JOURNAL OF SERVICE-LEARNING IN HIGHER EDUCATION

THE JOURNAL OF SERVICE-LEARNING IN HIGHER EDUCATION IS AN ONLINE, INTERNATIONAL, PEER-REVIEWED JOURNAL FOR THE DISSEMINATION OF ORIGINAL RESEARCH REGARDING EFFECTIVE INSTITUTIONAL-COMMUNITY PARTNERSHIPS. THIS IS A PUBLICATION OF THE UNIVERSITY OF LOUISIANA AT LAFAYETTE. OUR PRIMARY EMPHASIS IS TO PROVIDE AN OUTLET FOR SHARING THE METHODOLOGIES AND PEDAGOGICAL APPROACHES THAT LEAD TO EFFECTIVE COMMUNITY-IDENTIFIED OUTCOMES. THE JOURNAL OF SERVICE-LEARNING IN HIGHER EDUCATION IS A SUBSCRIPTION-FREE JOURNAL WITH A REVIEW BOARD MADE UP OF VARIOUS ACADEMIC DISCIPLINES OF THE MEMBER INSTITUTIONS OF THE UNIVERSITY OF LOUISIANA SYSTEM AS WELL AS OTHER NATIONALLY AND INTERNATIONALLY ACCREDITED COLLEGES AND UNIVERSITIES AND AFFILIATED ORGANIZATIONS

TABLE OF CONTENTS

Forward

By

David Yarbrough

JSLHE Executive Editor

Welcome to the second edition of Volume 11 of the Journal of Service-Learning in Higher Education. Thank you for reading and thank you for participating. This edition was conceived about six months ago when it became apparent what a pandemic meant for our work, family, and social lives. It meant change. And like everyone else, I had no idea – and am still discovering what that change entails. This edition is the result of an open invitation for submissions specific to how Covid-19 and/or the pandemic in general has changed your workplace. How has this changed your implementation of service-learning / experiential learning with your students and with your community partners? The submissions went through the standard peer-review process for our journal – and we settled on the four that you find here. I'll speak more to that in a moment. First, I just want to ask, how are you?

Are you well? How is your family? And your colleagues? Like many of you, I know of many who have contracted Covid-19 and have been personally touched by a couple of deaths. This is a sad and a remarkable time where the "front line" has been expanded to include the supermarket clerks, home and business cleaning staff, and the lowest wage earners who are keeping our businesses open and making our home deliveries. Small acts of kindness feel heroic and minor political differences are viewed as canyon-wide.

I am grateful for my small family – they keep me sane, happy and engaged during this unusual time of isolation. I am grateful for my neighbors, who smile and ask about our health (and don't ask about our politics). Like many of you, my extended family now looks strangely like my work colleagues

where we are all the same size in little Zoom boxes (or Skype, Teams, CNet, etc.) and now know way too much about each other. How many guitars have your counted? We're also getting much to casual in our dress, and I have been introduced to more cats and dogs than I would have believed were out there. I have also discovered that if you say "hey Google" or "Alexa" loud enough, you can discover how many of your colleagues have smart speakers. Well, enough of that – I'm sharing this with you because of the changes that will likely be adopted as regular practice and the insights that are developing about how we use our time in the workplace.

Like many of you, I have discovered great efficiencies in doing much work from home. The technology investment was expensive – and must be a consideration when applying this to a broad workforce and to classrooms. I'm saving lots of time that is often lost in transit – but I am missing the creative input of the "hall talk" that happens with many of my colleagues. These informal moments have been the start of funded projects, research manuscripts, updated class material and has served as a mental health balance. I used to think that much of that was wasted time – but it was not. It was the rapport building interactions that helped turn a class or a department into a team. Those teams did good work – and we must be creative in not losing that part of our day.

These are some of the issues that our authors shine a light on for this edition. California, Arkansas, Louisiana, and Bengaluru, India would under many circumstances be faced with different problems related to student access, community involvement, funding, etc. But throw in a pandemic, and the obstacles and adaptations become remarkably similar. Thank you for reading, keep up your great work and may the new year bring you some peace and joy.

A couple of resources:

Covid-19 information: http://cdc.gov/cdc-info
National Suicide Prevention Hotline: 800-273-8255; http://suicidepreventionlifeline.org

Abstract

Service-learning is a pedagogy that allows students to apply theoretical knowledge in practical settings, while serving the needs of their communities. It is a recent introduction in Indian education and has faced multidimensional obstacles in the face of the COVID-19 pandemic. However, by innovatively adapting the pedagogy to suit the needs of the time students have ensured that the service-learning activities do not halt completely. The current study aimed to explore the subjective experiences of undergraduate students who engage in service-learning in an Indian educational institution during the pandemic. Data was collected via in-depth, personal interviews from six undergraduate students who are involved in the central planning and execution committee for service-learning. The transcribed data was analyzed through thematic analysis, and various sub-themes and themes were obtained were obtained under the domains of the various challenges faced while engaging in service-learning during the pandemic, the adaptational strategies employed to overcome them, and also the personal challenges and development of the students while engaging in service-learning. The results of the study allow for a better understanding of the experience of service-learning in the pandemic, paving way for institutional policies that can better equip students and allow for greater preparedness.

Service-Learning in Indian Higher Education: Experiences of Adaptation to the COVID-19 Pandemic

Preeti Kodancha
CHRIST (Deemed to be University), Bengaluru, India

Kareena Suresh Sajnani
CHRIST (Deemed to be University), Bengaluru, India

Aalhad Raut
CHRIST (Deemed to be University), Bengaluru, India

Smitha Baboo – Corresponding Author
CHRIST (Deemed to be University), Bengaluru, India

There is a constant strife to improve and better the education system and adapt it to the demands of the environment. Given the hefty impact that education modalities have in molding students' lives, newer ways to impart and ingrain knowledge are always being attempted, and existing pedagogies are constantly evolving. In light of the COVID-19 pandemic, education has faced barriers like never before, eliciting a large-scale acculturation of pedagogical modalities to the current times. An analysis of adaptational strategies in higher education across 20 countries (Crawford et al., 2020) found that most educational institutions have, at least to a certain extent, migrated from traditional learning to online, virtual delivery.

While remote education may come with relative ease for classroom lectures and imparting of theory, experiential education seems to be particularly hard-hit. Service-learning is an innovation in experiential education that allows students to apply theoretical knowledge in practical settings, while serving the needs of their communities. Decades of literature on service-learning establish its effectiveness beyond a shadow of doubt – it has been shown to positively impact acquiring expertise over course materials (Lambright, 2008), professional self-perspective, caring behaviors, communication skills and a community perspective (Sedlak et al., 2003. Given its vast effectiveness, it is necessary to ensure that service-learning can be continued despite the pandemic. However, the challenges to making service-learning virtual are rather unique, even when compared to other forms of experiential education.

