



Promoting Digital Inclusion During the COVID-19 Pandemic: Reflections on the Parent Tech Training Program

Introduction

For years to come, researchers, academics, policymakers and nonprofits will be reflecting on the myriad impacts of the COVID-19 pandemic on individuals, families, institutions and societies. Whether one was infected with the virus, lost a job due to lockdowns, experienced mental health challenges because of isolation, or struggled to support children in their remote learning, no one has been untouched by COVID-19. It has been a collective, global experience.

In the Denver metropolitan area of Colorado, the pandemic quickly brought into stark focus the economic inequality that exists in the region. For school-aged children, levels and ease of access to reliable technology, which was absolutely essential for remote learning, were generally based on a family's wealth or degree of economic stability. Children from wealthier families often already had access to computers, reliable internet connections, and space at home conducive to participating in online learning. For students from lower income households, the transition was often much more complicated and much less efficient. While many schools were able to secure laptops for students and free internet hotspots from private sector companies, these efforts took time. Not all students had the same internet bandwidth or quiet spaces at home to focus on schoolwork.

In an effort to support the families of school aged children engaged in remote learning, Mile High United Way provided access to the internet (with gift cards), laptops, and a computer literacy program, the Parent Tech Training Program, so that parents could better support their children on the virtual learning journey. This paper describes the program, how it came to be, and key lessons learned about the digital divide in the context of a pandemic and through the lenses of culture and gender. This paper is intended for other practitioners seeking to increase computer literacy amongst adults and creatively address digital equity challenges, while taking into consideration issues of culture and gender.

Background

Mile High United Way is based in Denver, Colorado and is deeply committed to ensuring that every child in the metropolitan area has the opportunity to succeed. Recognizing that quality education is critical to breaking generational cycles of poverty that stem from a long history of race- and class-based inequity, Mile High United Way's United for Schools (UFS) program invests in schools in under-resourced neighborhoods. The overarching goal of UFS is to promote and increase school attendance and student and family engagement so that students and families have the access and exposure to academic opportunities shown to improve educational outcomes; ensuring that

children are present at school, ready and able to learn. Regular school attendance is a prerequisite to academic success. By focusing efforts on school attendance, Mile High United Way is helping schools in Denver area establish a strong foundation for learning and achievement.

UFS is one of several programs that make up United Neighborhoods, Mile High United Way's placed-based strategy. Over the last four years, the UFS staff has been working closely with seven elementary schools in three school districts. To achieve the school attendance and family engagement goals, UFS focuses on the following four high impact activities, or "levers of change":

1. Developing parent advocates and school leadership
2. Providing quality out-of-school time programming
3. Supporting families with resources (such as direct assistance for rent, utilities, etc. and referrals to mental health services, transportation assistance, etc.) to meet their needs
4. Building the capacity of school attendance systems to holistically address families and attendance concerns

The Need

Prior to the pandemic, UFS programming typically involved significant in-person interaction with parents, school staff, and students. In March of 2020, everything changed. School districts announced a shift to 100% remote learning because of COVID-19. Schools began scrambling to set students up with appropriate technology and orient teachers to the online platforms they would be using to deliver curriculum. As schools made the rapid transition to virtual instruction, Mile High United Way worked with them and corporate partners such as Comcast to deliver computers and broadband connections to families in need.

But simply *having* technology in place did not necessarily lead to the *use* of the technology. Some of the Mile High United Way laptops stayed in their original packaging. Many parents shared concerns with UFS Community Advocates (who are the face of UFS in schools and engage extensively with parents and school leaders) about their ability to perform basic tasks such as turning on a laptop, setting up an email account, or logging on to a Zoom meeting. In a pandemic environment, these technology skills were (and continue to be) essential for staying connected with school staff and teachers, helping a child with schoolwork, and continuing to function during a time of lockdowns and "stay at home" regulations. **The need was clear: to support student learning during the pandemic, parents needed to quickly develop basic technology skills.**

To put these technology needs in context, it is helpful to understand some of the characteristics and demographics of the parent population that is served by UFS more broadly. Many UFS parents:

- Are immigrants (from countries such as Mexico, Afghanistan, Guatemala, El Salvador, Honduras)
- Are English language learners
- Have limited levels of education
- Have limited experience with or understanding of the American educational system
- Are low-income
- Have been disproportionately affected by the COVID-19 pandemic

- Have experienced trauma
- Are women (and among the UFS parents who participated in the Parent Tech Training Program participants, almost all were women)

The Response

As a clear pattern of need for computer literacy became evident, Mile High United Way began exploring options for helping parents build their technology skills, recognizing that building skills in a pandemic environment would require the use of specific safety protocols.

