

Abstract

The COVID-19 pandemic facilitated abrupt shifts in university-to-community service-learning partnerships, such as mentoring and tutoring programs. This mixed methods study investigates the needs that under-resourced schools and nonprofit organizations faced during the shift to remote instruction in Southern California, and how their university service-learning partners had to innovate in order to continue providing meaningful experiences for both undergraduates and partners. Seventy-three school and nonprofit partners, six university lecturers of service-learning courses, and 55 university undergraduates participated in the study in June of 2020. Methods include surveys, interviews, and a focus group discussion with an emphasis on qualitative data analysis. Community partner needs included digital literacy, coping with complex remote learning environments, concern for the basic needs of children, and negotiating policies that inhibited the continuation of traditional mentoring. The following innovations stemmed from the evaluation of all constituents' needs: 1) remaining in contact with service-learning partners during times of crisis; 2) connecting with families; 3) redesigning courses to provide more support and flexibility for undergraduates; and 4) supporting digital literacy needs via remote tutoring. Recommendations for future success include creating flexibility in school policies to allow the most vulnerable constituents better access to mentors during the pandemic and beyond.

Innovations in Undergraduate Mentoring: School-University Partnerships to Address Needs and Inequities During Pandemic-Related Remote Learning

Amy Vatne Bintliff, University of California San Diego

Caren Holtzman, University of California San Diego

Ellen Ko, University of California San Diego

Brycen Barron-Borden, University of Leicester

Vivian Thong, University of California San Diego

Kathleen Ardell, University of California San Diego

Since the 1960s, service-learning in higher education has grown as a pedagogical approach to education that involves student growth via involvement in local and global communities. In the spring of 2020, the COVID-19 pandemic abruptly changed P-12 and university education programs, forcing many to convert to online or remote instruction. As schools and nonprofits closed, service-learning programs needed to shift how they provided services, such as mentoring children and youth. One university-community service-learning program is the Partners at Learning Program (PAL) in the Department of Education Studies at the University of California-San Diego which has over thirty years of history supporting undergraduate mentors of P-12 students in under-resourced schools and nonprofits in San Diego County. To better understand the needs and innovation required within this historical context, this study examines community partner, student, and instructor perspectives during the COVID-19 crisis in March through June of 2020.

PAL Program: Critical Service-Learning

Jacoby describes service-learning as “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development” (Jacoby & Associates, 1996, p.5). Key components of service-learning involve projects that are sustainable, developed in partnership with community, and that include activities that are meaningful to both students and community (Eyler & Giles, 1999). Lindt & Blair (2017) review a number of mentoring programs and document the potential benefits - particularly for P-12 students deemed “at risk.” The benefits include greater academic success, increases in school attendance, and decreases in school suspensions. Service-learning classes and programs positively impact student outcomes, such as academic engagement, understanding of social issues, persistence and retention, and self-efficacy (Eyler et al., 1997; Tinto, 2003). Effective mentoring relies on long-term relationships and targeted programming (Rhodes, 2020). PAL has long-standing relationships with partners with some partnerships lasting over twenty years. PAL course content is rooted in critical service-learning. Critical service-learning encourages students to name and recognize injustices and to identify themselves as agents for social change (Mitchell, 2007). Additionally, critical service-learning courses provide space for reflection and dialogue regarding the service experience, the course content, and inequities within community contexts (Mitchell, 2013). Thus, PAL course content includes presentations on economic inequities, the intersectionality of race, language, class, gender, and ability in education, and issues such as the school-to-prison pipeline, food insecurity, refugee rights, immigration, and disparities in school discipline policies. Students are required to write weekly reflections about their mentoring/tutoring, attend small group discussion session, as well as respond to readings on critical topics in mentoring, service, and education. They also meet in class for nearly three hours each week learning targeted strategies to support mathematics, literacy, and child wellbeing based on the needs and recommendations of partnering teachers, administrators, or nonprofit leaders. On top of their course work, students’ forty-hours of service are referred to as a “practicum.”

As the pandemic struck, community partners and practicum instructors were faced with new challenges. The need for swift action and cogent decision-making prompted a significant restructuring while maintaining the program’s commitment to a student-centered, community-

oriented approach. Based on the urgent need for continued innovation, this study addresses the following questions:

- What needs and challenges did community partners, students, and course instructors experience during the early phase of the pandemic?
- What innovations are needed so that university-service-learning programs can continue to support partners as the pandemic continues?

Methodology

Mixed methods research (MMR) is well suited for this study because it allows for a more complete understanding of the research problem (Creswell, 2014) and it helps to “integrate the two fundamental ways of thinking about social phenomenon” (Fielding, 2012). This mixed methodology study involves “mixing” in three separate ways: including three categories of participants, the mixing of quantitative and qualitative methods, and investigator triangulation via a mix of positionality on the research team (undergraduate students, graduate students, an instructor, and a professor (Carter et al., 2014). By having multiple lenses looking at the data, which was provided by diverse constituents, biases such as our histories and relationships with our community partners, as well as the complexities of divergent goals, could be interrogated.

The first group of participants were teachers, counselors, administrators, and nonprofit leaders who had partnered with the PAL program within the last two years. These participants will be referred to as “educators” unless specific delineation will enhance understanding. One hundred educator partners were emailed an invitation to complete an online anonymous Qualtrics survey that included a mixture of multiple choice, rank order, and open-ended questions. Survey questions included questions regarding successes and challenges, as well as issues of equity and access. Additionally, participants were asked, “What ideas do you have for how the UCSD PAL program can support you and the youth and families you work with during future remote instruction (and beyond)?” Seventy-three educators completed the survey representing seven school districts in and around San Diego County and three nonprofits. Of the sample, 82% are teachers, 10% identified as educational coaches or administrators, 4% as counselors, and 4% nonprofit leaders. The majority of educators serve low-income students, with 71% of respondents working with children in primary school, 18% with youth in middle school, 9% with youth in high school, and the remaining working in programs that serve a mix of children and adults. At the end of the survey, respondents were invited to participate in a 30-minute interview conducted via Zoom Pro and facilitated by the first or second authors. Forty-seven participants agreed to be interviewed and were then sent an email invitation and consent form for participation in the interview and audio recording. Ultimately, thirty educators participated in interviews which were recorded and transcribed using Zoom software. All interviewed participants were assigned a pseudonym and compensated with a \$25 gift card.

