Digital Readiness Survey
Written Reflection

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Background

The ability to use digital technologies has never been more important than it is today. While greater dependence on these technologies has been growing for years, the seismic shift towards remote work ushered by Covid-19 has led to a rapid acceleration of this trend. It is clear that the capacity to utilize computers and other digital technologies is essential for civic and economic life.

A wide array of research reveals a digital divide that exists within communities across the country with regards to those who have access to digital technologies and those who do not. This divide is meaningful and deserving of future research. However, when contemplating the nature of our civic engagement project, we decided to examine one particular facet of the divide: **digital readiness**, or the ability to use digital technologies to accomplish specific tasks.

While a significant amount of research illustrates a disparity of access, less is known about disparities that may exist in terms of digital readiness. A 2012 survey conducted by the City of Minneapolis found that only 51% of adults felt very comfortable searching and applying for jobs online. This figure is now more than eight years old, and further research is required to gain a complete picture of challenges that presently face residents of the Twin Cities.

We determined that the best way to gauge digital readiness was to create and disseminate an online survey. While a broad survey of Twin Cities residents would be ideal to truly assess the landscape of this research topic, limitations in time and resources have led us to focus on a narrower subset of participants: individuals who are working with Community Technology Empowerment Project (CTEP) service sites. Our partner sites included Adult Options in Education, EMERGE, Hired, Interfaith Outreach, Metro South ABE, Minneapolis Central Library, Neighborhood House, and PCs for People.

The results found by this project will provide meaningful data that CTEP and other institutions that are engaged with Digital Literacy can apply to their programming. Special emphasis will be placed on assessing digital readiness as it relates to finding and securing employment as this is a central component of CTEP's mission.

It is crucial to understand the current landscape of digital readiness in order to ensure CTEP and other organizations engaged in digital literacy instruction are serving community needs as they are presently felt. The findings of this project will hopefully provide information that will prove useful to digital literacy practitioners in years to come.

The Plan

Our initial schedule involved spending the early months of the project researching survey methodology and creating drafts of our final survey, incorporating feedback from survey consultant Dan Backman, Joel and Lizzie, and members at our partner sites. Simultaneously, we planned to pursue partnerships with CTEP sites to distribute the survey.

Our initial plan also involved developing two versions of the survey: one focused on collecting quantitative data and one with qualitative questions. We planned to each administer the qualitative survey to five participants, for a total of twenty responses. Our hope was to use these longer and more in-depth responses to add context to our quantitative survey results and to glean some useful anecdotes for our final report.

We planned to collect survey responses over a two month period in April and May 2021, with a goal of reaching 200 responses to the qualitative version in that time. We have spent the remainder of our project time analyzing the data to create the final Data Report.

To encourage participation in the survey, we planned to include respondents in a raffle for a $20 digital Target gift card. Respondents were able to opt in to providing their contact information for the raffle, and we purchased ten gift cards for a total expense of $200. This $200 was generously funded by SPNN and was the only expense in our budget.

Accomplishments/Impact

A major accomplishment of this project is that we far surpassed our goal in terms of survey respondents. By the project's completion, we received a total of 405 responses to our survey—double our initial goal of 200. It was crucial to have a significant dataset in order to identify noteworthy trends, and 405 responses provided us with enough data to accomplish this goal.

Furthermore, our project received broad participation from CTEP service sites. The three service sites represented by group members of this project participated in the survey in addition to five other sites. The complete list of sites is as follows:

- Hired
- Neighborhood House
- Emerge
- Minneapolis Central Library
- Adult Options in Education
- Interfaith Outreach
- PCs for People
- Metro South Adult Basic Education

We were delighted to receive such broad support from our fellow service sites and believe their support led to a richer pool of data to analyze . Each participating site will receive data that are specific to their respondents as well as a copy of our final Data Report. We hope the results of this project can be immediately implemented into their programming and believe this feedback loop directly aligns with CTEP's mission of providing informed training in computer literacy to community members of the Twin Cities.

Perhaps the most meaningful result of our civic engagement project is that we identified 158 community members who are interested in receiving computer literacy training. The survey included a question where respondents could select specific topics that they would like to

receive training in; nearly 40% of survey participants self-identified as interested in receiving training. We aggregated these names and passed them along to our participating sites so these individuals can receive training in the near future, most of which will likely be led by CTEP members. We are particularly proud of this aspect of our project because it directly correlates with CTEPs charter of expanding technology training to individuals who might otherwise be overlooked.

Finally, this document in addition to a Data Report will be forwarded to CTEP leadership as well as the participating cites that joined us in the project. We also sent site-specific data to partner organizations so they can gain a better understanding of how their participants responded to the survey. We hope our findings will provide valuable insight to incorporate into existing and future digital literacy programming.