Hironimus and Lovell-Try (1999) identify three components to service-learning – the opportunity to take part in service-learning activities, determining the needs of the community in collaboration with supervisors, and finally, reflection and retrospection of the objectives met through the activities of service learning. Bringle and Hatcher (2000) identify two key characteristics of service learning – participation in an organized service activity that meets the needs of the community being served, and students reflect on the service activity to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. This cursory discussion of the components of service-learning reveals that the aspect of 'service' in service-learning comes from students working closely with communities, understanding their needs, and working with them diligently to meet their needs. And it is this very component that is severely hampered by virtual education. In a country such as India, the communities served by service-learning activities tend to be from underprivileged backgrounds. These communities face a dual-pronged challenge with regard to virtually-based projects – limited accessibility to devices and inadequate connectivity to the internet (Kawoosa, 2020). Therefore, how can students who engage in service-learning work closely and collaborate with such communities during the pandemic? Further, as Levesque-Bristol, Knapp, and Fisher (2011) showed, the effectiveness of service-learning as a teaching tool is enhanced by the presence of an environment that supports autonomy, large amounts of time dedicated to classroom reflections and a learning environment that is perceived to be positive. With effective communication being a hurdle in virtual engagements from pre-COVID times (Grosse, 2002; Heller,

2010), how do students perceive the nuanced shows of support from their teachers and engage in effective reflections?

In the context of Indian education, specifically, service-learning is a fairly new introduction. The pedagogy is restricted to a few select institutions, and even here, service-learning is still in the process of making a lasting mark. A good indicator of the novelty of service-learning practices in the Indian subcontinent is the severe dearth of research literature in the regard – research in service-learning is exclusive to Western sources. Such being the case, the obstacles posed by the COVID-19 pandemic are severe. Care needs to be taken to ensure that the still young educational modality is able to overcome the circumstances to make its mark as a more permanent and widespread pedagogy.

The current study aims to qualitatively understand the subjective experiences of engaging in service-learning during the COVID-19 pandemic, in an undergraduate setting in Bangalore, India. The study seeks to understand the various challenges faced by students, and the adaptation strategies to assure the continuity of service-learning activities. Finally, the study attempts to shed light on the personal challenges experienced by students with regard to engaging in service-learning during the COVID-19 pandemic, and also to understand how students have grown and developed as a result of their experiences.

Methods

Questions

- What is the experience of engaging in service-learning in Indian higher education during the COVID-19 pandemic?
- What are the various challenges faced by students in India when engaging in service-learning during the COVID-19 pandemic?
- How have students in India adapted service-learning activities to the COVID-19 pandemic?
- What are the various personal challenges and growth experienced by students in India when engaging in service-learning during the COVID-19 pandemic?

Design

The research design adopted was qualitative in nature and attempted to subjectively understand the lived experiences of those engaged in service-learning during the COVID-19 pandemic.

Sample

The sample consisted of 6 undergraduate Psychology students from CHRIST (Deemed to be University) in Bangalore, India. The ages of the participants ranged from 18 to 20 years. The sample consisted of 6 females from urban, middle/upper-class backgrounds. The participants had between one to two years of experience engaging in

service-learning programs. The participants were all student coordinators at the 'Service-learning Club' at CHRIST (Deemed to be University), Bengaluru. All participants had also completed a 2-credit course in service-learning as a part of their academic program in their first year of their undergraduate course.

Sampling Technique

A purposive sampling strategy of purposive sampling was employed, and participants were recruited as per the inclusion criteria.

Inclusion Criteria. The inclusion criteria for the study were as follows.

- The individual must have been involved intimately with the service-learning activities for at least 1 year
- The individual must have taken part in or coordinated at least 1 major service-learning project since March 2020

Setting

CHRIST (Deemed to be University), Bengaluru is amongst the premier private institutions in India. Service-learning was incorporated as a part of the curriculum in the Psychology department in 2016. Due to its popularity, a formal 'Service-Learning Cell' was established. Engaging in the coursework was compulsory for all first-year students of the BSc Psychology (Honors) program while participation in the service-learning projects in the cell was voluntary. A 'committee' of students was also set up, along with a faculty advisor – the role of these committee members was to coordinate various projects, liaise with community partners and manage the student volunteers and their administrative records. The committee members are selected from the pool of volunteers by the faculty advisors of the cell – and once selected, serve a term of 2 to 3 years. Due to the efforts of the cell, policy-level decisions regarding the incorporation of service-learning in the curriculum have been made – and the course has already been made mandatory for various other programs at the university. The cell takes on projects of interest and relation to their subject material and works on them in collaboration with various community partners. The cell is currently in its 4th year of operation and has grown in size and scope since its inception.

Due to the rapidly unfolding COVID-19 pandemic, all schools and colleges in India were shut down indefinitely in March 2020, as per governmental regulations to restrict the spread of the novel coronavirus. Since then, all students have returned to their hometowns in India, and other parts of the world. While classes have commenced online since June, the return to in-person education seems murky (as in October 2020), with no indication from government sources as to when educational institutions may reopen.

Procedure

Semi-structured, one-to-one, in-depth personal interviews were employed to collect data. The interview schedule consisted of 8 questions regarding the nature of service-learning activities during the pandemic, their design and implementation, institutional support for service-learning activities, and adaptation to the pandemic. all interviews were conducted virtually via video conferencing. The length of the interviews ranged from 30 minutes up to 75 minutes. Once completed, interviews were transcribed verbatim and analyzed.

Analysis

Thematic analysis was used to understand the data with the reflexive method of Braune and Clark's model (2006). Based on the key ideas, language and context, themes were identified in each transcript. Through further analysis, additional factors or subthemes were identified which then clubbed together to form major themes based on conceptual similarity. Two raters independently conducted up to 4 iterations of the data, and derived sub-themes and themes, which were subjected to inter-rater reliability by calculation of level of concordance. In order to assure trustworthiness and credibility of the qualitative findings and inferences, member-check was individually conducted with each participant within 1 week of data collection, and all discrepancies were resolved.

Ethical Considerations

Each participant was given a consent form prior to the interview which informed them of their rights as participants of the study. Confidentiality and anonymity were assured and the limits of the same were informed to the participants. Additional consent was taken to audio-record the interviews. Further, the participants were given the right to withdraw from the study at any point in time without any consequences. At the end of the interview, the participants were debriefed and were offered the results of the findings.

Results

Thematic analysis was conducted under three domains – challenges to service-learning during the COVID-19 pandemic, adaptational strategies for service-learning during the COVID-19 pandemic, and personal challenges and development of students through engagement with service-learning during COVID-19. A sum total of 50 sub-themes emerged through analysis, which were grouped into 14 themes, under the aforementioned domains.

Inter-rater reliability was established via calculation of the 'Level of Concordance' and was found to be 0.9 (retained subthemes = 50; total initial subthemes = 55), thereby indicating a high degree of reliability.

Each of the three domains has been discussed below. For convenience, the participant number has been indicated with a '#' where verbatim samples have been cited, and the subthemes have been indicated with ''.

Challenges to Service-Learning during the COVID-19 Pandemic
The domain 'Challenges to Service-Learning during the COVID-19 Pandemic' explored the various obstacles and hurdles that students experienced while attempting to engage in service-learning activities during the pandemic. A total of 22 sub-themes were identified under 7 themes.