The second group of participants were students registered for a practicum course during spring quarter 2020. An invitation to complete an anonymous Qualtrics survey was shared with 90 students in June 2020. The survey contained multiple choice, ranking, and open-ended questions. Questions included a rank order of how meaningful, flexible, and obtainable the

service-learning component of the course was considering the pandemic related changes to programming. No incentives were provided for participation. Fifty-five students completed the anonymous survey with most of them being juniors (27%) or seniors (63%). 74% of respondents were female, which corresponds to typical practicum course enrollment.

The third group of participants were four lecturers and two professors who were teaching a practicum during spring quarter of the pandemic. For clarity, we refer to these participants as instructors. After receiving an email invitation from the second author, all instructors accepted the invitation and consented to participate and to being audio recorded. The focus group lasted eighty-five minutes, was moderated by the first author, and was recorded and transcribed by the research team (Krueger & Casey, 2014). The focus group was structured with each participant invited to answer designated questions individually followed by an open time for responses from all members. No compensation was provided for participation in the focus group.

Ethics

All aspects of the study were reviewed by the Human Research Protections Program Internal Review Board at the University of California-San Diego.

Data Analysis

To begin data analysis, the first and second authors used structural coding and In Vivo Codes to analyze data from the surveys. Structural coding is a question-based coding that categorizes data based on commonalities, differences, and relationships that relate to a specific question (Saldaña, 2016). Codes from the surveys, informed the re-design and clarification of the semi-structured interview questions (Halcomb & Hickman, 2015). After structural coding and In Vivo coding was again applied to analyze the interview data, the authors then created a code book that defined each code as it related to the research questions. The research team members then coded separately with the first author reviewing coding, then met to discuss and interrogate codes and themes, as well as to review analysis memos and notes. The first and second author communicated continuously to share analysis memos.

Table 1.

Code Book: Example of Challenges, Inequities, and Needs Experienced by Community Partners

Theme	Definition	Example
Concern for Children and Youth	Reference to a low percentage of participation and/or youth fizzling/disappearing over time. Concern for child and youth mental health, well-being, safety, sleep schedules, diet, supervision, and social-emotional learning.	<p>“All of them turned into ghosts, I guess is the best way to describe it, like, really hard to reach and they weren't logging into class”</p> <p>“And it's a weird time and you know I think kids are scared and they're wondering what's going on.”</p>
Inequity: Language	References to home languages other than English, examples of programs/curriculum requiring materials in languages other than English, specific needs of non-English speaking parents and how they were addressed (or not).	“And with our English learners, we had, you know, some translation issues. We learned often it's not just a language barrier, but like a cultural barrier that we had to figure out how to navigate.”
Inequity: Access	Examples of access to devices and/or internet, references to familiarity with technology and platforms, references to digital literacy needs. Also access for students with special needs.	“And then, not to mention the fact that a lot of kids didn't have access to getting any type of technology so trying to get in touch with them just even on a telephone was really difficult.”

Inequity: Basic Needs	Examples of students' home circumstances that necessitated moving, combining households, meeting basic needs, border crossing, or ICE/immigration concerns.	“We did lose. Unfortunately, about nine families and some of them went to live with family in Mexico.”
Learning Environments: Home and School	Home: Household equity issues such as no quiet space to work, working parents.	“We can get your computer. We can get you internet. We can't control where you live or if you have a quiet place to work.”
	School: Reference to pedagogical issues impacted by remote learning environments, including access to immediate interpersonal feedback versus remote feedback.	“Most of the stuff that I was teaching was not transferable to an online platform.”
School-wide & District Policies	Participant mentions policies, either positive or challenging. This could be the way policies were delivered, educator/student "rules" for remote instruction, or communication.	“We had no directives. At first there was—nobody knew what to do. Nobody knew how often we were to do anything. Nobody knew anything at all.”

Constant comparison analysis (Glaser & Strauss, 1967; Strauss & Corbin, 1998) was used as an effective method for analyzing focus group data, as well as open-ended answers within student survey results. Like the interviews with community partners, data was chunked into small units, then grouped into categories. Coded themes from the surveys, focus groups, and interviews were then compared, investigated, and questioned to see how the information overlapped or created tension when telling an overall story to answer the research questions.

Results

Needs, Challenges, and Inequities

All groups under the PAL umbrella--the community partners, the practicum instructors, and the undergraduate students--faced unique challenges based on their roles, the policies which supported or impeded their progress, and the needs that their underlying constituents faced. For our community partners, most of whom were classroom teachers, concerns included an awareness of inequities that were exacerbated by the pandemic, challenges with new learning environments, concern for youth, and working within district policies. For undergraduate students, needs included digital access, access to mentees, and the interest in making meaningful connections during the shift to remote learning. For practicum instructors, needs focused on course objectives and meaningful service, supporting students, and supporting community partners.

Our Community Partners

Results from educator partners indicated that remote learning brought large challenges regarding meeting educational goals. The pandemic exacerbated inequities that already existed, further widening the resource gap regarding socioeconomics.

Inequity in Access. For educators, one of the most urgent equity concerns included issues of access to technology and digital literacy. While school districts and outside donors distributed devices to families, the distribution was uneven. Laura said, "The school asked one of them [parents] to fill out a particular survey, so they had to go and fill it out. It was like a Google survey that was online. But if they didn't have the internet already and have access to that at home, how are they supposed to do that?" Some districts represented in this study had a "soft launch" period in which some families who had access to a device could participate while others waited. Barb said, "At the time of the soft launch I only had maybe consistently five students out of my 20 students who were participating." Schools had to wait their turn for the device distribution which meant some families had to wait longer. In many instances, districts designated specific times and locations for device pick up which caused scheduling and transportation issues for parents.

Also, Wi-Fi and broadband issues occurred. Sandra reported, "I know I had a student who was able to get the tablet from school, but they didn't have Wi-Fi until a few weeks later. So from there, she missed a good chunk of instruction." Students who used freely provided hotspots had continual issues getting and staying connected. Alicia said, "Even though they had free cable. It didn't work. It was such a low bandwidth."