At the same time, a core Mile High United Way partner, Metropolitan State University (MSU), reached out with concerns about its ability to continue providing English language classes to UFS parents when face-to-face classes were temporarily halted due to the pandemic. How could they provide virtual classes to parents who did not know how to use technology? Thus began discussions between MSU and Mile High United Way about how to create a technology training curriculum that would: a) build on MSU's adult learning methodology; b) be delivered safely during the pandemic; and c) take into account the unique challenges (such as language barriers) of UFS parents that could affect learning. These discussions led to the creation of the Parent Tech Training Program, a computer literacy program that includes the following:

- Nine short **instructional videos** to guide basic technology literacy. The videos focus on topics such as using a keyboard, using the internet, downloading an app to a phone, navigating Google Classroom, and more. These videos were posted on Mile High United Way's YouTube page and were intended for learners to access on a regular basis throughout the course. While originally developed in English and Spanish, videos in Dari and Pashto were also added for Afghan parents who participated in the program in 2021.
- Provision of virtual **one-on-one tutoring** to each participating parent to reinforce learning from the videos and assist with any specific computer tasks that parents needed to accomplish. All instructors were bilingual, comfortable with technology, had flexible schedules, and an affinity for the culture of the parent learners (if not actually from that culture). They also received onboarding guidance and an instructor guide to ensure consistency of support for adult learners.
- **Learning cohorts** for parents from the same schools. As of July 2021, six cohorts (of up to ten learners each) had started the Parent Tech Training Program, although not all completed it. (More cohorts are anticipated for the 2021-2022 school year). Cohorts participated over four or five weeks and were assigned to an instructor who would provide tutoring throughout that time period.
- **Support from UFS Community Advocates.** Prior to training and tutoring, Community Advocates delivered a pre-assessment test to parent learners to better understand their base knowledge and determine what training modules to prioritize. Community Advocates also delivered a post-training survey to parents to gauge how much they learned from the training and tutoring. MHUW also provided monitoring and coaching throughout each cohort of parents. Community Advocates checked in with the parents, particularly if there was any difficulty with scheduling tutoring sessions, cancellations, emergencies, etc.
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- As an **incentive**, parents received a laptop and hotspot, if needed, to participate in the program and were allowed to keep them upon successful completion of the training. (While this was not an original part of the program, it was added in February 2021 to promote sustained participation.)

The Parent Tech Training program rolled out according to the following timeline:



What We Learned

Upon reflection about the launch and implementation of the Parent Tech Program, UFS staff can cite many successes. The team was able to get the program up and running very quickly with support from MSU. This was important given the urgency of the need – parents had no time to waste because their children were being transitioned to online learning almost overnight. The UFS and MSU team was also able to create training content that was highly relevant based on direct input from parents and their articulation of very specific technology challenges. The team was also able to create a training delivery model that was safe and in accordance with the COVID-19 safety guidelines that local and state officials had in place at that time. Lastly, the program was successful in accommodating different language needs and was very flexible for parent schedules.

For a number of parents who completed the Parent Tech Training Program, the trainings were a catalyst for exploring other opportunities for education or professional development. For example, one woman in the program proceeded to enroll in a GED class after having a positive experience with the tech training; others signed up for English language classes; and one even went on to become an instructor in the Parent Tech Training Program. All noted that the Parent Tech Training Program helped lay a positive foundation for further learning and development.