Table 1
Thematic Analysis: Challenges to Service-Learning during the COVID-19 Pandemic

Themes	Sub-Themes
Logistical Challenges	• Inability to Engage in Field Work • Difficulties in Bringing Field Work Online • Discontinuity in Existing Service-Learning Projects • Slowed Pace of Existing Service-Learning Projects • Decreased Awareness Activities for Service-Learning • Lack of Access to Target Populations • Lack of Enthusiastic Participation from Members of the Community
Challenges in Working with Communities and Organizations	• Difficulties Collaborating with Communities and Organizations • Difficulties Communicating with Communities and Organization • Loss of Contact with Communities and Organizations
Administrative Challenges	• Administrative Delays • Difficulties Following Administrative Procedures Virtually
Challenges within the Student Community	• Decreased Internal Communication Among Students • Decreased Effectiveness of Communication conducted Virtually • Attrition of Volunteers due to Stagnation of Work • Decreased Availability of Manpower • Need for Virtual Recruitment of Newer Students
Challenges with Faculty Involvement	• Decreased Involvement from Faculty Supervisors

Technological Challenges	• Technological Barriers • Need for Adaptation to Working Online
Challenges with Uncertain Future due to COVID-19	• Uncertainty about the Future • Ambiguous Plans of Action

Logistical Challenges

The COVID-19 pandemic posed various roadblocks to conducting field work, causing numerous logistical barriers which appear to be the predominant challenge faced by students – as indicated by the maximum number of sub-themes in the current domain.

Firstly, there was an 'Inability to Engage in Field Work'. Participants described that most service-learning projects were based on hands-on activities and live interactions among people which cannot be conducted currently due to COVID-19 restrictions and can also not be transferred online – *"Also, another challenge that we've faced, for one of the projects, a lot of the modules were very activity based and obviously we were meeting these people in person"* (#2); *"A lot of our projects are very hands on and it requires going to these places and carrying out activities and delivering our modules and everything that came to a halt because of COVID"* (#4). Given the nature of these service-learning projects, participants were facing 'Difficulties in Bringing Field-Work Online' – *"you need one on one interaction as well to conduct the kind of activities we had planned… And you need to see the group dynamics and all that, after 3-4 sessions of only rapport building... these things are not that possible if you're doing it online…"* (#3). Literature shows the importance of fieldwork to a rounded education and its ability to elicit an enhanced affective response (Hope, 2009; Sunirose, 2018), and the circumstances brought about by COVID-19 definitely take away the most from this aspect of service-learning, making it the central challenge.

This massive roadblock has understandably led to 'Discontinuity in Existing Service-Learning Projects' – *"a lot of our projects are at a standstill right now, like most of our projects, actually"* (#2); *"the biggest problem is how do we get like even the projects that we're running, we can't like stop them for a very long time. Right? Because these patients… whatever rapport we've built with them… they'll forget it"* (#5). On a similar vein, a 'Slowed Pace of Existing Service-Learning Projects' even for the projects that were shifted to the online medium was noted by participants – *"they've been really a little slower than they would be if they were in person… a lot of projects have really slowed down…"* (#3).

Participants also reported 'Decreased Awareness Activities for Service-Learning', since these were usually conducted in person – *"we wanted to have an orientation for our juniors… you know, tell them about like what exactly service-learning is, because most of the juniors are not aware… they used to listen to us as their seniors – but we*

don't know how to reach out to them online and still be convincing" (#4). Literature in marketing shows that social persuasion in-person are dependent on interpersonal trust, but these factors do not play a role in online social persuasion (Singh et al., 2014). Since the participants usually employed such trust-based factors while popularizing service-learning among the incoming batches of students, there is currently a dearth of such marketing for service-learning as a mode of student engagement.

Participants also reported a 'Lack of Access to Target Populations', thereby limiting the scope of the service-learning activities. While the rates of internet penetration in India have increased multifold in the past decade reaching a whopping 54% in late 2019, large sections of the population remain inaccessible virtually, particularly in rural areas, poorer states and disadvantaged communities (Kawoosa, 2020). Given as to how students engaging in service-learning tended to work with such segments of society, the lack of internet connectivity leaves them with limited avenues to implement their service-learning projects. Where they are able to gain access to middle and upper-class populations, a 'Lack of Enthusiastic Participation from Members of the Community' was reported – *"it's kind of hard to find people willing enough to sit through half an hour or an hour or something… a session of that length and listen to something voluntarily without any rewards…"* (#5). Among the middle and upper-class populations who have had access to devices and internet connectivity through the pandemic, various newfound phenomenon such as webinar fatigue have started to be reported – with individuals overwhelmed by the sheer number of online workshops, lectures and webinars which leads them to becoming apathetic towards such virtual events (Sen, 2020; Lugtu, 2020). In the current case, it may be due to such factors that individuals who do attend the workshops and webinars conducted as a part of service-learning activities are facing similar apathy towards online events leading them to be unenthusiastic. Nonetheless, engaging such populations remains a challenge that has to be overcome in order for service-learning to be successful.

Challenges in Working with Communities and Organizations

The current theme, 'Challenges in Working with Communities and Organizations' is especially critical – according to both Hironimus and Lovell-Try (1999) and Bringle and Hatcher (2000), community collaboration is a cornerstone of the service-learning pedagogy. Students reported diverse difficulties in the same.
Participants reported 'Difficulties Collaborating with Communities and Organizations' – *"we might not be able to adhere to their demands, given that we can only work online now"* (#2). Research in management shows the importance of successful collaboration and collaborative goal setting across various key organizational functions (Sahai, & Srivastava, 2012; Taylor & Zawacki, 1978). While these studies were not conducted in the context of service-learning, the importance of collaboration is evident in the current setting and its absence has had a detrimental impact on the quality of service-learning projects. This is compounded by 'Difficulties Communicating with Communities and

Organization' – *"our community partners can be unresponsive"* (#3); *"they don't take us very seriously… it's not just a project for us… it is hard to explain that in one phone call"* (#1). The lack of effective communication can further lead to 'Loss of Contact with Communities and Organizations' *"we lose this kind of constant contact and touch when we try to get back in touch with these organizations, they don't necessarily recognize what work they were doing with us"* (#5). A study by Kharouf, Biscaia, Garcia-Perez & Hickman (2020) shows that there must be an effective way to communicate between partners in order to maintain a positive outlook on the common goal. Moreover, communication must be consistent – and a lack of effective communication poses threats to the efficiency of an organization (Raina, 2011). The results indicate that such effective, two-way communication is clearly lacking in the current case, and such obstacles may severely deter the quality of the community collaboration, warranting immediate attention.

Administrative Challenges

While the institution already had in place various meticulous administrative procedures with regard to approvals and permissions for carrying out service-learning activities, the accounts of the participants show that 'Administrative Delays' have become more prevalent in the times of COVID-19 – *"It's difficult to get permissions… it takes a really long time, a lot of patience… it's been even slower during this time has obviously been a little bit difficult"* (#3). This has also led to 'Difficulties Following Administrative Procedures Virtually' – *"there are documentation issues when we have do everything online"* (#1).

The fact that repetitive, documentation-related, administrative tasks are especially stressful for individuals when computerized – has been well-established in literature – a study conducted as early as the 1980's shows that employees face severe physiological and psychological discomfort when engaging in monotonous administrative jobs (Johansson, & Aronsson, 1984). It can be expected that such tedious tasks may very well add to the stress levels of students attempting to engage in service-learning virtually.

Challenges within the Student Community

There is a trend of 'Decreased Internal Communication Among Students' – *""the entire COVID situation has also made it worse* [communication and contact] *… Because at least back in college, we used to have like regular meetings"* (#5). Moreover, 'Decreased Effectiveness of Communication conducted Virtually' was reported with regard to the communication that does occur – *"we don't talk about official stuff for more than about 15 minutes before, sort of debilitating into more casual conversation"* (#1); *"And it's easier when you actually go there and interact with the people over there as opposed to doing the over call or through email because it's easy to get ignored when*

you do that" (#3). Communicating virtually has been found to impair attention span and cause mental fatigue, while also impacting the understanding of the social context and salience of information (Argenti, 2020; Gershman, 2020) – these factors may lead to the decreased effectiveness experienced by the participants.