Students and families were also unfamiliar with the technology they had to use, leading to an immediate and long-term need for improving digital literacy. Shelby explained saying, "Just giving a family a device is not equity. If a family has never had a computer in their home or has never had the internet in their home just like adjusting to how to use it effectively is a huge learning curve." Other teachers, especially those teaching in kindergarten through third grade, reported that young learners had difficulties opening multiple links and then returning to the home page of the district's technology platform. The youngest students had neither the reading nor the fine motor skills to navigate the online platforms.

Inequity in Language. Another equity issue for teachers, students, and families was language access. One participant who worked primarily within a Spanish-speaking community described these difficulties. She said, "You know, all those school districts do translate many things into Spanish. Sometimes it doesn't come out as quickly. Sometimes the parents don't have the technology to be able to even pull it up." Additionally, another teacher who worked with linguistically diverse refugee students said, "We saw some things translated, but they don't have all the languages my kids speak."

Even when staff were available to translate directly, for example, in the case of deaf students, difficulties arose. For students speaking American Sign Language (ASL), teachers reported experiencing issues with broadband which caused "freezing." This inhibited students from seeing the teacher's or interpreter's signs which caused confusion and frustration.

Teachers also reported concerns with remote instruction impeding language acquisition strategies that they commonly used in the classroom, such as body language and actions, posters, clarifying signals, and the placement of objects within a room. Mia shared her concerns, "I now have concerns with our English learners because in the classroom there's so much more of that clarification you can provide."

Inequity in Basic Needs. Educators also expressed concerns for their students regarding basic needs, such as access to food and affordable housing. Although lunches continued for most schools, those resources were insufficient for families whose jobs were impacted by the pandemic. Also, not all families could travel to the school lunch pick-up locations due to transportation issues or work schedules. One nonprofit partner stated that their programming shifted from education to fundraising for food distribution and money for rent. She reported:

We were searching for resources that we could share with them... But it was largely to do with finances for them. Almost all [members of their community] lost their employment. And they're still struggling with that.

Other educators were concerned about students that had to move to other cities or countries due to pandemic related shutdowns. Being near Mexico, some San Diego students have families on both sides of the border. Myra said, "Some families went back to Tijuana, because they couldn't afford to live here anymore," but they "don't have Wi-Fi over there," which made it difficult to keep those students engaged. Families were also evicted. Sandra described, "There was a lot of stress, like monetary stress. I know one of my families was living in a hotel."

A lack of basic needs also impacted learning by worsening student mental health. Secondary teachers reported a variety of student mental health concerns including hospitalizations for depression, suicide attempts, police involvement, becoming homeless, additional stress, loneliness, and self-medicating with drugs or alcohol. Mia described one way she addressed these concerns:

I would do things like set up check-ins with certain students that weren't even academic counseling check-ins, like every day, every week, we'll meet for 30 minutes or an hour just discussing their life.

Thus, educators were developing new strategies to support students during times of tremendous change and stress.

Shift in Learning Environments. A shift in learning environments meant that education was “literally in people’s living rooms” in some cases, or solely remote with no access to visual platforms in others. Educators stated that many of their students did not have access to a quiet work space. Lucy described one of her student’s spaces saying, “[They were] working in their kitchen. But then you have TV noise, you have parents in the background, you have a little sibling.” Educators observed differing levels of parent/guardians’ abilities to help their children at home. Some of the parents were frontline workers or had jobs which continued during the pandemic. Shelby reported noticing the variety of needs:

There's a very small percentage of my students whose families were actually working at home. And with those particular students, a parent was at home with them and giving them support and so they seemed to do pretty well during the distance learning adjustment.

Teaching and learning from home also created concerns with teaching pedagogy. Many educators noted the lack of physical presence as a major barrier to effective learning. Being together in the same classroom space gave students immediate access to each other and to teacher feedback. The remote format meant that most feedback came in written form after students had already completed work on each specific lesson. Thus, immediate and spontaneous guidance on student formative work, which naturally occurs during in-person teaching, was nearly impossible to provide.

Educators also struggled with adapting their curriculum to the online format. For example, David shared that in the classroom, he builds excitement for lessons by using theatre, comedy, and spontaneity. He said, “The things that I do in my classroom cannot be replicated on this screen.” Teachers expressed difficulty determining how much they should expect from students with these sudden changes in pedagogy and structure, one saying that they were “gradually moving the goalpost” and extending deadlines based on parent/guardian requests, low homework completion rates, or administrative recommendations.

Student Concerns. Nearly every community partner expressed concern for their students in the interviews and surveys, including concerns over absenteeism and the isolation that children and youth were feeling. They referenced students not attending virtual class, stating that “there were quite a few who faded.” One high school teacher said, “Several were ghosts and couldn't communicate at all. And one of them, two of them, went missing for a period of time. And if we were in a school, we would have been able to locate them.” Other teachers reported that in general, attendance on live sessions was low, one saying they would get two to three people in a class of 25 students. Every teacher reported that the school and district repeatedly tried to connect with missing students, yet despite these efforts, even many of the students who initially made contact eventually stopped attending or turning in work. In some cases, educators reported observing increases in stress amongst both parents and students due to many people sharing a space. Gabby said:

So the parents being home and everyone being home in the house. I think that just everybody, even beyond our school, is stressed out about that and having to deal with

interpersonal relationships and families and having conflict and not knowing how to resolve those things.

Other educators expressed concerns with a lack of availability for peers to interact socially with one another. Educators felt that social-emotional learning (SEL) was important and was very difficult to support if school policies did not allow for holding class virtually or if they did not receive guidance and training on how to support SEL in a virtual environment. Social-emotional learning is defined by the Collaborative for Academic, Social, and Emotional Learning [CASEL] as:

The process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. (CASEL, n.d.)

Elementary teachers expressed concerns that children who had little contact with other children would lag in forming connections and developing SEL and friendship-making skills.