Survey Results

Demographics

The demographic makeup of our survey respondents is roughly proportional to US Census data on race and ethnicity in Minneapolis (link), with results slightly skewed by double-counting respondents who marked multiple boxes. However, as compared to our expectations, our respondent pool is skewed wealthier and more highly educated. Over a third of our respondents make more than $50,000 a year, and more than half have a college degree. More than three quarters of our respondents have completed at least some college.

Our respondents demonstrate a wide range of employment statuses: approximately a third are employed full time, 20.3% unemployed, and 16.5% out of work and seeking employment. This is consistent with the fact that the majority of our respondents received the survey through Hired, an organization focused on helping individuals gain employment.

Overall, our pool of respondents is wealthier and more highly educated than we anticipated. It may not be broadly representative of all of the participants that use the services of CTEP partner sites.

Graphic: Respondents by Race/Ethnicity

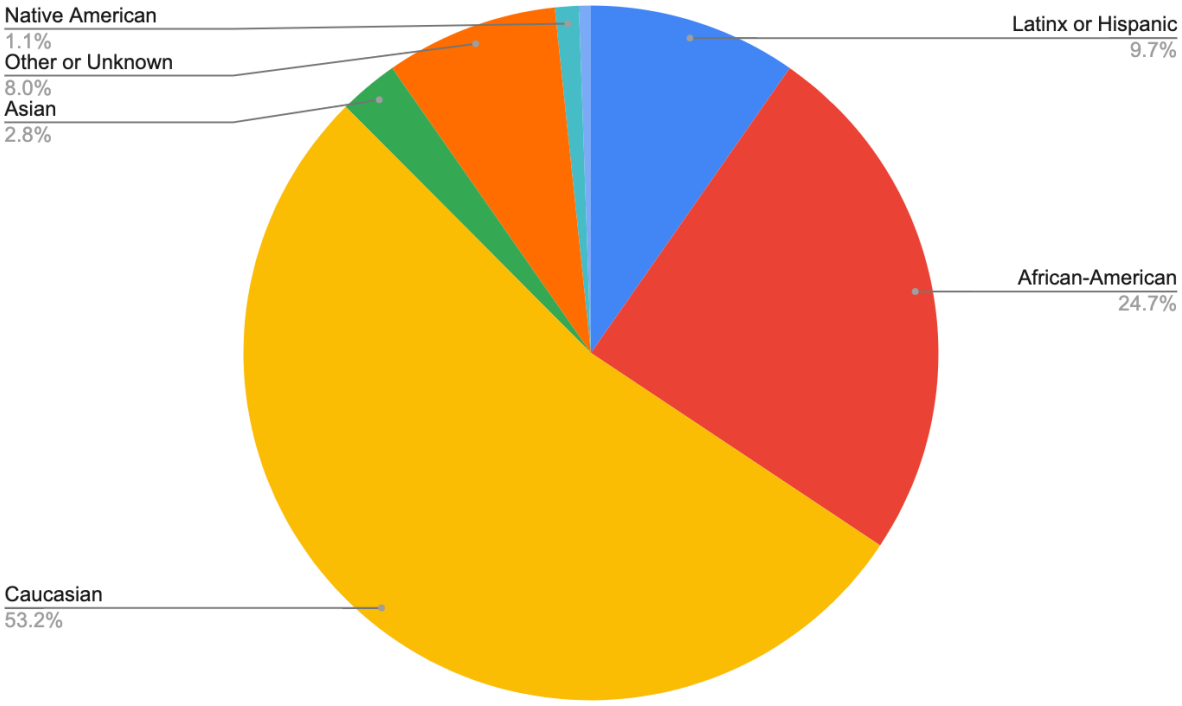
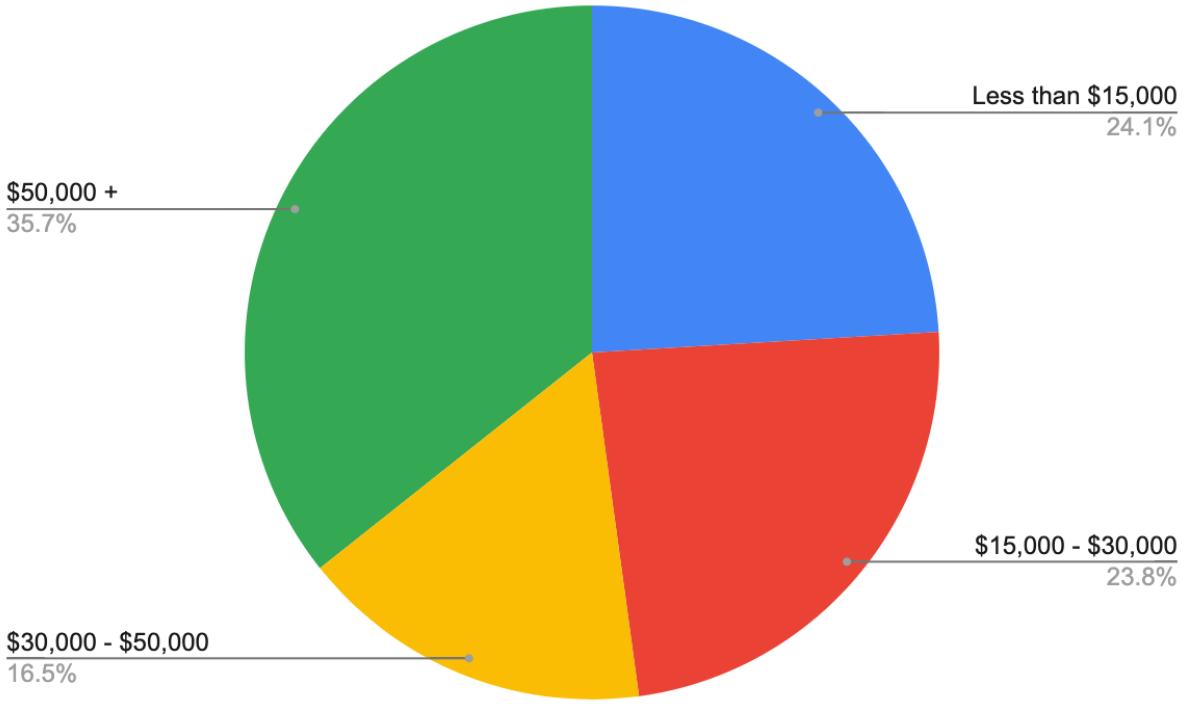