'Attrition of Volunteers due to Stagnation of Work' was also reported as a challenge by the participants – *"And another thing is that a lot of volunteers are slowly dropping out because of how stagnant everything's become. A lot of volunteers seem to be dropping out. And that's definitely been a challenge"* (#3). This is in concurrence with literature – Allen and Mueller (2013) suggest that burnout occurs when there is an ambiguity in one's role as a volunteer, which is likely to have occurred due to the discontinuity and slowed pace of projects elaborated in an earlier theme. This burnout then leads to a higher intent to resign from their roles. This attrition has directly resulted in 'Decreased Availability of Manpower', to design and implement service-learning activities.

The increased rates of attrition and the need for more manpower has created the 'The Need for Virtual Recruitment of Newer Students', which has proven to be another challenge for the participants. While virtual recruitment has been common practice in large, globalized organizations, studies show that they require expertise to be conducted with precision (Evuleocha, 2002; Yakubovich, & Lup, 2006; Holm, 2009), which is far beyond the scope of undergraduate students engaging in a co-curricular activity. Beyond the recruitment, orienting the new students also seems to be a problem – *"get the juniors or the people who've just joined to sort of be part of the club as well. But what's been difficult is giving them an orientation, finding the time to give them an orientation because they don't really know what it is or what we do…"* (#1). This process of virtual onboarding has been found to be a challenge even in large-scale, commercial organizations (Hemphill, & Begell, 2011).

Challenges with Faculty Involvement

Students currently experience a 'Decreased Involvement from Faculty Supervisors' – *"So I feel like maybe if the faculty was a little more involved in talking about the importance of SL as a club, like, I feel like it would really make a big difference"* (#5). Research shows that students are more likely to excel at their tasks with constant, positive support from faculty (Flaherty, 2016), which service-learning activities currently lack. Further, faculty involvement is a fundamental feature of the service-learning pedagogy (Hironimus, & Lovell-Try, 1999; Bringle, & Hatcher, 2000) – the lack of which will lead to a sub-optimal experience for students.

Technological Challenges

Despite the students engaging in service-learning having adequate access to technology, they did face 'Technological Barriers' which hampered the effectivity of the

service-learning activities that they were attempting to conduct online. These barriers included fluctuations in internet connectivity – "*there are a lot of issues that come with that… like Internet connectivity issues*" (#3); "*sometimes the Internet will not work, sometimes their Internet will not work*" (#2); and also a lack of access to paid technological tools – "*they use Cisco WebEx, which is more effective in official meetings… if they allowed us to use that to do our modules, I feel like it would feel more legitimate to people that were reaching out to*" (#1).

Moreover, since shifting the entirety of work to a virtual medium was a novel experience for the students, despite being familiar with technology, leading them to feel the 'Need for Adaptation to Working Online', which they believed would require some time – "*So initially it took time for us and for them to adapt to it but then now…we can do it in a better way*" (#6).

Challenges with Uncertain Future due to COVID-19

Across the globe, the COVID-19 has created intense ambiguity and uncertainty surrounding the future. This reflects in the experiences of the students, all of whom reported 'Uncertainty about the Future' – "*A lot of the future is uncertain right now. And like, that's something we're trying to figure out as well*" (#2). Such a high degree of uncertainty may invoke or exacerbate anxiety among students (Grupe, & Nitschke, 2013). Educators and faculty supervisors must pay special attention to the same, and attempt to put their students at ease by engaging in a certain degree of planning in order to reduce the levels of uncertainty.

This uncertainty has led to 'Ambiguous Plans of Action' for the organization as a whole and the individual projects – "*the conditions are very, you know, uncertain…So we don't know how we can implement it. We don't know how the volunteer system will work*" (#1); "*how exactly do these online projects start off? How exactly does the planning work? What all goes into it? How do we plan for it if we have no idea how it is supposed to work?*" (#6).

Adaptational Strategies for Service-Learning during the COVID-19 Pandemic
Having understood the diverse challenges that are currently being faced by students pursuing service-learning, the current domain explores the various adaptational strategies that have been put in place to assure the continuity of the pedagogy. A total of 5 themes were identified, with 16 sub-themes.

Table 2
Thematic Analysis: Adaptational Strategies for Service-Learning during the COVID-19 Pandemic

Themes	Sub-Themes

Measures to Assure Continuity of Service Learning	• Preventing a Complete Halt of Service-Learning Activities • Adhering to a Trial-and-Error Model to Attempt Newer Strategies • Brainstorming for Newer Adaptational Strategies
Shift to Virtual/Online Medium	• Shift of Projects to the Online Medium • Establishing an Online Social-Media Presence for Service-Learning • Conducting Online Promotional Activities for Service-Learning
Design and Development of Service-Learning Activities	• Development of Service-Learning Activities that Address Pandemic-Specific Needs • Ideating Service-Learning Projects for a Later Time • Revision and Updating of Existing Service-Learning Activities • Restructuring Service-Learning Projects to Suit Needs of More Accessible Populations • Restructuring of Projects as Per Current Constraints
Structuring of Virtual Communication	• Constant Communication and Contact with Faculty Supervisors • Establishment of Streamlined Channel of Communication • Attempting Regular Communication among Students
Relations with Communities and Organizations	• Maintaining Regular Virtual Communication with Communities and Organizations • Allowing Organizations to be Proxies to Conduct Fieldwork

Measures to Assure Continuity of Service Learning

Despite the various circumstantial challenges posed by the COVID-19 pandemic to the students, various measures were adopted to prevent cessation of service-learning activities. The participants stressed on the importance of 'Preventing a Complete Halt of Service-Learning Activities' – *"we're allowing ourselves to slow down*

but not stop" (#1); *"…you know, we don't want to completely go obsolete during… during this time... And we are just trying to, you know, keep on functioning…"* (#2). Due to the novelty of the situation, neither students nor faculty have experience with coping with similar situations leading participants to report 'Adhering to a Trial-and-Error Model to Attempt Newer Strategies' – *"it's a constant, you know, process of learning from past mistakes and trying not to, you know, and being mindful of ... where we shouldn't repeat like previous misses"* (#3); *"trying new stuff out and then seeing if it works if it doesn't work, and if it doesn't work, then we chuck it, but if it works, we keep it. And I think it has worked in our favor so far..."* (#4). The importance of such a trial-and-error approach for business innovation has even been noted in large-scale organizations (Sosna et al., 2010).

Participants also identified the need for 'Brainstorming for Newer Adaptational Strategies'. With a large group, electronic brainstorming has been found to be more productive, which is of benefit during the pandemic situation (Gallupe et al., 1992), which has been attempted by the participants – *"we sort of like… combine our ideas, and we try to understand the best way… the best way to approach a problem, and basically come up with, new ideas…"* (#3).