School-wide and District Policies. Educators reported school or district policies that limited their abilities to effectively teach. Despite intending to be equitable (not penalizing those with no access, financial struggles, or working parents), teachers felt that grading policies caused confusion and higher absenteeism. Some teachers reported that their district decided that students could work to improve a failing grade from the previous semester, but that other student work would not be graded. Others described pass/no pass policies which meant that students could get by with putting the minimal effort forward. One teacher said that the policy was the “worst thing” as it led to disinterest, decreased motivation, a lack of work completion, and, sometimes, a complete disconnection with school. In other cases, policies prevented staff from reaching out directly to students and their families. During face-to-face instruction these teachers were encouraged to make calls to parents, but during the pandemic they were told that they could not call or interact with their students in real time through virtual platforms. One educator said that her “back was to the wall”; another said, “my hands were tied.” Another educator said, “I think the switch to distance learning had me feeling pretty powerless.” This language of being trapped regarding the impact of policies on youth showed the degree of hopelessness that teachers were facing—they wanted to do more, but were inhibited due to restrictive policy. There was great emotion expressed as teachers detailed their frustrations as they believed real-time interaction would have been beneficial to student emotional health.

Policies impacted service-learning partnerships too, as some educators reported that they were told that they could not have volunteers help in virtual environments, while other teachers asked school or district leaders, but never received clarification regarding policy. Thus, it was not just that educators were too overwhelmed to coordinate the assistance of undergraduate mentors; indeed, some were simply told that zero volunteers were allowed contact.

Thus, community partners faced a number of challenges ranging from access to necessary tools for digital learning, to concern for their students. The next section describes the

consideration service-learning instructors needed to make to provide immediate and longer-term assistance to partners.

Service-learning Instructor Focus Group Results

The needs and inequities experienced by community partners was just one consideration that service-learning instructors had to balance during March-May 2020. Results from the focus group indicated that instructors had three overarching concerns: (1) shifting course objectives to work in an on-line environment; (2) supporting student needs during a difficult time; and (3) supporting community partners.

Shifting Course Objectives. Initial concerns for instructors focused on shifting their courses from in-person to a virtual environment. Instructors had less than two weeks to learn new online platforms, and shift practices and experiences to virtual environments. Because students usually participate face-to-face within the schools and nonprofits, instructors had to quickly rethink the essential elements of the courses and how the service component could be met. The student-centered approach to courses prompted instructors to consider essential learning and “take-aways” as the priorities in restructuring the course and practicum. One practicum instructor, Irina, began by asking herself, “What are the most important experiences that we want our students to have and what do we want them to leave with?” Another instructor, Veronica, continued by saying that she initially asked herself, “And what could actually be a meaningful practicum experience that could also serve the schools?”

Supporting Students. Instructors also expressed concern about students’ mental health. Students still on campus were isolated, while other students were forced to return to their family home, and often, less than ideal living situations. Corinne shared that one immediate goal was, “Just keeping students connected to each other and me trying to keep a finger on the pulse of how they were feeling and how they were doing because I was pretty distraught about that—just wanting to make sure that they were happy, healthy, and whole.” The pandemic itself led to more students verbally reporting anxiety and isolation, so instructors worked to establish relationship-building activities and opportunities through office hours, email, virtual posts, and virtual small group discussions.

Instructors also reported that their students faced loneliness, xenophobia, and racism during this time period as well. Although many students could return to local homes, some international students faced travel restrictions and were forced to remain on campus which was very isolating. Some students also faced racist and xenophobic acts of discrimination. An Asian student reported that when he got on the bus one day, everybody seated near him moved to the back of the bus, even though he was more than 6 feet away. These types of discriminatory behaviors were reported to multiple instructors. Additionally, instructors reported that many students, but especially African American students, reported feeling added stress after George Floyd, an African American man, was murdered by police (Taylor, 2020). The murder precipitated heightened Black Lives Matter protests throughout the nation in May and June of 2020. African American students, as well as other Students of Color, were undergoing increased stress which caused instructors to reconsider end of quarter assignments by easing due dates or creating flexibility while still adhering to university policy.

Supporting Community Partners. In March 2020, once school closure announcements were made, instructors engaged directly with partners to talk through redesign ideas and to invite partners to consider having mentors or tutors. One instructor, Mia said:

I got a lot of emails from teachers who were contemplating their decision [to have a practicum student] and so I would email back and forth and they'd say, 'So what does this look like?' And I'd say, 'Well here are some ideas I have' and 'What do you think would be most helpful?' There was that conversation and for the most part they didn't continue because they just couldn't envision what it would look like or they were too overwhelmed with the current realities that they just didn't have the ability to support another human being while trying to figure this out.

Thus, instructors needed to meet their partners where they were. Veronica, said "At first, the teachers, they had some ideas and they just wanted resources. So I thought, that's maybe what I need to focus on. Let's just focus on what the students can do and what the teachers can use." Thus, instructors reconsidered how they placed students with community partners. They reported shifting from all students being matched with a mentee in a single classroom, to some students being matched with a specific school-wide need, such as curating and delivering tools to educators, supporting counselor's online messages, and creating interesting videos that teachers could upload and share.

Service-Learning Students

Undergraduate students surveyed expressed a variety of needs during the initial switch to remote learning. A majority of those surveyed often stated that the transition to distance learning itself was challenging. More than 25% of students cited feeling a lack of motivation, while others faced logistical challenges such as Wi-Fi access and living situations. These access issues included both access to technology and a concern about whether or not they would have access to work with children as part of their service component. Most had registered for the service-learning course to become involved directly with youth and classrooms.

For students, the other concern was whether or not the course could still be meaningful to them if they could not be physically present with mentees. When they registered, they had a vision of what mentoring would look like and then, due to the pandemic, that mental image needed to shift.

Figure 1 represents the needs of partners, students, and instructors that led to the innovations in mentoring, which will be discussed in the next section.