Table: Number of Respondents in Each Race/Ethnicity Category

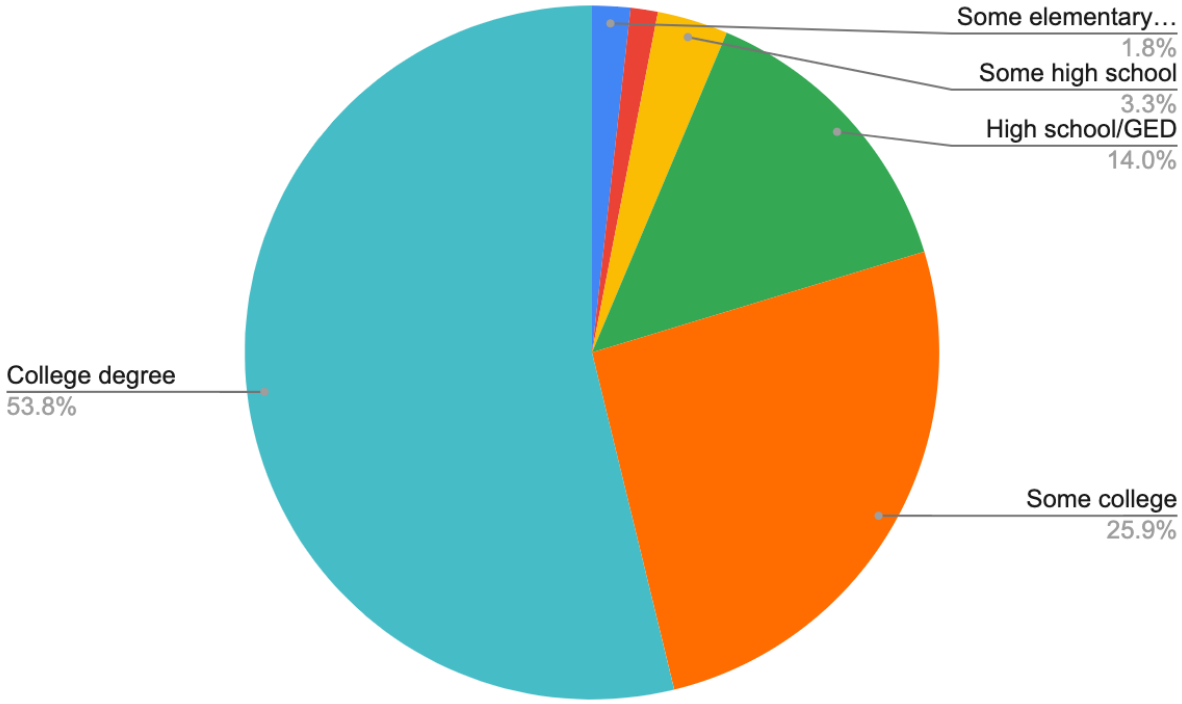
*Note: this table double-counts respondents who selected multiple boxes