Shift to Virtual/Online Medium

At the outset, adapting service-learning to COVID-19 has involved a complete 'Shift of Projects to the Online Medium', which according to Yusof, Atan and Harun (2018), requires both intrinsic and extrinsic motivation, as well as sustained reflection. As elucidated in the above domain, conducting awareness activities were a challenge. However, students have resorted to 'Conducting Online Promotional Activities for Service-Learning'. This has been identified as an important step in engaging with students of the University – "*And that is one of the ways we are trying to make service learning like promote it more for our juniors especially"* (#04). Further, members have found 'Establishing an Online Social-Media Presence for Service-Learning' as a step in transitioning to the online platform and utilizing social media as a channel for communicating information about the organization to its stakeholders (Cheung, Pires, & Rosenberger, 2019). With regard to higher education in particular, Constantinides and Stagno (2011) find that due to the heightened use of social media among the young adult and adolescent populations, it acts as an effective medium of marketing. In the current context, the social media presence may contribute to reaching out to the student population as well as communities and organizations.

Design and Development of Service-Learning Activities

In order to make service-learning relevant, the participants recognize the need for the 'Development of Service-Learning Activities that Address Pandemic-Specific Needs' – *"Another thing about adapting SL to the current situation is that we're coming*

up with a new project which kind of directly deals with COVID. So… the plan is to basically provide people information and the correct information about COVID and how to like, you know, deal and cope with the current scenario" (#5); "*So in this case, it's addressing mental health issues and more specifically, self-care practices... we are trying to focus on mental health because that's a really pressing issue right now. ... and we're trying to target that using behavioral nudges…"* (#2). It is important to note that the projects being developed were being done in a manner so as to implement them virtually, thereby overcoming the design challenges in earlier projects that prevented the same.

In addition to developing new projects, participants were also attempting 'Restructuring Service-Learning Projects to Suit Needs of More Accessible Populations', thereby directly catering to the assets of the community partners (Kretzman & McKnight, 1993) – *"we've been trying to look at another population. So our initial population was children ages 05 to 14. And now we're trying to look at people from the ages 16 to 21"* (#5). The incompatibility of some projects to the online mode has also led to 'Restructuring of Projects as Per Current Constraints' - *"So we kind of also need to change up a lot of these modules and we need to fit them to the current situation because, of course, it's not possible to physically carry out these modules … "* (#03).

Further, given how fieldwork was a challenge, the participants were engaging in the design and development of service-learning activities. They were involved in 'Ideating Service-Learning Projects for a Later Time' – *"… we're still trying to come up with new projects because that's something that we do pretty much continuously… Even if it's not possible for us to implement it right away, if we keep everything ready to go, we can get around to implementing it on the field when the time comes…"* (#1). Further, they also engaged in the 'Revision and Updating of Existing Service-Learning Activities', which is considered an important step of the service-learning process. Monitoring and evaluating service-learning projects and the service-learning process ensure the implementation and outcomes of service learning can by revised (Bringle, & Hatcher, 1996).

Structuring of Virtual Communication

Given that effective communication among students and with faculty supervisors was subpar, the participants developed means to provide a structure to virtual communication in order to increase its effectiveness. The members try to ensure 'Constant Communication and Contact with Faculty Supervisors', which is essential for the academic and social integration of students in service-learning (McKay, & Estrella, 2008). The members have also been 'Attempting Regular Communication among Students'. Leenders, van Engelen, and Kratzer (2003) found that a modest frequency of interaction among team members is required for optimal team creativity. There was also the 'Establishment of Streamlined Channel of Communication' based on the hierarchical positions within the club – *"... the volunteers go to the project heads, the project heads*

go to the core members, and we just see if we can figure it out within ourselves ..." (#01), in order to effectively meander through the meticulous administrative procedures, which were described as a challenge.

Relations with Communities and Organizations

Since community collaboration forms a cornerstone of service-learning, as described earlier, it is important to gauge the strategies that participants adopted to foster the same. The students recognized that 'Maintaining Regular Virtual Communication with Communities and Organizations' is essential to the continuation of their collaborative projects – *"continuous emailing, I think is very, very important for like, correspondence and for maintaining that correspondence like, consistent contact is quite important..."* (#6); "*...after a lot of trying, we have created a good communication system with organizations that is professional as well as friendly…"* (#4). Participants reported that there were regular virtual meetings held with community partners in order to discuss the progress on various projects, and to account for multiple perspectives in taking them forward. Given how even community partners report a lack of communication as a major barrier while working with service-learning projects (Cronley et al., 2015), it is crucial for students engaging in service-learning to take such measures. The participants have also attempted to bridge the gap in fieldwork by 'Allowing Organizations to be Proxies to Conduct Fieldwork' due to the availability of resources and access to vulnerable populations – *"... we're trying to work around it with the help of the organizations and the, like the core members of those organizations itself… By trying to get them to do the groundwork since they have the resources ..."* (#2).

Personal Challenges and Development of Students through Service-Learning during COVID-19 Pandemic

The experience of engaging in service-learning during the times of COVID-19 have led to the participants experiencing various challenges on a personal level, coping with which have also led to newer avenues for personal growth and development. The current domain contains 12 subthemes, grouped into 2 themes.

Table 3
Thematic Analysis: Personal Challenges and Development of Students through Service-Learning during COVID-19 Pandemic

Themes	Sub-Themes
Personal Growth and Development	• Administrative and Organizational Abilities • Communication Skills • Patience • Confidence • Leadership Abilities • Enhanced Research Skills

Personal Challenges	• Professional Development • Stress • Pressure due to Concurrent Online Educations • Feelings of Helplessness • Lack of Motivation • Difficulties with Time Management

Personal Growth and Development

Having to manage service-learning activities on an online medium has enabled members to develop 'Administrative and Organizational Abilities' - *"I am learning few administrative tasks as well"* (#6). 'Enhanced Research Skills' were also reported by participants, having engaged in research with a greater degree of autonomy, with all participants working individually from home – *"I think this aspect of understanding ethics to such a degree, ... to such an extent, will really help me conduct the future research work that I want to do …."* (#4). Service-learning has also enabled the members to continue their 'Professional Development' during the pandemic – *"You get like this exposure that you are not getting at home ..."* (#06).

Apart from the direct professional and organizational avenues of development, participants also experienced growth in terms of various soft skills. Confirming the impact of service learning on communication reported by Tucker et al. (1998), there was an improvement in 'Communication Skills' among many participants – *"I understood the importance of communication… communicating with someone of a higher authority, both in terms of someone who's like, above you, or an organization, learning how to communicate with them… and how to do it effectively when it's all virtual…"* (#4). The work involved also encouraged members to learn 'Patience', a trait which facilitates goal pursuit and improvement of well-being (Schnitker, 2012) – *"It has also like, taught me to, like, you know, be really patient and stuff…. Um… I think you kind of build your patience because you kind of have to, you have no choice but to be patient"* (#3). Members noticed an increased level of 'Confidence', which Shrauger & Schohn (1995) found to impact the activities people partake in and how they perceive their future – *"I think this really gave me that confidence and like really allowed me to venture out and do more things and take more part in college activities…"* (#5). Some members also found an improvement in their 'Leadership Abilities' (#1 – *"I've learned to be, you know, a leader within this atmosphere of how the core team works…"*), in concurrence with earlier literature which shows that service-learning induced positive changes in most domains of leadership.