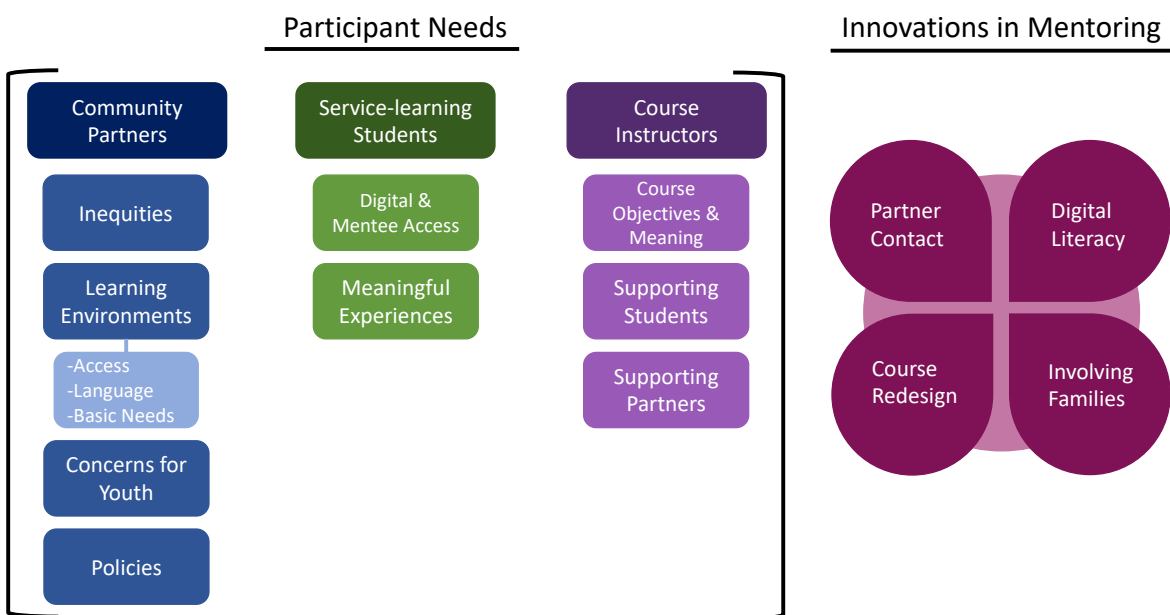


Figure 1. Needs of all participants lead to four innovations in mentoring.

Innovation

Instructors worked to develop innovations to respond to the expressed needs of all constituents. Innovation included maintaining contact with partners, redesigning practicum courses, supporting partners' digital literacy needs, and involving families of their partners' constituents.

Partner Contact

Instructors and community partners spoke often throughout the quarter. Instructors informed partners that they welcomed ideas and would listen to their partner's concerns, but left the level of engagement with up to them. Because some of the partners had long-standing relationships with the instructors, they began reaching out to brainstorm solutions regarding pandemic-related issues. Through these many conversations, partnerships were strengthened. One instructor, Corinne, said, "I feel like I had a richer, different relationship with my colleagues in P-12 and in the community organizations as well because, you know, ordinarily how we interact is just around placements [placing students with teachers and classrooms], but this was ongoing conversations about 'how do we do this?'"

Reaching Out to Impacted Families

Instructors participating in the focus group described several innovations that arose from the desire to facilitate direct undergraduate mentoring with youth. To remove the placement burden from partner sites, practicum instructors created a form for families to access to register for tutoring or mentoring. A link to the form was sent to families via administrators or nonprofit leaders. Upon receiving a parent request, instructors would match students to mentees, and then students would send an introduction letter and contact the parents/guardians to plan times for the remote sessions. Several sites shared the form with families, and by week three of the quarter, one instructor had nearly half her class providing virtual mentoring. These remote tutoring sessions were meaningful yet challenging for students because of issues with scheduling. Normally, PAL students pre-arrange hours with teachers, but reliance on families for scheduling resulted in some missed or rescheduled sessions. However, the scheduling issues abated once a routine was established and mentors began sending reminder texts to a parent or guardian.

Course Redesign

Instructors developed innovations within their course designs to respond to both partner and student expressed needs. For instructors, redesigning the courses was occurring simultaneously with connecting with partners. As some partners declined initial placements of

undergraduate mentors, one instructor said, “A really important goal for me was wanting [students] to feel like they were making a contribution even though they weren’t face to face in classrooms.” Community partners were asked informally, “What can the PAL program do to help support you?” Instructors would then make announcements in their classes as each new opportunity arose. This helped undergraduates feel that they were making a difference in real time as they were responding to immediate needs.

Another example of redesign includes developing a menu of opportunities that would be acceptable for students to use towards practicum hours. The menu included a variety of activities and supports for partners including conducting virtual neighborhood tours of the schools and nonprofits, creating videos to share with virtual mentees and teachers on requested materials, and joining educational professional networks. For students who were able to meet with a mentee virtually, instructors also invited students to count the hours spent preparing for the virtual sessions towards their field hours. Because undergraduate students were struggling with their overall wellbeing, a small portion of field work could also be spent learning or practicing new self-care skills, such as mindfulness or exercise. See Table 2 for a list of identified partner needs, additional innovations in course structure and design, and innovations regarding undergraduate service opportunities.

Table 2.

Partner Needs, Instructor Innovation, and New Student Roles and Opportunities.

Needs	Service-Learning Course Innovation: What Instructors Can Do	Service Learning Practicum Innovation: What Students Can Do
-------	--	---

Access: Digital Literacy	Provide time for small group instruction, create a menu of opportunities for students related to the service population or topic, and embed course projects in which students create helpful tools needed by partners.	Assist with technology set up and help individual students and families with connecting and logging in.
Learning from Home	Provide instruction on designing routine in remote tutoring sessions. Directly teach students to begin to dismantle deficit ideology around issues of poverty and class.	Provide direct virtual tutoring/mentoring to students and check in often with families.
Equity in Language Access	Survey students to find out the spoken languages within each class, then match tutors and mentees based on available spoken languages.	Help with translating classroom documents, such as mini-lessons, tutoring tips, or technology instructions, and serve as bridge between teacher and families.
Curricular Access	Continue to directly teach and model learning games and strategies that students can share with their mentees or teachers. Provide frameworks so that students can effectively communicate with community partners around identifying basic needs within their populations.	Find or create resources for teachers focusing on specific curricular areas, provide academic support to individual or small groups of students.
Student Concerns	Directly teach about self-care strategies and on-campus support systems. Network across higher education and with community partners. Check in with community partners often to ensure service is meeting their needs.	Develop and lead activities that support connection, social-emotional learning (SEL), executive functioning and wellbeing; create videos to build classroom community and reteach SEL strategies.