Despite those successes and the thought that went into creating a demand driven, flexible, and linguistically appropriate program, the program team encountered challenges with parent participation and course completion. The expectation was that, with some guidance from Community Advocates, a large majority of parents would readily finish the eight sessions of the Parent Tech Training Program. In reality, about 60% of parents overall who started the training program completed it, with 32% partially completing the program. It is recognized in adult education that completion numbers will be lower for adults because they have so many competing priorities and barriers. Lower completion rates, in turn, can impact overall learning. For example, the Colorado Department of Education realistically anticipates that only 37% of adult English as a Second Language (ESL) learners will have measurable skill gains after participation in

designated ESL programs across the state.¹

The next section of the paper explores various factors that may have led to lower-than-expected completion rates with the Parent Tech Training Program, including: a) issues with program design/structure, b) dynamics related to culture and gender, and c) life events and pandemic-related uncertainties.

A. Program Structure and Design – Lessons Learned

Because the Parent Tech Training Program had to be launched so quickly – online classes for students were starting regardless of the readiness of parents to play an effective support role – the UFS team did not have the luxury of going through a comprehensive and detailed program design process. Rather, the team focused on the fundamentals: developing engaging and useful training videos, securing and delivering computers and hotspots to participants, and identifying instructors who would be available for one-on-one tutoring of each learner. The team recognized that because of the tight timeframe for designing the program, some program elements would inevitably need to be added or adapted over time. A list of key lessons learned about program structure are noted below, related to these topics: expectations, incentives, one-on-one support, needs identification, scheduling, and the importance of positive relationships.

EXPECTATIONS OF PARTICIPANTS

When the Parent Tech Training Program launched in September of 2020, the UFS team did not formally share expectations with parents. The operating assumption was that because parents had so strongly communicated their desire to have this computer literacy opportunity, they would actively participate and see the course through to completion. In reality, some parents in the early cohorts showed signs that they might not finish. Some parents may have had the sense that this investment in learning from Mile High United Way was informal and completion of the full training not necessary. Or they may not have fully understood how much time and focus the training required and, once enrolled, decided it was more than they could handle. The UFS team quickly determined that the program was missing a set of formal, clearly defined expectations that could be communicated with parents before they started the program. Consequently, the team created a written and detailed set of expectations for parents to review prior to enrolling in the program.

INCENTIVES

Another example of a program gap relates to incentives. Again, operating on the assumption that parent interest in tech training would lead to training completion, UFS staff did not include incentives for completion in the initial program configuration. They realized, however, that incentives could help, especially if the incentives were directly tied to the task at hand: developing computer literacy. If parents are working hard to develop technology skills but, upon completion of training, no longer have a computer on which to continue *using* those skills, active and sustained participation can be hard. With this in mind, the UFS team began offering parents the opportunity to keep their computers and hotspots if they successfully completed the training. Simply *having* the incentive in place, however, was not enough. The program team learned that it must be intentional

¹ “Performance Accountability Targets.” Colorado Department of Education, <https://www.cde.state.co.us/cdeadult/grantees/laces-data-dictionary/performance-accountability-targets>.

about letting parents know about the incentive early on so that it would serve as a source of motivation and not just an unexpected “reward” at the end of the program.

ONE-ON-ONE SUPPORT

During the program design phase, the UFS team was not yet aware of the amount of one-on-one support Community Advocates would need to provide to participants. Support often meant “house calls” to troubleshoot issues with setting up or maintaining the technology and frequent motivational connections to encourage persistence. This deep engagement between Advocates and learners made a difference, but it had implications for how the program was staffed. It would have been helpful for the team to understand how time consuming the support would be so that early in the program design phase they could have established more balanced and manageable staffing patterns.

NEEDS IDENTIFICATION

While Mile High United Way staff did spend time learning about parents’ specific technology needs and learning goals, they did not spend as much time seeking ideas about *how* the training program should be delivered – e.g., what modes of content delivery would be useful, how frequently, etc. Obviously because of the pandemic, especially in its early months, the options were limited because of lock-downs, but deeper dialogue directly with parents on the mode of delivery might have been helpful to identify creative options that would suit different needs and learning styles.