Personal Challenges

Members reported that attempting to engage in service-learning was a constant source of 'Stress' – *"It has been quite stressful... It's been quite hard"* (#4). Apart from the stress that students experienced in organizing service-learning activities online, they felt further difficulty because of the 'Pressure due to Concurrent Online Educations' – *"... your midterms and you have these completely different, this completely different format that we've had to adapt to ..."* (#1). Planning, designing and executing service-learning in the face of numerous roadblocks while also handling routine academic work led to many 'Difficulties with Time Management' - *"it's difficult to find the time especially… according to like the college schedule, which is really like hectic"* (#5). Given that pandemic has stretched on indefinitely with no end in sight, participants also reported 'Feelings of Helplessness' with respect to the various factors that were not in their control, as they were attempting to adapt to the current scenario – *"... there are a lot of things which are not within our control ... We put in so much effort and then there are these things that are simply beyond our control… It makes me feel so helpless and lost"* (#3). Some participants also reported a 'Lack of Motivation' to continue putting in large amounts of work with little visible impact – *"it's quite hard to find motivation to conduct a project that we are very, very unsure about"* (#4). Communication problems with community partners and difficulty of time demands on the students' schedules could be some other factors contributing to a decrease in motivation (Darby et al., 2013).

Discussion

The COVID-19 pandemic has been a trying time for the world at large, bringing various unprecedented challenges that humankind had not previously fathomed. While assuring the continuity of education has been particularly ridden with hurdles, society has been quick to adapt to the demands of the current times, and even experiential modalities such as service-learning have attempted to find a foothold. The current study explored the subjective experiences of students who have engaged in service-learning during the COVID-19 pandemic, and attempted to understand the myriad challenges they face, and the strategies they have employed to cope with them. The study also took into account the ways in which students have grown while rising to the challenges, and also their personal struggles while trying to adapt service-learning to the COVID-19 pandemic.

The study brought to light various nuances in the experiences of the students. While some challenges like the lack of access to target populations, the unresponsiveness from community partners and ambiguity related to the future were beyond the control of the students themselves, their faculty advisors or even the institutions – the results of the study clearly showed that there were other challenges that could be eased with a greater degree of faculty intervention or institutional support. For instance, the institutional can reduce the number of administrative procedures and

required permissions to allow for smoother flow of service-learning activities. Along a similar vein, if faculty advisors were to spend greater amount of time with the students or if the number of faculty advisors were increased, the need for greater amount of guidance that was felt by students could be met. Similarly, with respect to the adaptational strategies that were being implemented by the students – while the largely successful system put in place by the students is highly commendable, there are various elements that can be standardized and formalized with greater institutional support.

One of the most crucial findings of the study was with respect to the challenges being faced by students. Despite adapting service-learning to the COVID-19 pandemic successfully and using the opportunity to learn and grow, the grave challenges reported by the participants were very concerning. It is important that faculty supervisors and educational institutions must be alert towards such issues that students may be undergoing. Especially in the time of the pandemic, studies have found that most individuals have experienced an increase in psychological distress (Qiu et al., 2020; Wang et al., 2020). Experiencing further strain due to a voluntary engagement is unwarranted, and ways to mitigate these challenged must be looked into.
In conclusion, the current study uncovered the multilayered experience of engaging in service-learning during the COVID-19 pandemic. Service-learning is undoubtedly a student-centric, student-initiated activity – however, the study highlighted the need for faculty involvement and institutional support for such activities to be successful.

Limitations
The study had a limited sample size – a larger, more heterogenous sample that included more diverse perspectives may have yielded more insights.

Implications and Future Directions
The study attempted to understand the experience of service-learning from the perspective of student volunteers who were engaged in the planning of these activities. However, various other perspectives such as those of student volunteers, faculty advisors, and community partners may also be key narratives that are of importance in forming a comprehensive understanding of the phenomenon at hand. There is also a need for longer terms studies that assess the impact created by service-learning activities that are conducted virtually. Further, controlled, quantitative studies are warranted to understand the effectiveness of the various adaptational strategies against each other.

References

(Ed.), To improve the academy (Vol. 24, pp. 86-103). Bolton, MA: Anker Publishing.

Allen, J. A., & Mueller, S. L. (2013). The Revolving Door: A Closer Look At Major Factors In Volunteers' Intention To Quit. *Journal Of Community Psychology, 41*(2), 139–155. doi: https://doi.org/10.1002/Jcop.21519

Argenti, P. (2020). Communicating Through the Coronavirus Crisis. *Harvard Business Review.* https://hbr.org/2020/03/communicating-through-the-coronavirus-crisis

Astin, A. W., Vogelgesang, l. J., Ikeda, E. K., & Yee, J. A. (2000). How Service-learning Affects Students. *Higher Education.* Retrieved from: http://digitalcommons.unomaha.edu/slcehighered/144

Barber, B. R. A Mandate for Liberty: Requiring Education-based Community Service. *The Responsive Community* (Spring 1991).

Barber, B. R., & Battistoni, R. (1993). A Season of Service: Introducing Service-learning into the Liberal Arts Curriculum. *PS: Political Science and Politics, 26*(2), 235. doi: https://doi.org/10.2307/419837

Bonati, M. L. (2018). Collaborative Planning: Cooking Up an Inclusive Service-Learning Project. *Education and Treatment of Children, 41*(1), 139–*151.* doi: https://doi.org/10.1353/etc.2018.0005

Bringle, R. G., & Hatcher, J. A. (1996). Implementing Service-learning in Higher Education. *The Journal of Higher Education, 67*(2), 221–239. doi: https://doi.org/10.1080/00221546.1996.11780257

Bringle, R. G., & Hatcher, J. A. (2000). Institutionalization of Service-learning in Higher Education. *The Journal of Higher Education, 71*(3), 273–290. doi:10.1080/00221546.2000.11780823

Bringle, R. G., and J . F. Kremer. "An Evaluation of an Intergenerational Service-Learning Project for Undergraduates." *Educational Gerontologist, 19* (1993), 407- 416.

Bringle, R., & Hatcher, J. (1996). Implementing Service Learning in Higher Education. *The Journal Of Higher Education*, *67*(2), 221-239. https://doi.org/10.1080/00221546.1996.11780257

Cheung, M. L., Pires, G. D., & III, P. J. R. (2019). *Developing a conceptual model for examining social media marketing effects on brand awareness and brand image. International Journal of Economics and Business Research, 17(3), 243.* doi: https://doi.org/10.1504/ijebr.2019.098874

Cohen, J., and D. Kinsey. "'Doing Good' and Scholarship: A Service-Learning Study." *Journalism Educator* (Winter 1994), 4-14.

Constantinides, E., & Zinck Stagno, M. C. (2011). Potential of the social media as instruments of higher education marketing: a segmentation study. *Journal of Marketing for Higher Education, 21*(1): 7-24. doi: https://doi.org/10.1080/08841241.2011.573593

Cravens, J. (2008). Virtual Volunteering: Online Volunteers Providing Assistance to Human Service Agencies. *Journal of Technology in Human Services,* 17(2-3): 119-136. doi: https://doi.org/10.1300/J017v17n02_02

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P. A., & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching, 3*(1). doi: https://doi.org/10.37074/jalt.2020.3.1.7

Cronley, C., Madden, E., & Davis, J. (2015). Making Service-Learning Partnerships Work: Listening and Responding to Community Partners. *Journal Of Community Practice*, *23*(2), 274-289. https://doi.org/10.1080/10705422.2015.1027801

Darby, A., Longmire-Avital, B., Chenault, J., & Haglund, M. (2013). Students' Motivation in Academic Service-Learning Over the Course of the Semester. *College Student Journal*, *47*(1), 185-191.