While there were complex challenges that PAL students faced during remote learning, students reported positive results about the redesigned practicum. Students reported that they appreciated the increased level of engagement with their instructors and felt that the course was meaningful. Figure 2 results show students' perceptions of the practicum regarding its meaning, enjoyability, flexibility, and whether or not the practicum work was achievable. Overall, out of the 55 students surveyed, 87% of students strongly agreed or somewhat agreed that their practicum experience was meaningful. Additionally, student survey results show that 99% of students successfully completed their 40-required field hours.

Students thought practicum was:

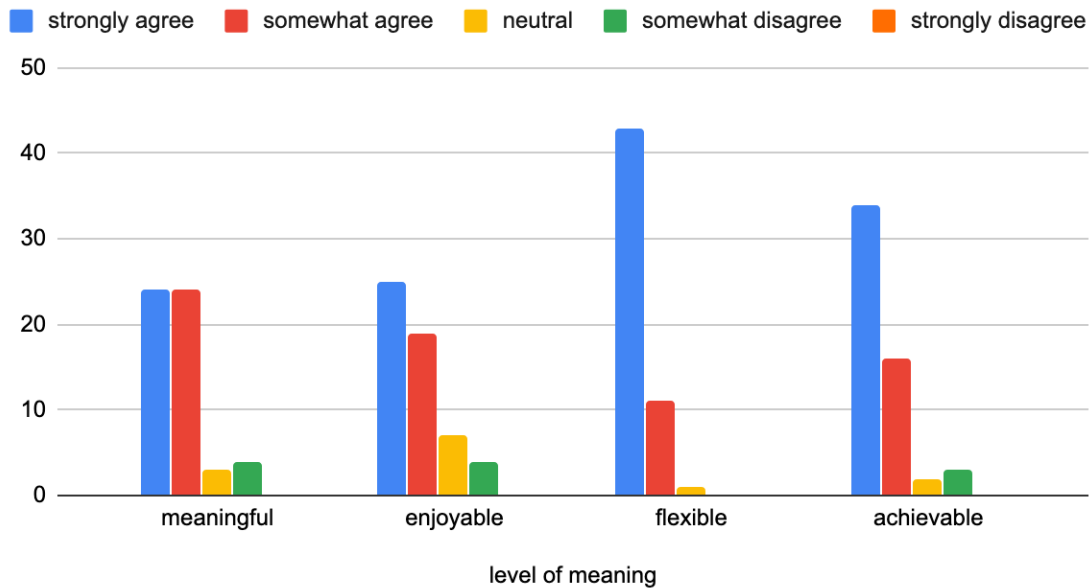


Figure 2. Fifty-five Student Responses to Innovation in Practicum Redesign.

Students also reported that they felt that their instructors cared about their wellbeing, that instructors were highly reachable, and that they felt supported in their service efforts. Thus, even though some students were disappointed that they could not be in schools, overall, students reported positive results via the anonymous survey.

Partner Digital Literacies

Another innovation was helping to address the digital literacy needs of community partners. In answer to those needs, one instructor and students created a personal Zoom Pro training involving staff at a nonprofit. Students who were virtual mentoring or assigned to work with specific teachers supplied new technology applications, as well as walked parents through setting up the platforms that they would need for virtual learning. Undergraduates learned technologies being used by the schools and worked to ensure that their mentees had access and knowledge to use them.

Discussion

The COVID-19 pandemic created havoc within both higher education service-learning programs and corresponding community partner organizations. Results of this study convey the needs and challenges faced by three stakeholders: community partners, undergraduate students, and practicum course instructors. Although the challenges were high, instructors used flexibility to adjust course requirements, while maintaining community partner relationships, and supporting student success. To continue providing quality service-learning experiences during and beyond the pandemic, we explore the following key issues: policy complications, the unique needs of virtual mentoring, the potential for remote learning to strengthen home-school-community-university engagement practices; and using flexibility and determination in maintaining connections in times of crisis.

Policies

Immediate protective policies actually prevented the most vulnerable children in our communities from interacting live with their teachers or mentors. Children were not only missing their university mentors, but in some cases, even children's teachers were not able to interact synchronously with students. Policies in a few districts also prohibited teachers from adding tutors to remote teaching platforms. Thus, many children lost integral components of learning including immediate feedback and formative assessment, social-emotional lessons, connections to caring adults beyond their families, and connections to peers. The role of caring is an essential developmental consideration for youth in educational contexts (Bosworth, 1995; Lipsitz, 1995; Noddings, 2005). Teachers understood the urgency and chaos, but were frustrated by the lack of democratic decision-making processes involving teacher input and flexibility, especially regarding options for providing connection, caring, and support to their students via mentors. *The Blueprint for Back to School* (Bailey et al., 2020) echoes concerns of educators in the study about child and youth social-emotional learning and increases in isolating experiences that can exacerbate children's depression or anxiety. The authors recommend connecting with community partners in order to meet new challenges. Many university programs, such as PAL, teach their mentors social-emotional learning techniques that they could reinforce via e-mentoring or organizing and facilitating small-group clubs, which is another strength-based approach to supporting children and youth (Logan & Scarborough, 2008). Indeed, these targeted types of mentoring interventions often have double the effect size of non-specific relational approaches (Christensen et al., 2020; Rhodes, 2020). *The Blueprint for Back to School* concludes,

COVID-19 exposed too many of the inequities that we have either overlooked or ignored for too long. Rising up to meet this challenge requires the whole community, not just school leaders. Adapting to the challenges of COVID-19 gives America's schools the opportunity to provide what is uniquely possible in the schoolhouse while seeking new ways to fully use technology and community partnerships (p. 15).

In order to meet these goals, school districts specifically need to evaluate how mentors and other community supporters can support children, youth, and educators as the pandemic

continues. Policies should not impede these connections if parents/guardians consent to participate.

Unique Needs of Virtual Mentoring

E-mentoring has been used in a variety of settings, including secondary education in fields of science and mathematics, and results show that it is promising in enhancing students learning, increasing motivation, broadening understandings, and augmenting career awareness (Adams & Hemingway, 2014; Lämmerhirt & Scholten, 2013). The pandemic is driving a need for e-mentoring at younger ages than are typically studied. E-mentoring can be facilitated and monitored by parents, established within teachers' online classrooms, or tailored to existing apps that students and families are already using.