SCHEDULING PROCEDURES

Reflecting back on a year of program implementation, UFS Community Advocates acknowledged struggles that many of the instructors and learners had with scheduling one-on-one sessions. Because instructors were often very part-time in their roles, and program participants were juggling a wide range of demands (especially during the pandemic), training sessions were often canceled and rescheduled, only to be canceled again. Sometimes these scheduling exchanges – which typically took place via phone and text – languished and sessions simply didn’t happen.

B. Cross-Cultural Dynamics – Lessons Learned

Beyond the program design factors noted above that may have impacted course completion rates, other factors related to culture and gender were also likely at play. This section of the paper introduces some concepts from the cross-cultural communication field and reflects on some of the cross-cultural dynamics that may have created some barriers to training completion.

INDIVIDUALISM VS. COLLECTIVISM

In 1984, Geert Hofstede created a framework for understanding cultural values that has been widely used over the years to guide thinking and practice in the fields of cross-cultural communication and psychology. One of the five cultural dimensions included in his framework explores the spectrum of “individualism” and “collectivism” in different cultures. Here is how he describes those terms:

“Individualism stands for a preference for a loosely knit social framework in society wherein individuals are supposed to take care of themselves and their immediate families only. Its opposite, Collectivism, stands for a preference for a tightly knit social framework in which

*individuals can expect their relatives, clan, or other in-group to look after them in exchange for unquestioning loyalty (it will be clear that the word "collectivism" is not used here to describe any particular political system). The fundamental issue addressed by this dimension is the degree of interdependence a society maintains among individuals. It relates to people's self-concept: 'I' or 'we'."*²

A dominant aspect of American culture is individualism, with emphasis placed on self-reliance and individual freedom. Many (if not all) of the parents in the Parent Tech Training Program come from collectivistic cultures, where collaboration and interdependence are more prevalent and where students are often encouraged to help one another rather than compete or simply focus on their own performance. In this context, it's possible that the self-paced, individualized structure of Parent Tech Training Program made it difficult for some parents to stay engaged and motivated. Parents worked individually to complete the training modules and only periodically connected with an instructor – not other parents – during the program. Unfortunately, because of Covid-19 and the social distancing practices it necessitated, Mile High United Way had very few, if any, options for structuring the program in a more collaborative, group-oriented way. Also, many of the adult learners did not know one another, which may have made a more group-oriented approach more challenging.

CULTURAL COHESION

The PTT Afghan learners tended to have higher completion rates than Latina learners. It's quite possible that because the Afghan participants entered the training? in later cohorts when several of the programmatic issues had been addressed (e.g., incentives added, expectations for participation defined, etc.) that this facilitated persistence. UFS Community Advocates did note, however, that there was a cohesiveness among the Afghan participants that may have also contributed to higher training completion rates. Unlike the Latina participants, who are part of a fairly heterogeneous group, with family roots in different countries, different language capabilities (some native Spanish speakers, some native English speakers, some bilingual), and some recent immigrants and some having been in Colorado for many generations, etc. – most of the Afghan participants were recent immigrants with more cultural homogeneity. This built-in "peer network" may have made it easier for learners to complete the training.

HESITATION TO ACKNOWLEDGE GAPS IN UNDERSTANDING

Advocates and instructors observed that some parent learners who were struggling to understand the content were hesitant to express their lack of understanding. Sometimes when instructors would ask, "Do you have any questions" the response would be "no", even when learners might be unclear about recently introduced content. In a few cases, participants who were struggling with the content stopped returning texts and calls, and did not schedule any more sessions – rather than speak up about challenges.

The potential reasons for this hesitation to acknowledge gaps in understanding are varied. It's possible that because learners come from cultures where deference to teachers is the norm, they chose to trust the expertise of the instructors and simply move through the modules with the expectation that deeper comprehension would come in due time. It's also possible that, because

² Hofstede, Geert. (1984) Cultural dimensions in management and planning. *Asia Pacific Journal of Management*, 1, 81- 99.

some program participants have limited formal education, navigating this instructor/learner relationship was a relatively new experience. Lastly, given the unique circumstances of the training – happening during a pandemic, in a virtual setting, and often with an instructor unknown to the learner – learners may not have felt comfortable raising too many questions.