Dicke, Lisa, Sara Dowden, and Jodi Torres. 2004. Successful Service Learning: A Matter of Ideology. *Journal of Public Affairs Education, 10*(3):199–208.

Dienhart, C., Maruyama, G., Snyder, M., Furco, A., McKay, M. S., Hirt, L., & Huesman, R. (2016). The impacts of mandatory service on students in service-learning classes. *The Journal of Social Psychology, 156* (3), 305-309. doi: https://doi.org/10.1080/00224545.2015.1111856

Evuleocha, S. (2002). Implications of virtual interviews as a global recruitment tool. *In The Second International Conference on Electronic Business*. http://iceb.johogo.com/proceedings/2002/PDF/f183.pdf

Flaherty, C. (2016, August 04). Report on Faculty Role in Student Success Efforts. Retrieved October 05, 2020, from https://www.insidehighered.com/quicktakes/2016/08/04/report-faculty-role-student-success-efforts

Gallupe, R., Dennis, A., Cooper, W., Valacich, J., Bastianutti, L., & Nunamaker, J. (1992). ELECTRONIC BRAINSTORMING AND GROUP SIZE. *Academy Of Management Journal*, *35*(2), 350-369. https://doi.org/10.2307/256377

Gershman, S. (2020). Stop Zoning Out in Zoom Meetings. *Harvard Business Review.* https://hbr.org/2020/05/stop-zoning-out-in-zoom-meetings

Giles, D. E., Jr., and J. Eyler. The Impact of a College Community Service Laboratory on Students' Personal, Social, and Cognitive Outcomes. *Journal of Adolescence, 17* (1994), 327-339.

Groh, C., Stallwood, L., & Daniels, J. (2011). SERVICE-LEARNING in Nursing Education:Its Impact on Leadership and Social Justice. *Nursing Education Perspectives*, *32*(6), 400-405. https://doi.org/10.5480/1536-5026-32.6.400

Grosse, C. U. (2002). Managing Communication within Virtual Intercultural Teams. *Business and Professional Communication Quarterly, 65*(4): 22-38. doi: https://doi.org/10.1177/108056990206500404

Grupe, D. W., & Nitschke, J. B. (2013). Uncertainty and anticipation in anxiety: an integrated neurobiological and psychological perspective. *Nature Reviews Neuroscience, 14*(7), 488–501. doi: https://doi.org/10.1038/nrn3524

Hatcher, J. A., & Bringle, R. G. (1997). Reflection: Bridging the Gap between Service and Learning. *College Teaching, 45*(4), 153–158.doi: https://doi.org/10.1080/87567559709596221

Heller, R. (2010). A cost-benefit analysis of face-to-face and virtual communication: Overcoming the challenges (CAHRS White Paper). Ithaca, NY: Cornell University, ILR School, Center for Advanced Human Resource Studies.

Hemphill, L., & Begel, A. (2011). Not seen and not heard: Onboarding challenges in newly virtual teams. *131.107*, *65*.

Herczog, M. (n.d.) Linking Service-learning and The California Standards. Retrieved from: https://www.lacoe.edu/Portals/0/Curriculum-Instruction/SL-Standards%20Intro.pdf

Hironimus, R. J.,& Lovell-Try, L. (1999). Grounding Service-learning in Social Theory. *Teaching Sociology, 27*(4), 360-372.

Hirsch, P., & Lloyd, K. (2006). Real and Virtual Experiential Learning on the Mekong: Field Schools, e-Sims and Cultural Challenge. *Journal of Geography in Higher Education, 3:* 321-337. doi: https://doi.org/10.1080/03098260500290892

Holm, A. B. (2009, May). Virtual HRM: A case of e-recruitment. *In 11th International Conference on Enterprise Information Systems* (pp. 49-68). INSTICC Press. https://www.scitepress.org/papers/2009/21746/21746.pdf

Hope, M. (2009). The Importance of Direct Experience: A Philosophical Defence of Fieldwork in Human Geography. *Journal of Geography in Higher Education, 33*(2), 169–182. doi: https://doi.org/10.1080/03098260802276698

Johansson, G., & Aronsson, G. (1984). Stress reactions in computerized administrative work. *Journal of Organizational Behavior, 5*(3), 159–181. doi: https://doi.org/10.1002/job.4030050302

Kawoosa, V. M. (Aug 14th, 2020). Connectivity gets better but parts of India still logged out. *Hindustan Times.* https://www.hindustantimes.com/india-news/connectivity-gets-better-but-parts-of-india-still-logged-out/story-VSqXriMdGUudWb7eBcWzjN.html

Kharouf, H., Biscaia, R., Garcia-Perez, A., & Hickman, E. (2020). Understanding online event experience: The importance of communication, engagement and interaction. doi: https://doi.org/10.1016/j.jbusres.2019.12.037

Kinloch, V., Nemeth, E., & Patterson, A. (2015). Reframing Service-Learning as Learning and Participation With Urban Youth. *Theory Into Practice, 54*(1), 39–46. doi: https://doi.org/10.1080/00405841.2015.977660

Kretzmann, J. & McKnight, J. (1993). *Building communities from the inside out: A path toward finding and mobilizing a community's assets.* Chicago, IL: ACTA Publications.

Lambright, K. (2008). Lessons Outside of the Classroom: Examining the Effectiveness of Service-learning Projects at Achieving Learning Objectives. *Journal of Public Affairs Education, 14*(2), 205–217. doi: https://doi.org/10.1080/15236803.2008.12001520

Leenders, R., van Engelen, J., & Kratzer, J. (2003). Virtuality, communication, and new product team creativity: a social network perspective. *Journal Of Engineering And Technology Management, 20*(1-2), 69-92. https://doi.org/10.1016/s0923-4748(03)00005-5

Levesque, C., Sell, G. R., & Zimmerman, J. A. (2006). A theory-based integrative model for learning and motivation in higher education. In S. ChadwickBiossey

Levesque-Bristol, C., Knapp, T. D., & Fisher, B. J. (2011). The Effectiveness of Service-Learning: It's Not Always what you Think. *Journal of Experiential Education, 33*(3), 208–224. doi: https://doi.org/10.1177/105382590113300302

Lugtu, R. C. (May 29th, 2020). Webinar fatigue — another pandemic?. *Business World.* https://www.bworldonline.com/webinar-fatigue-another-pandemic/

Markus, G. B., J. P. F. Howard, and D. C. King. Integrating Community Service and Classroom Instruction Enhances Learning: Results from an Experiment. *Educational Evaluation and Policy Analysis, 15* (1993), 410-419.