Caucasian	207
African-American	105
Latinx or Hispanic	43
Other or Unknown	36
Native American	17
Asian	13
Native Hawaiian or Pacific Islander	4

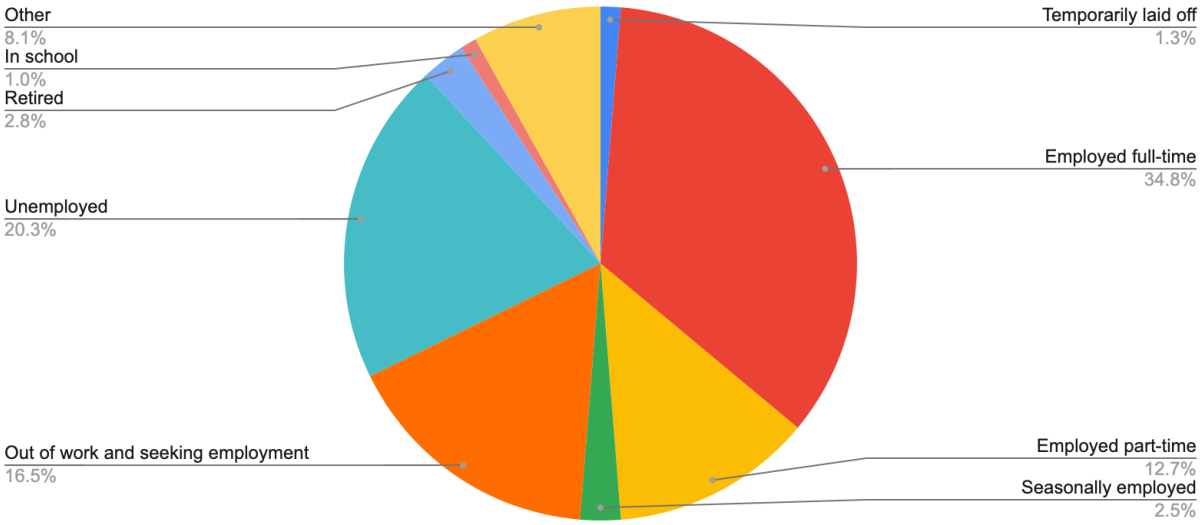
Graphic: Respondents by Income Bracket



Graphic: Respondents by Highest Education Level



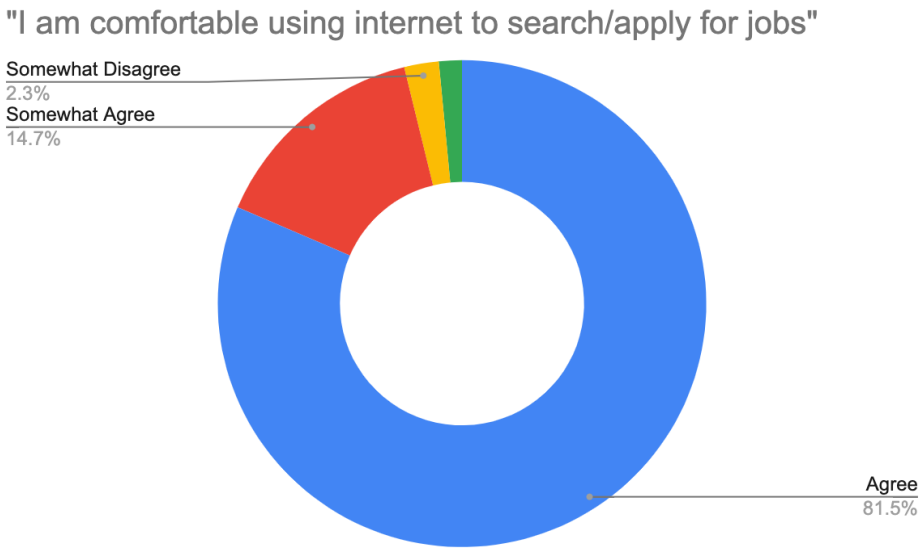
Graphic: Respondents by Employment Status