GENDER

Ninety-eight percent of participants in the first six cohorts of the Parent Tech Training Program were women. This is not surprising. It is well documented that during the pandemic women have taken on a disproportionate amount of additional household labor and caretaking, often in the form of supporting school-aged children with virtual learning.³ To better provide support in this context, many women were hoping to increase their computer literacy. Ironically, the impetus for gaining computer skills (helping their children with schoolwork) was often the cause for women struggling to complete the training (not having enough time because of household and family demands).

With the gender make-up of learners in mind, Mile High United Way was intentional about hiring women instructors who could relate to the experiences of program participants in a meaningful way. This was especially important for Afghan participants who are from a culture with fairly defined gender roles and norms – having male instructors would have made participation uncomfortable for some of the women. MHUW’s hiring strategy was not only for the benefit of participants. Many of the women instructors were playing a leader/teacher role for the very first time and this opportunity was empowering for many of them.

An area that Mile High United Way wants to further explore is whether the women’s levels of educational attainment (and experiences with education more generally) had any impact on their level of engagement with and completion of the Parent Tech Training Program. Some of the participants are from places where girls don’t always have the same educational opportunities as boys or where expectations for academic achievement may be lower for girls than for boys. What kinds of formative educational experiences did the women in the program have? Did these formative educational experiences affect their learning or ability to persevere in any way? These are questions that warrant further exploration.

C. Life Events and Pandemic-related Uncertainty – Lessons Learned

While the COVID-19 pandemic triggered the need for the Parent Tech Training Program, it also created an unpredictable environment that made training completion difficult for some learners. The pandemic has created an almost constant state of uncertainty for everyone, but that uncertainty and stress is all the more profound for UFS families who are more likely than most to experience poverty, language barriers, inequity, and unemployment or exposure to the virus in “essential” jobs. Members of some UFS families have been infected with COVID-19. Living in a state of flux can make it hard for a parent to focus on computer literacy, when day to day demands of living in a pandemic can be so overwhelming.

³ Bateman, Nicole and Ross, Martha (October 2020). Why has COVID-19 been especially harmful for working women? *The Brookings Institution*. <https://www.brookings.edu/essay/why-has-covid-19-been-especially-harmful-for-working-women/>.

Of course, the pandemic was not the only cause of uncertainty and instability for program participants. Unexpected emergencies and accidents, events such as divorces and separations, changes in housing situations, and employment transitions sometimes impacted learners' ability to consistently participate in the program. Not all interruptions were negative, of course. In one case, a learner dropped out of the program because she secured a new full-time job and no longer had time to participate. It should also be noted that some life events actually increased learners' commitment and ability to complete the training. For one woman, a recent divorce gave her new freedom and time to focus on her own development and skill-building.

Lastly, many of the families served by UFS have experienced significant levels of trauma in their lives. The current pandemic environment can be a trauma trigger for these individuals and create even more barriers to participating in activities such as the Parent Tech Training Program.

Recommendations

The lessons noted above point toward some concrete recommendations for strengthening program implementation in the future. Recommendations are organized according to: a) Program design; b) cultural dynamics; and c) life events.

PROGRAM STRUCTURE RECOMMENDATIONS

- Recommendation #1: To increase the likelihood of program completion, practitioners of computer literacy programs should have a list of written expectations that program staff and potential participants review together prior to program launch. At the end of that review, parents should state whether or not they can fully commit to participation. If a parent is unable to make a commitment at that time, encourage them to delay participation until a later date. (A sample Expectations document is included in Attachment A.)
- Recommendation #2: When doing the program needs assessment, in addition to determining what the learning needs are of parents, raise questions about *how* and *when* that learning should take place. (e.g., How many hours would you be able to commit to this training on a weekly basis, given that it should be completed in 4-5 weeks? How many weeks would you be able to commit to?)
- Recommendation #3: Communicate early and clearly about any incentives that are available to participants if they complete the program. This can be a source of motivation, as long as the incentive is of an adequate size (e.g., a laptop or hotspot that they can keep).
- Recommendation #4: Because this type of programming requires intensive one-on-one support from both instructors and Community Advocates, be sure to plan accordingly. Provide staff with adequate time to engage and follow-up and be sure they have the skills and time to manage the frequent communications. Also, create "short-cuts" when possible. For some of the common technology troubleshooting needs of learners, document the steps for addressing the issue and disseminate widely to participants so they can do some independent troubleshooting.

