the program. In terms of technological resources, the participant reported that increasing the number of devices received would benefit the program as it would enable clients to practice the skills that they learned outside of the digital literacy workshops.

The participant suggested that the workshops could be delivered at additional community locations to increase the number of people attending. The pilot location was described as “great” but increasing locations may “cut down on traveling time, making it a lot easier for most people to attend”. Although opening new locations for the workshops may increase participation within the community, expanding the program primarily requires increasing the number of staff running the workshops.

Key Takeaways and Next Steps

We conducted a process evaluation of the Access Tech Pilot Program to support Empowerment Squared with improving the implementation of the tech drive and digital literacy workshops.

Based on our findings from interviews with McMaster staff involved with the tech drive, there are a few actions that McMaster University and Empowerment Squared could take that may improve the implementation of the tech drive. McMaster should consider:

- Dedicating additional personnel to the tech drive operation to ensure that the program is adequately staffed to accommodate a larger number of device donations and to keep the tech drive office open for collections on a consistent basis.
- Optimizing the processing of devices by investing in a stockpile of pre-cleaned hard drives or additional equipment to support faster hard drive cleaning for devices that are received.

Empowerment Squared should consider:

- Providing additional support for the tech drive by conducting direct outreach with community organizations in Hamilton outside the McMaster community to increase the number of donations.
- Setting clear parameters around the quality of tech devices that they desire and communicating them with McMaster staff and other stakeholders. Interview participants noted that the ambiguity surrounding device requirements had made it challenging for students processing devices to determine whether the

donations would meet Empowerment Squared's needs. While Empowerment Squared indicated that they worked with a member of the McMaster team to develop an infographic to communicate their desired specifications, McMaster staff that we interviewed appeared unaware of it. Although we were not able to discover why, this information appears not to have been widely communicated to all stakeholders.

In our survey of digital literacy workshop participants, we found that most participants were interested in attending the digital literacy workshops to learn basic computer functions, to learn to access information about work or school, and to learn to better support their children with schoolwork. Participants generally reported a high level of satisfaction with all aspects of the digital literacy workshops, indicated that the instructors were helpful, and found the content of the lessons useful. However, participants also suggested that the number of workshop sessions could be increased, that workshop notes would be helpful, and that workshops could cover additional topics like typing and word processing.

While we only managed to interview one individual among the digital literacy workshop partner organizations, they reported that the workshop does well to accommodate the individual and cultural needs of the participants. They suggested that Empowerment Squared could increase the number of staff dedicated to running the workshops and deliver the workshop at additional community locations so that the program can accommodate a larger number of participants in the program.

There are some limitations to this research. The survey was only shared with participants who attended the workshop sessions. Therefore, we cannot draw any conclusions about the reasons why individuals may have registered for the workshop but were unable to attend. Additionally, despite several attempts by the Research Shop team to reach representatives from Empowerment Squared's partner organizations, we were only able to conduct one interview pertaining to the digital literacy workshops. A more fulsome understanding of the digital literacy workshop implementation would require additional input from other partner organizations. Despite these limitations, the findings presented in this report can be used by Empowerment Squared to inform changes to the Access Tech program aimed at improving its implementation and scaling up its operations

Appendices

Appendix 1: Tech Drive Interview Guide

Hello, my name is [introductions]. We're student volunteers from the McMaster Research Shop and we're working with Empowerment Squared to evaluate how the Access Tech program is going. We want to thank you for agreeing to participate in this interview. The purpose of this interview is to evaluate the partnership between McMaster and Empowerment Squared, specifically the tech drive providing Empowerment Squared with used electronic devices for their clients. We'll be asking about your perspectives on the tech drive implementation and ways the initiative might be scaled.

Confidentiality - Before we begin our discussion, I want to spend a few moments going over some basic ground rules for today:

- Your participation is voluntary. You can leave or stop participating in this interview at any moment you choose with no repercussions on yourself.
- You do not have to answer any questions that make you feel uncomfortable.
- The information which we collect from these interviews will unlikely be attributable *(connected or associated)* to you. If we decided we want to use a quote and attribute it to you, we would contact you ahead of time to ask permission.
- I will strive to protect the confidentiality of our discussion or your written responses. Keep in mind that we can be identified through the stories we tell when deciding what to tell me.

Use of Recording – with your permission, this interview will be recorded to increase accuracy and to reduce the chance of misinterpreting what you say.

- All audio files and transcripts will be securely stored in a OneDrive folder that only the Research Team has access to.
- We will also be taking notes throughout the discussion.
- Only the research team will have access to transcripts from this discussion.
- The recordings and transcripts will only be used for this project and will be destroyed once the report is complete.

We ask that when using abbreviations or acronyms, you say the full name at least once to aid transcription.

If at any point you feel tired or fatigued, please let us know and we can take a short break.

Do you have any questions before we begin?

Do you give your consent to participate in this interview?