Employment-related Results

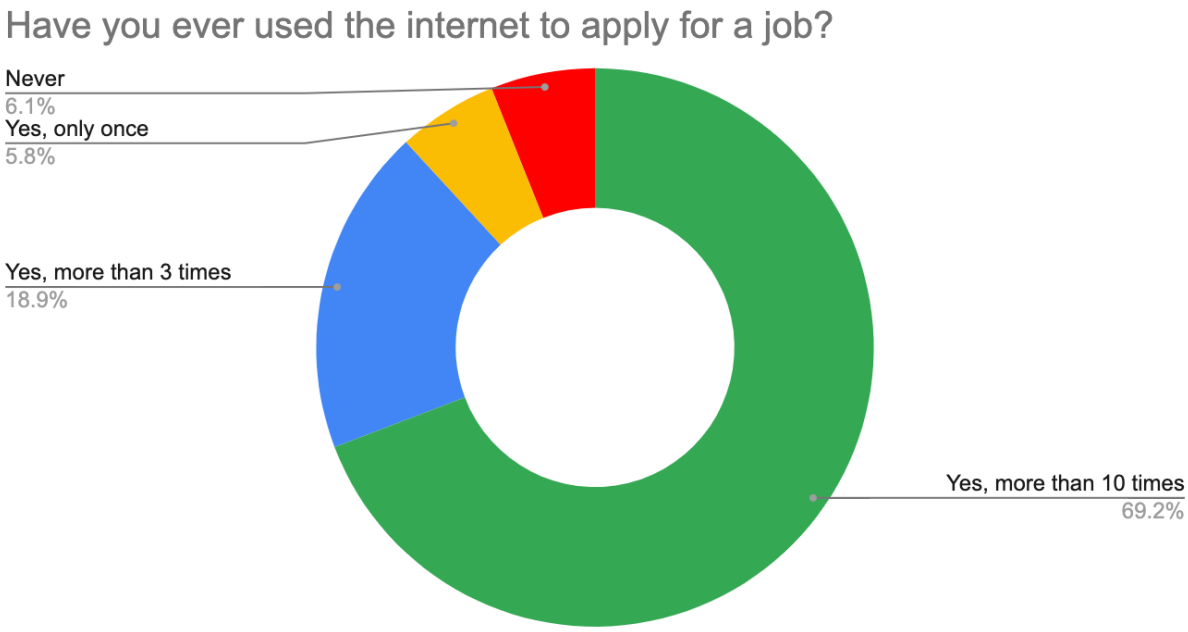
In our background section, we mentioned that the 2012 City of Minneapolis survey found that only 51% of adults felt very comfortable searching and applying for jobs online. Our survey finds encouraging news on this front: 81.5% of our respondents agree with the statement "I feel comfortable using the internet to search/apply for jobs," with an additional 14.7% answering that they "somewhat agree." This means that only 3.8% of our survey respondents answered that they "disagree" or "somewhat disagree."

Graphic: Agreement with the Statement "I feel comfortable using the internet to search/apply for jobs"
*Note: "Disagree" is green



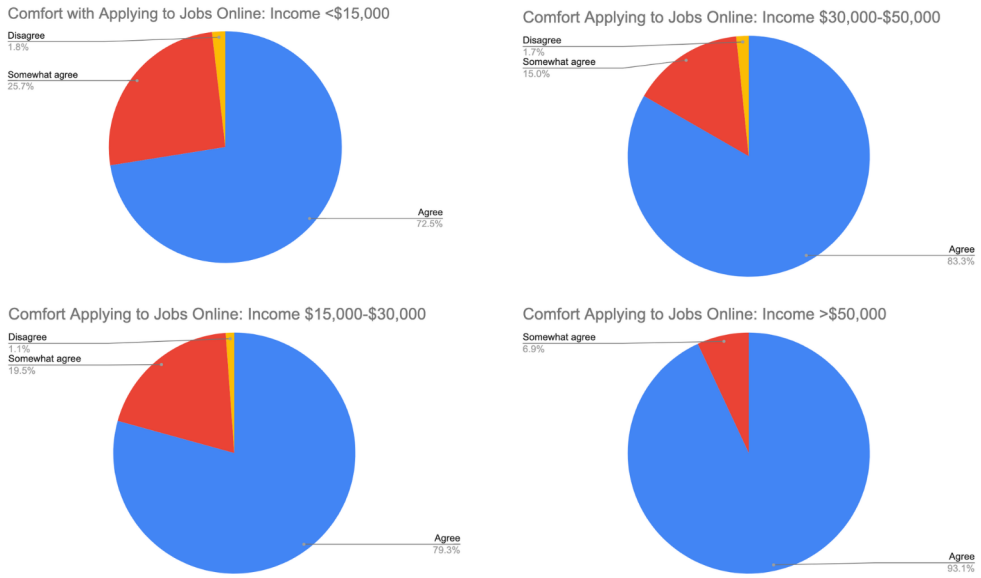
This reported comfort was backed up by responses about experience with applying for jobs online. 69.2% reported that they had applied for more than ten jobs online, with only 6.1% reporting that they had never applied for a job using the internet. This level of comfort and experience shows an encouraging trend in the nine years since the City of Minneapolis survey, as most industries continue to move their hiring processes online.