Unlike programs designed to conduct e-mentoring, many face-to-face programs have much to learn from research-based e-mentoring. The shift requires that instructors prepare undergraduate students to plan and implement meaningful tutoring sessions, as well as inviting mentees to learn about college and careers. The practicum instructors in this study, most of whom are former classroom educators, supplied service-learning students with templates to follow. Templates included a "flow" such as opening with a "get to know you" activity, transitioning into basic skill or SEL skill review, moving into a learning game, then into homework support, and ending with a final closing game. Instructors also supplied modeling and resources on new virtual learning games that mentors could play with their mentees.

Home-School-Community-University Engagement

The sudden switch to remote learning necessitated intensive home-to-school communication, especially at the beginning when students needed the devices, connections, and required log-in information. In many instances an unprecedented level of teacher-family communication continued throughout the duration of the school year as "the walls came down" and school literally happened inside students' homes. While the content and tenor of communication varied widely, the expanded engagement created an opportunity for collaboration and connection. But educators cannot make these connections with families alone. In order to reap higher benefits, university education and mentoring programs can serve as conduits to improve the learning of all constituents (Quezada, Alexandrowicz, & Molina, 2013).

The potential to create a wrap-around model providing deeper and more consistent engagement at all levels emerged at sites where undergraduates worked as mentors and tutors. In many instances, instructors reported that undergraduates served as conductors for rich conversations on youth goals and improvements, keeping in contact with both the teachers and the families while directly working with the students. Further, the service-learning model afforded the university an opportunity to facilitate and guide some of these conversations as the practicum instructors met regularly with the undergraduates and had ongoing contact with site personnel. The mentors and tutors also had the unique ability to work with students one-on-one to provide real time feedback, which they could then share with teachers and families. Under the guidance of their instructors, students who worked with groups on special projects also created videos and "virtual talent shows" to highlight the students' skills and learning in a format that

was accessible to both teachers and families. The pandemic pushed these innovations that helped to build engagement and communication across all levels, including with community nonprofits.

Maintaining Contact

The practices required to maintain productive, social justice-oriented collaborations with site partners amplified significantly during remote instruction. Making initial contact, assessing needs, and responding to site partners' unique situations and limitations prompted practicum instructors to focus on communication and ongoing support. As the situation unfolded, practicum instructors needed flexibility and responsiveness in order to meet site needs and place as many practicum students as possible. Check-ins with sites occurred regularly and instructors adjusted expectations and assistance for undergraduates accordingly. By the end of spring quarter about half of the practicum students had at least some direct contact with P-12 students or teachers. By summer session, 100% of practicum students were matched with mentees or teachers in virtual environments. Programmatic flexibility and trusting relationships with site partners allowed the instructors to find meaningful ways for the students to directly support remote learning. The generative process of checking in, listening, asking questions, and brainstorming possibilities also led to a comprehensive list of suggestions from educators that were shared with all community partners. Thus, the university serves to not only connect undergraduates to partner sites, but also to connect partner sites' ideas and experiences to one another other.

Limitations

There are limitations in this study that should be noted. First, recruitment focused on a nonrandom sample of educators who already supported service-learning efforts. They went into the study believing that service-learning relationships had benefited their students. Recommendations may have varied if the sample included teachers who had never worked with service-learning mentors. Thus, these educators represented not only a region-specific sample, but a sample that included people with some pre-existing relationships with service-learning and the PAL program. This could lead to a bias in interpreting results. We worked to eliminate bias through discussion and a constant "returning to results" and "shop talking" (Saldana, 2016, p. 231) within our research team.

Another limitation is that the majority of educator participants in the study work with primary students. Thus, needs of secondary educators are underrepresented in this sample size. Because secondary teachers often request tutors versus mentors, results may have varied based on this context. Additional studies should recruit secondary educators to better understand their needs and concerns.

Also, the majority of educator participants were teachers or counselors, with only a few nonprofit partners and school administrators represented. Thus, further research is needed to triangulate responses regarding the impact on policy within nonprofits. Having more administrator respondents or school board members could help distinguish why policies were made and could help negotiate innovation with university partners.

Finally, the parents/guardians of the mentored children were not a part of the study. Although instructors shared a sentence or two in the focus group about positive parent responses, the study was not designed to survey two important tiers: the mentored youth and their parents/guardians. Conducting a more in-depth survey that includes mentees who are now receiving remote mentoring would be an important addition to future study.

Conclusion

Results of this study highlight some of the unique needs faced by community partners and their constituents during the early months of social distancing. Partners reported frustrations with delayed deliveries of tablets and devices, difficulties with Wi-Fi access, and a lack of digital literacy preparation for students and families. Worry over the lack of basic needs within constituent populations, absenteeism, and district policies on educational practices clearly impacted community partners and their objectives. In many cases, established mentoring partnerships were put on hold due to pandemic related stress and increasing demands on educators and nonprofit leaders. Based on the expressed partner needs, these services and relationships are especially important in under resourced schools where there is limited digital literacy, access to technology, and adults available for support.

As educational settings move forward with remote or in person instruction, now and in the future, a community need that must not be ignored is the need to provide support on digital literacy within communities. University-school service-learning partnerships could help bridge the gaps of knowledge regarding district and non-district platforms and apps. With training and support, university students could help school districts provide both remote and face-to-face family workshops on digital literacy.

Regarding policy, we encourage school districts and nonprofit leadership to keep options open regarding service-learning. Rather than withdrawing from partnerships, invite conversations regarding mentoring remotely and negotiate privacy concerns together. As the pandemic continues, it is essential that wellbeing and social emotional needs of both teachers and students be prioritized and that policies enable targeted mentoring of children and youth. We recommend that service-learning organizations conduct a brief needs assessment which enables instructors to adjust course curriculum to provide training and contextual background to support school and nonprofit initiatives, such as support with SEL or digital literacy.

Additionally, we encourage universities to be advocates and ambassadors for their service-learning partners as part of their own policy development. Conducting needs assessments and research that exposes underlying inequities is only the first step. Universities can then restructure courses to directly meet partner needs, connect various partners to one another for additional support, and approach challenges with flexibility during times of crises.

In conclusion, educators currently continue to struggle with hybrid, remote, and in-person learning challenges during the COVID-19 pandemic. University service-learning programs, rather than pausing collaboration, should consider the needs of their community partners and work tenaciously to re-envision programming that more directly provides solutions to the inequities and challenges partners are facing during and after the pandemic.