[Start Recording]

1. Let's begin with introductions. Please provide your job title and your role with the tech drive.
2. Please describe McMaster Office of Sustainability's partnership with Empowerment Squared.
    a. What were the objectives?
    b. Were expectations clear and realistic?
3. Please describe the process that occurs between collecting the devices and delivering them to E2.
    a. Following the device collection, how are devices allocated to Empowerment Squared or other recipients?
    b. What determines the approximate date of delivery of the devices to Empowerment Squared?
4. Did the implementation of the tech drive go as expected?
    a. Did you achieve the objectives of the tech drive (e.g., number of donations; quality of donations)? Why or why not?
    b. If there was anything that did not go according to plan, have there been any adjustments made in response?
5. In what ways, if any, do you feel the tech drive was successful?
6. What, if anything, would you improve about the tech drive if possible?
7. What would it take to increase the number of devices collected during the drive? How could the tech drive be scaled up in a sustainable way?
8. What, if anything, could additional support from Empowerment Squared look like in your partnership with the tech drive?
9. Do you have any final reflections or feedback on the tech drive that you would like to share?
10. We are aiming to capture diverse perspectives on the tech drive implementation from people who have been directly involved. To that end, who else would you recommend we speak to? Can you provide contact information for this/these individual(s)?
    a. e.g., tech drive volunteers, individuals cleaning/refurbishing devices

[End Recording]

Appendix 2: Digital Literacy Workshop Participant Survey

1. What is your age?

2. What is your gender?
    - Do Not Know
    - Woman/Girl
    - Man/Boy
    - Transgender - Man/Boy
    - Transgender - Woman/Girl
    - Two-Spirit
    - Other _____

3. How long have you lived in Canada?

4. Is English your first language?
    - Y/N

5. How many of the workshop sessions did you attend?
    - 1
    - 2
    - 3
    - 4 (all)

6. What were your learning goals for the workshop? Please select all that apply.
    - Learn how to use a computer to access information about school
    - Learn how to use a computer to access information about work
    - Learn how to better support children with school work
    - Learn how to easily find a job
    - Learn how to meet other people
    - Learn how to use basic computer functions (e.g., turn device on and off, learn about different parts of a computer, use mouse and keyboard, use email and internet browser, save and transfer files, learn the basics of Zoom and Google Workspace)
    - Other (please specify): _____

7. Did the workshop allow you to meet your learning goals?
    - All of my learning goals were met
    - Some of my learning goals were met
    - None of my learning goals were met

8. If some or all of your learning goals were NOT met, please explain which ones and why.

9. On a scale of 1 to 4, where 1 is “Very unsatisfied” and 4 is “Very satisfied”, please rate your satisfaction with the following[2]:
    - Length of workshops
    - Quality of the instruction
    - Quality of the learning material
    - Location of the workshops

10. What did you like most about the digital literacy workshops, if anything?

11. Were there any topics missing from the digital literacy workshops that you believe should have been included? If so, please explain below.

12. Do you have any other feedback about how the digital literacy workshops could be improved? If so, please type it below.

[2] For each of the areas listed, the survey was programmed such that if a participant responded with “Very unsatisfied” or “Unsatisfied,” they were asked to explain why they were unsatisfied and/or recommend any changes to the program.

Appendix 3: Digital Literacy Workshop Interview Guide

Hello, my name is [introductions]. I'm a student volunteer from McMaster who's helping Empowerment Squared evaluate how the Access Tech program is going. We want to thank you for agreeing to participate in this interview. The purpose of this interview is to get your perspective on the digital literacy workshops that Empowerment Squared is running. Specifically, we'll be asking about your participant referral process for the digital literacy workshops, what motivates participants to attend these workshops, and your insights on any barriers to participating.

Confidentiality - Before we begin our discussion, I want to spend a few moments going over some basic ground rules for today:

- Your participation is voluntary. You can leave or stop participating in this interview at any moment you choose with no repercussions on yourself.
- You do not have to answer any questions that make you feel uncomfortable.
- The information which we collect from these interviews will unlikely be attributable *(connected or associated)* to you. If we decided we want to use a quote and attribute it to you, we would contact you ahead of time to ask permission.
- I will strive to protect the confidentiality of our discussion or your written responses. Keep in mind that we can be identified through the stories we tell when deciding what to tell me.

Use of Recording – with your permission, this interview will be recorded to increase accuracy and to reduce the chance of misinterpreting what you say.

- All audio files and transcripts will be securely stored in a OneDrive folder that only the Research Team has access to.
- We will also be taking notes throughout the discussion.
- Only the research team will have access to transcripts from this discussion.
- The recordings and transcripts will only be used for this project and will be destroyed once the report is complete.

We ask that when using abbreviations or acronyms, you say the full name at least once to aid transcription.

If at any point you feel tired or fatigued, please let us know and we can take a short break.

Do you have any questions before we begin?

Do you give your consent to participate in this interview?

[Start Recording]

1. Please tell me a bit about your organization.
2. What is your/ your organization's role in the Access Tech partner network?
3. How, if at all, do your clients find out about the digital literacy workshop?
    a. Prompt: How, if at all, do you advertise the program to your clients? How are clients within your organization recruited for the workshops? Do you have a referral process?
4. From your perspective, what motivates your clients to register for the digital literacy workshops?
    a. What do you think they're hoping to get out of the program?
5. Have you heard any feedback about the workshops from your clients? If so, what have they said?
6. From your perspective, what might prevent your clients from registering or attending the workshops?
    a. Prompts: workshop location, timing, content
7. What, if anything, could be done to increase participant engagement in the workshops?
    a. Prompt: Is there anything that could be changed or added (e.g., content) to make the workshops more engaging?
8. How, if at all, could the digital literacy workshops be better promoted among your clients?
9. Do you have any final reflections or comments?

[End Recording]