Graphic: Experience Applying for Jobs Online



The more discouraging results, however, show that this level of comfort with applying online is not consistent across income brackets. Comfort rises steadily as income rises, from just 72.5% of the respondents making less than $15,000 responding “agree” to a remarkable 93.1% of those making more than $50,000. Applying for jobs online is more comfortable and familiar for those who already have a high-paying job, while those making substantially less money are less likely to be completely comfortable with the process.

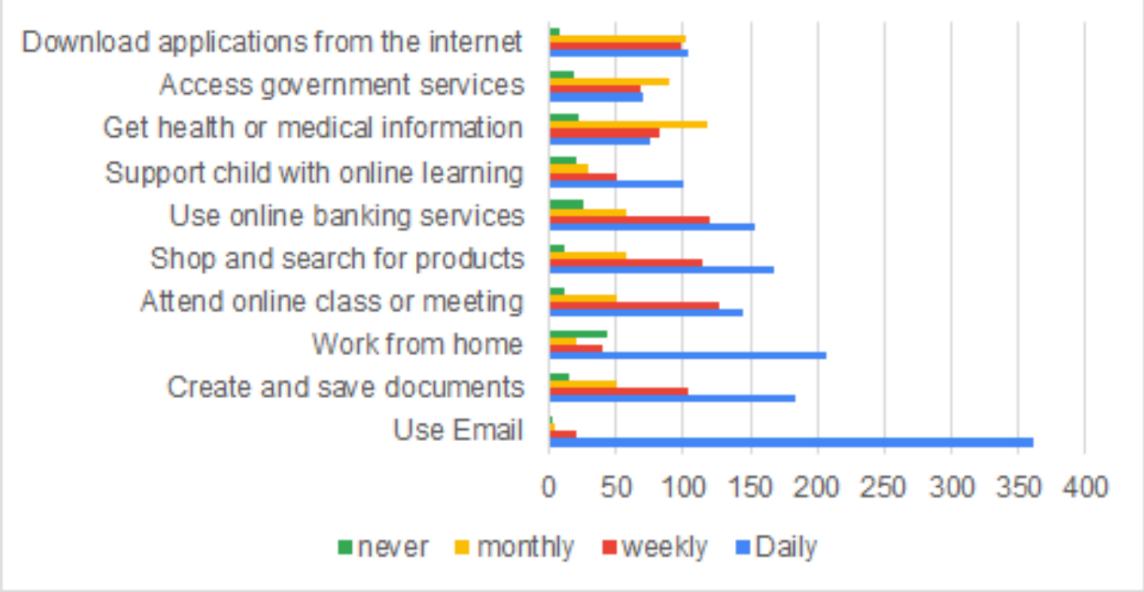
Graphic: Comfort Applying to Jobs by Income



<u>Emergent Narratives</u>

A major narrative that appeared from the data is the level of reliance on digital technologies that was felt across all 405 respondents. This pattern can be seen in the number of individuals who regularly work from home and attend online classes/meetings. 207 survey respondents said they work from home daily with an additional 40 reporting they work from home weekly. In addition, 144 respondents said they attend online meetings on a daily basis and 127 said they attend them on a weekly basis. In terms of frequency, only a small percentage of respondents marked “never” for the various tasks that can be seen in the graphic below. These data point towards the conclusion that digital technologies are a near ubiquitous part of modern life. We estimate that Covid-19 has heightened the reliance upon these technologies, especially when considering that nearly 50% of respondents noted that they work from home on a daily or weekly basis.

Graphic: Frequency of Digital Activities



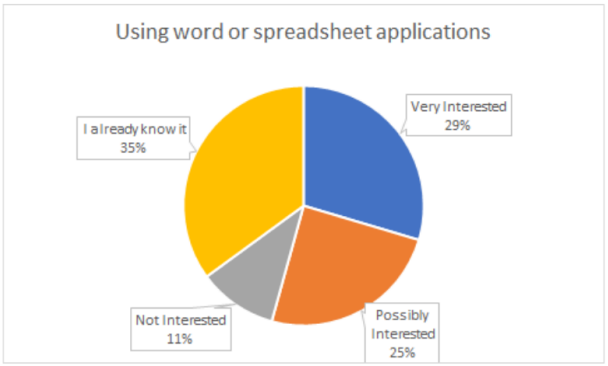
Another narrative that we observed in our results is that respondents generally felt a high level of comfortability accomplishing most digital tasks that were included in the survey. As the graphics delineate below, respondents revealed a high value of comfortability for both low and high frequency tasks. This observation is also bolstered by the comfort respondents noted with using the internet to apply for jobs.