- Recommendation #5: Remember that relationships matter. In schools where Community Advocates had longer-standing relationships with parents, they could leverage the existing social capital to encourage participation. For example, if learners in the Parent Tech Training Program know and trust a UFS Community Advocate (based on months or even years of positive interactions), they are probably more likely to be accountable to actively participate in and complete the training.

CULTURAL DYNAMICS RECOMMENDATIONS

- Recommendation #6: To bring a more collectivistic approach to the training, even in a pandemic environment, consider creating opportunities for social connections with peers and/or create a “buddy system” where parents can learn together with a trusted partner. Obviously, these pairings would have to take into consideration pandemic-related safety protocols. If buddies are not from the same household, they could create and maintain a “bubble”; or they could connect by phone – or even computer, as their skills develop – to work through the content together, step-by-step. Also consider using a cascading recruitment approach, in which parents help recruit friends or people they know.
- Recommendation #7: To facilitate learning, instructors should be sure to do some extensive norm setting at the beginning of the training. Make sure that all instructors explicitly share the idea that it’s okay not to know – everyone in the program is a learner and is expected to have questions. Identify ways to make it safe to “not know” and ask questions. For example, after each tutoring session, have all learners identify a question they have (to normalize and essentially “require” the asking of questions). Instructors can model the kind of vulnerability that they want to see in parent learners by acknowledging things that were hard for them initially when learning to use computers and how they improved their skills.
- Recommendation #8: The gender make-up and cultural background of participants requires careful consideration of the gender of instructors. For example, if this program is offered to male Afghan parents, then the instructors must be male.

LIFE EVENTS RECOMMENDATION

- Recommendation #9: One way to help families navigate the uncertainty of the pandemic and unexpected life events, more generally, is to provide access to a range of wrap around support services. Support such as emergency rental assistance, food supplements, mental health services, job training, and more can make a huge difference for families. Wrap around assistance is provided to stabilize families and give them the opportunity to better support their students. When parents feel stability, they are better able to think about the future and invest time in activities such as the Parent Tech Training Program.

OTHER RECOMMENDATIONS

- Recommendation #10: Continuously focus on community engagement and trust-building. Strong relationships and trust are foundational to a program like this and should

- consistently be nurtured.
- Recommendation #11: Take an ethnographic approach to the effort. UFS incorporates an ethnographic approach into its programming by working diligently to understand the environments that families are in and seeking them in their own environments.

ATTACHMENT A: Sample Expectations Document

PARENT TECHNOLOGY TRAINING AGREEMENT

This is an agreement between _____ (parent name) and Mile High United Way to ensure that the Parent Technology Training is useful. Below are the expectations that _____ (parent name) agrees to in order that the training is successful.

- This Training will be approximately 4 weeks long.
- It will consist of 8 one-on-one, VIRTUAL classes with an instructor.
- You commit to 2 classes a week. Not completing 2 classes weekly could jeopardize finishing the training.
- In addition, there will be “homework” to do BEFORE the you virtually meet with your instructor. The homework are short videos for you to watch BEFORE meeting with your instructor.
- You commit to a minimum of 4 hours per week for 4 weeks: 2 hours for two, separate one-on-one meetings with your instructor and up to 2 hours for homework per week.
- You will be able to focus on the virtual instructor meeting at home. That means that young children or other household members will not interrupt you.
- You will give 24 hours’ notice if you need to cancel a meeting with your instructor.
- You will commit to reschedule a cancelled meeting during that same week, if possible.
- If you do not show up for a meeting two times and have not contacted your instructor, then we may take you out of the Training.

Parent initials or signature

Date