References

Adams, C. T., & Hemingway, C. A. (2014). What does online mentorship of secondary science students look like? *BioScience*, 64(11), 1042–1051. <https://doi.org/10.1093/biosci/biu147>

Bailey, J. P., Hess, F. M., Cerf, C., Conaway, C., El-Mekki, S., Erquiaga, D., Henderson, K., Klussman, D., Lewis, W., Lockett, P., McQueen, C., Rausch, K., Rees, N., Robinson, G., Rotherham, A., Rowe, I., Scott, I., Skandera, H., Steiner, D., ... White, J. (2020). *A Blueprint for Back to School*. https://www.aei.org/research-products/report/a-blueprint-for-back-to-school/?gclid=EAlalQobChMIvfeqvcTf6wIVoCCtBh1yFwQtEAAAYASAAEgl-L_D_BwE

Bosworth, K. (1995). Caring for others and being cared for: Students talk caring in school. *Phi Delta Kappan*, 9, 686–693. <https://www.jstor.org/stable/20405434>

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. (2014). The use of triangulation in qualitative research. *Oncol Nurs Forum*, 41(5), 545–547.

<https://doi.org/doi:10.1188/14.ONF.545-547>

CASEL. (n.d.). *What is SEL?* Collaborative for Academic, Social, and Emotional Learning (CASEL). <https://casel.org/what-is-sel/>

Christensen, K., Hagler, M., Stams, G., Raposa, E., Burton, S., & Rhodes, J. (2020). Non-Specific versus Targeted Approaches to Youth Mentoring: A Follow-up Meta-analysis. *Journal of Youth and Adolescence*, 49, 1–14. <https://doi.org/10.1007/s10964-020-01233-x>

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE.

Eyler, J., & Giles, J. D. E. (1999). *Where's the learning in service-learning?* Jossey-Bass.

Eyler, J., Giles, J. . D. E., & Braxton, J. (1997). The impact of service-learning on college students. *Michigan Journal of Community Service Learning*, 4(1).

<http://hdl.handle.net/2027/spo.3239521.0004.101>

Fielding, N. (2012). Triangulation and mixed methods designs: Data integration with new research technologies. *Journal of Mixed Methods Research*, 24(3), 226–238.

<https://doi.org/10.1177%2F1558689812437101>

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine Publishing Company.

Halcomb, E. J., & Hickman, L. (2015). Mixed methods research. *Nursing Standard: promoting excellence in nursing care*, 29(32), 41–47. <http://dx.doi.org/10.7748/ns.29.32.41.e8858>

Jacoby, B., & Associates. (1996). *Service-Learning in Higher Education*. (B. Jacoby (ed.)). Jossey-Bass.

Krueger, R. A., & Casey, M. A. (2014). *Focus groups: A practical guide for applied research* (5th ed.). SAGE.

Lämmerhirt, M., & Scholten, L. (2013). Inspiring girls and boys in science, engineering and technology on virtual networks: The e-mentoring programme TANDEMkids at RWTH Aachen University. In F. Sagebiel (Ed.), *Motivation: The gender perspective of young people's images of science, engineering and technology (SET)* (pp. 253–270). Burich UniPress.
<http://dx.doi.org/10.2307/j.ctvddzcc.18>

Lindt, S. F., & Blair, C. (2017). Making a difference with at-risk students: The benefits of a mentoring program in middle school. *Middle School Journal*, 48(1), 34–39.
<https://doi.org/10.1080/00940771.2017.1243919>

Lipsitz, J. (1995). Prologue: Why we should care about caring. *Phi Delta Kappan*, 76(9).
<http://www.jstor.org/stable/20405430>

Logan, W., & Scarborough, J. (2008). Connections through clubs: Collaboration and coordination of a schoolwide program. *Professional School Counseling*, 12(2), 157–161.
<https://doi.org/10.5330/PSC.n.2010-12.157>

Mitchell, T. D. (2007). Critical service-learning as social justice education: A case study of the citizen scholars program. *Equity & Excellence in Education*, 40(2), 101–112.
<https://doi.org/10.1080/10665680701228797>

Mitchell, T. D. (2013). Critical service-learning as a philosophy for deepening community engagement (A. Hoy & M. Johnson (eds.)). *Deepening community engagement in higher education*. Palgrave Macmillan. https://doi.org/https://doi.org/10.1057/9781137315984_20

Noddings, N. (2005). *The challenge to care in schools: An alternative approach to education* (2nd ed.). Teachers College Press.

Rhodes, J. E. (2020). *Older and wiser: New ideas for youth mentoring in the 21st century*. Harvard University Press.

Saldana, J. (2016). *The coding manual for qualitative researchers* (1st ed.). Sage Publications.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Sage.

Taylor, D. B. (2020, July 10). George Floyd protests: A timeline. *New York Times*.
<https://www.nytimes.com/article/george-floyd-protests-timeline.html>

Tinto, V. (2003). Learning better together: The impact of learning communities on student success. *Higher Education Monograph Series*, 1.

http://www.nhcuc.org/pdfs/Learning_Better_Together.pdf

Quezada, R. L., Alexandrowicz, V., & Molina, S. (2013). Family, school, community engagement, and partnerships: An imperative for k-12, and colleges of education in the development of twenty-first-century educators. *Teaching Education*, 2, 119-122.

<https://doi.org/10.1080/10476210.2013.786888>

About the Authors

Amy Vatne Bintliff is an Assistant Teaching Professor at the University of California San Diego. Contact the author at abintliff@ucsd.edu.

Caren Holtzman is a continuing lecturer at the University of California San Diego and the director of the Partners at Learning Program.

Ellen Ko is an undergraduate student at the University of California San Diego.

Brycen Barron-Borden is a graduate student at the University of Leicester.

Vivian Thong is an undergraduate student at the University of California San Diego.

Kathleen Ardell is a recent graduate of the University of California San Diego in Psychology.

Acknowledgements

We gratefully acknowledge all the students, service-learning partners, and professors who participated in this study during a very tumultuous time. We appreciate you and the work that you do to support children and youth in your schools and communities.