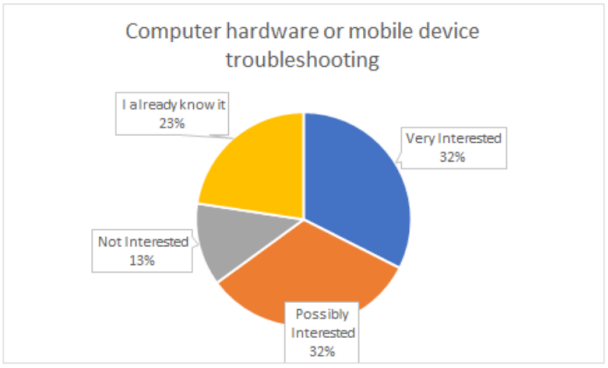
Interestingly, while respondents expressed high levels of comfort with performing various digital tasks, there was also a significant number who said they were interested in future training opportunities. Nearly 40% of respondents responded affirmatively when asked whether they were interested in being contacted by a CTEP member for training on digital literacy topics. This value reveals a clear desire to work with technology professionals on building computer skills that is often not correlated to one's feelings of comfort with performing general computer tasks.

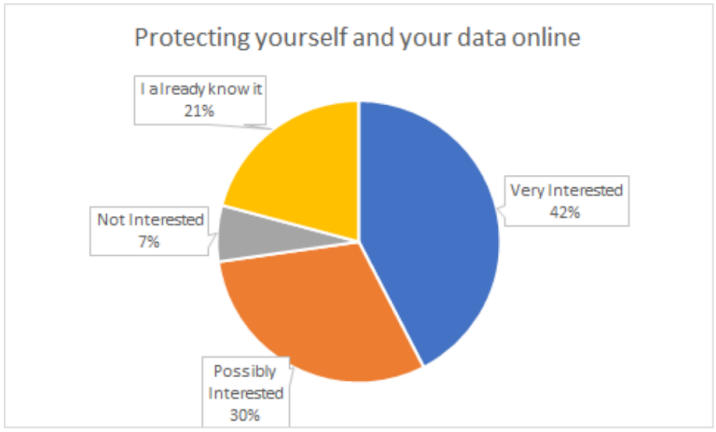
Our survey also uncovered instructive data about the type of digital literacy trainings that respondents would like to receive. Nearly 30% of respondents said they were very interested in using word or spreadsheet applications and 25% noted they were possibly interested. 32% of respondents were very interested and 32% were possibly interested in trainings on computer hardware or mobile device troubleshooting. Finally, 42% of respondents were very interested in receiving instruction on "protecting yourself and your data online" and 30% marked they were possibly interested in this topic, jointly comprising more than two-thirds of respondents. Based

on these results, we believe there is a clear appetite for specific instruction in word processing and spreadsheet creation, troubleshooting for phones and computers, and data privacy/protection. We believe community technology organizations would benefit from incorporating these materials into their existing programming to ensure they are serving the needs of their participants.

Graphic: Training Topics of Interest







When considering future trainings, another pattern that emerged from our results was a decreasing interest in being contacted by a computer teacher that seems to correlate with an increase in income. 52% of respondents who have an annual household income of less than $15,000 per year said they were interested in receiving computer training and 69% of those making between $15,000-$30,000 also responded affirmatively to this question. These figures are significantly higher than the 39% of respondents who have a household income between $30,000-$50,000 and the 19% with one of $50,000 who said they were interested in computer training. These results point towards an increased need in providing training to lower-income individuals who have a greater desire to receive digital literacy instruction compared to their higher earning counterparts.

Goals

Our number of survey responses (405) well exceeded our goal of 200. With this amount of data, we are able to see some trends in digital readiness. We will not be assessing the data for statistical significance, but we hope these results can show the effectiveness of having a CTEP at different sites in the community. In addition, we were able to provide each partner site with individualized data about their participants' interest in various types of technology training; we hope that partner sites will be able to use this information in making decisions about the digital literacy programming they offer.

The process of creating and administering the quantitative version of the survey took a lot of hours to complete, and we were unable to find the time to generate a second qualitative version. However, our quantitative data still produced many interesting findings that our partner sites may choose to make use of in grant applications. We also feel that the text of our survey reflects the amount of work that we put into it; in choosing to apply our energies to fine-tune our quantitative survey, we achieved our goal of creating a high quality resource for future CTEPs considering similar projects.

Challenges

We accurately predicted that COVID-19 would make in-person administration of the survey impossible. While some of our partner sites were able to provide limited in-person services by the time of the survey's administration in May and June 2021, coordinating a large-scale in-person administration effort would have been too much work with too little notice. Thankfully, our predicted risk of receiving too few responses due to entirely online administration proved to be false; the online survey received far more responses than we had predicted.

Our most extensive and most unexpected stumbling block was the sheer amount of time that it took to create and edit our survey. In our project charter, we had budgeted the months of February and March to write and edit the survey. In reality, we underestimated the number of steps that would go into the process: once we had combed through reference surveys for help, our initial draft was quite long, and the process of trimming it down was harder and more time-consuming than we had anticipated. With this first draft, we then had to elicit feedback from both Dan and Joel, discuss the feedback as a team, and figure out ways to incorporate it into our new draft. Our final stage involved participant feedback as we took the survey on test runs with trusted community members at our sites. The amount of feedback we got was sometimes overwhelming and occasionally contradictory, and while we are proud of our final product, the road to get there was long.

The end of our editing process came when we simply chose a firm date for the distribution to start and decided that whatever the survey looked like at that date was its final form. In retrospect, setting this kind of very firm deadline earlier in the process could have allowed us to

focus on which feedback we found most important, and could have allowed us to get to the distribution phase more quickly.

Another difficulty arose once we reached the distribution phase: because we were relatively loose in allowing our partner sites to distribute the survey as they saw fit, we saw very uneven returns between different sites. Our lowest site had just one response, while our highest had over three hundred, with the result that participants from Hired make up approximately 80% of our data pool. However, we did foresee that this unevenness in numbers of responses might happen when we decided to be hands-off. For us, it was important that partner sites had a low barrier to entry when deciding whether to participate in the survey, and we actually made a point of telling potential partners that any number of responses was helpful. In retrospect, if we had had a longer survey administration period we may have been able to take more action to try to even these response disparities between sites. However, we believe that the decision to initially set a low bar for participation attracted more partner sites to the survey.

Our final stumbling block was something we had discussed almost since day one: the issue of language barriers preventing participation in the survey for non-native English speakers. Based on our reference surveys, which showed that extremely few respondents ever made use of translated survey forms, we decided not to put our limited resources towards the expensive process of professionally translating our survey into different languages. While we designed the survey to be understandable by an intermediate level English language learner, we recognize that this decision means we likely missed a significant number of potential respondents. If this had been a year in which the situation had allowed for in-person survey distribution at our partner sites, we could likely have tried to overcome some of these language barriers by helping participants with lower English levels fill out the survey. As our distribution necessarily had to be fully online, we provided a phone number on each survey to call for help.

Next Steps

This project naturally lends itself to future engagement. One of the catalyzing forces behind the creation of this project was a desire to capture an accurate understanding of the current landscape of digital readiness. Given the ever-changing nature of this topic, further investigation will build upon the results of this project while adding a unique layer: change over time.

Future CTEPs may choose to engage with this project in a few ways. They might choose to administer a survey that looks very similar to our own in an effort to capture how digital readiness has shifted with time. A seemingly natural interval could be five years in the future, but other intervals would be equally informative. Alternatively, future CTEPs may choose to administer a survey that addresses weak points in our own. While we are proud of the survey that we ultimately distributed, we recognize there are certain areas that could have been strengthened. While this information is discussed in more depth in other sections of this report, potential growth areas include expanding the pool of respondents to a general population and focusing on qualitative aspects of digital literacy.

Civic Engagement Reflections

The biggest lessons were in managing expectations while remaining committed to the purpose of what we were doing. In our initial meetings, we discussed the possibility of pursuing a goal for survey responses that would be broadly representative of the city of Minneapolis. When we took a good, hard look at our available resources, however, we decided to scale it back to targeting the participants at CTEP sites. Similarly, our initial plan was to create two versions of the survey and to administer the qualitative version through in-person, in-depth interviews. This dream also had to be phased out of the project when it became clear that creating just one version of the survey was still going to take up large amounts of time and resources. Learning to be realistic with each other and with Joel, Lizzie, and partner sites about exactly what our resources were and how far they could take us meant that our pared-down project was a success, still capturing data from the participants we wanted to target.

Another lesson gained from this project was the importance of listening to partner organizations and adjusting needs to fit those of our community. The majority of our responses came from a single organization. We also spent the longest amount of time working with this organization to ensure the survey would be meaningful to their clientele. This involved scheduling numerous meetings to discuss how best to present the survey to participants and the kind of data that would be passed along upon the survey's completion. The end result of more than 350 responses reveals that this was time well-spent. It also taught us that community buy-in is the result of one's willingness to come to the table and work towards a shared goal.

Acknowledgments

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