McKay, V., & Estrella, J. (2008). First-Generation Student Success: The Role of Faculty Interaction in Service Learning Courses. *Communication Education, 57*(3), 356-372. https://doi.org/10.1080/03634520801966123

Mercer, E. (2017, November 21). What Are the Challenges of an Online Business? Retrieved October 05, 2020, from https://smallbusiness.chron.com/challenges-online-business-45762.html

Mukherjee, D. (2010). Participation of Older Adults in Virtual Volunteering: A Qualitative Analysis. *Ageing International, 36*(2), 253–266. doi: https://doi.org/10.1007/s12126-010-9088-6

O'Donnell, L., Stueve, A., San Doval, A., Duran, R., Haber, D., Atnafou, R., … Piessens, P. (1999). The effectiveness of the Reach for Health Community Youth Service-learning program in reducing early and unprotected sex among urban middle school students. *American Journal of Public Health, 89*(2), 176–181. doi: https://doi.org/10.2105/ajph.89.2.176

Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *General Psychiatry*, *33*(2), e100213. https://doi.org/10.1136/gpsych-2020-100213

Raina, R. (2010). Timely, Continuous &Credible Communication &Perceived Organizational Effectiveness. *Indian Journal of Industrial Relations,* 46(2): 345-359

Reeb, R. N., Sammon, J. A., & Isackson, N. L. (1999). Clinical application of the service-learning model in psychology: Evidence of educational and clinical benefits. *Journal of Prevention and Intervention in the Community, 18:* 65-82.

Reed, P., & Butler, T. (2015). Flipping the Script: When Service-Learning Recipients Become Service-Learning Givers. *Theory Into Practice, 54(*1), 55–62. doi: https://doi.org/10.1080/00405841.2015.977663

Sahai, S., & Srivastava, A. K. (2012). Goal / target Setting and Performance Assessment as Tool for Talent Management. *Procedia - Social and Behavioral Sciences, 37*, 241–246. doi: https://doi.org/10.1016/j.sbspro.2012.03.290

Schnitker, S. (2012). An examination of patience and well-being. *The Journal Of Positive Psychology*, *7*(4), 263-280. doi: https://doi.org/10.1080/17439760.2012.697185

Schott, C., & Marshall, S. (2018). Virtual reality and situated experiential education: A conceptualization and exploratory trial. Journal of Computer-Assisted Learning. doi: https://doi.org/10.1111/jcal.12293

Sedlak, C. A., Doheny, M. O., Panthofer, N., & Anaya, E. (2003). Critical Thinking in Students' Service-Learning Experiences*, College Teaching, 51*(3), 99-103.

Sen, S. (May 21st, 2020). In race to upskill, millennials face webinar fatigue. *Live Mint.* https://www.livemint.com/news/india/in-race-to-upskill-millennials-face-webinar-fatigue-11589971932948.html

Shrauger, J. S., & Schohn, M. (1995). Self-Confidence in College Students: Conceptualization, Measurement, and Behavioral Implications. *Assessment*, 2(3), 255–278. doi: https://doi.org/10.1177/1073191195002003006

Singh, V. K., Mani, A., & Pentland, A. (2014). Social Persuasion in Online and Physical Networks. in *Proceedings of the IEEE, 102*(12): 1903-1910. doi: https://doi.org/10.1109/JPROC.2014.2363986.

Skinner, R., & Chapman, D. (1999). Service-Learning and Community Service in K-12 Public Schools. *NATIONAL CENTER FOR EDUCATION STATISTICS, U.S. Department of Education, Office of Educational Research and Improvement*. Retrieved from: https://nces.ed.gov/pubs99/1999043.pdf

Sosna, M., Trevinyo-Rodríguez, R. N., & Velamuri, S. R. (2010). Business Model Innovation through Trial-and-Error Learning. *Long Range Planning, 43*(2-3), 383–407. doi: https://doi.org/10.1016/j.lrp.2010.02.003

Sunirose, I. P. Fieldwork in Social Work Education: Challenges, Issues and Best Practices. *Rajagiri Journal of Social Development, 5(1).*

Taylor, R. L., & Zawacki, R. A. (1978). Collaborative Goal Setting in Performance Appraisal: A Field Experiment. *Personnel Administration, 7*(3), 162–170. doi: https://doi.org/10.1177/009102607800700303

Tucker, M. L., McCarthy, A. M., Hoxmeier, J. A., & Lenk, M. M. (1998). Community Service Learning Increases Communication Skills Across the Business Curriculum. *Business Communication Quarterly, 61(2*), 88–99. doi: https://doi.org/10.1177/108056999806100211

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C., & Ho, R. (2020). Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic among the General Population in China. *International Journal Of Environmental Research And Public Health*, *17*(5), 1729. doi: https://doi.org/10.3390/ijerph17051729

Yakubovich, V., & Lup, D. (2006). Stages of the Recruitment Process and the Referrer's Performance Effect. *Organization Science, 17*(6), 710–723. doi: https://doi.org/10.1287/orsc.1060.0214

Yusof, A., Atan, N., & Harun, J. (2018). Towards A Conceptual Framework for Service-Learning in Online Learning Environment. In *International Conference on Industrial Engineering and Operations Management*. Bandung.

Author Profiles

Preeti Kodancha: preetikodancha@hotmail.com
CHRIST (Deemed to be University), Bengaluru, India
Present Address: Manipal College of Health Professions, Manipal Academy of Higher Education, Manipal, India
Preeti holds a B.Sc. (Honors) in Psychology from CHRIST (Deemed to be University). She is currently a postgraduate student of Clinical Psychology at the Manipal College of Health Professions, India. She takes a community perspective to Psychology and has a special interest in education and pedagogy.

Kareena Suresh Sajnani: kareena.sajnani@hotmail.com
CHRIST (Deemed to be University), Bengaluru, India
Kareena holds a B.Sc. (Honors) in Psychology from CHRIST (Deemed to be University). She aims to specialize in Counselling Psychology.

Aalhad Raut: aalhad.raut@science.christuniversity.in
CHRIST (Deemed to be University), Bengaluru, India
Aalhad is an undergraduate student of Psychology at CHRIST (Deemed to be University), India. His academic interests lie in individual psychology. He is very passionate about quantitative and qualitative research.

Smitha Baboo – Corresponding Author ; smitha.baboo@christuniversity.in
CHRIST (Deemed to be University), Bengaluru, India
Dr Smitha Baboo is an assistant professor of Psychology at CHRIST (Deemed to be University). She holds PhDs in Psychology and Education. Her area of expertise is the role of Psychology in pedagogy and education, and developmental studies.

Abstract

The spring 2020 semester brought a never before seen challenge for university faculty. The COVID-19 global pandemic caused universities to move to remote course delivery overnight. With most faculty unprepared to deliver courses online, hybrid or Hyflex, leadership at a regional, predominantly undergraduate university in the South turned to service-learning to address their needs. Faculty and staff who are experts in online learning pedagogy, educational technology tools, and online student services designed, developed and delivered professional development to interested faculty. This study addresses if the service-learning professional development provided the skill set and confidence needed to implement remote learning. Furthermore, the study sought to determine what modifications could be made if the program were replicated to ensure faculty obtained skills to successfully implement remote learning and how this training could lead to increased service-learning opportunities at this institution.

A Service-Learning Approach for Faculty Development Focused on Remote Delivery of Courses During a Pandemic

Aimee Hollander
Nicholls State University

Cynthia B. Vavasseur
Nicholls State University

Hayden Robicheaux
LaCache Middle School

Service-learning, although a recognized and a vital part of higher education initiatives, is now serving a new purpose in a COVID-19 world. Deck, Conner & Cambron (2017), report that service-learning is being adopted by higher education institutions at a rising rate. Coffey (2011) reports that in addition to higher education institutions utilizing service-learning programs at an increasing rate, that teacher education programs in particular are utilizing service-learning programs in new ways. However, the current pandemic presents unprecedented challenges and allows service-learning initiatives a unique opportunity to serve the needs of students and faculty at the higher education level.

In March of 2020, like most higher education institutions, a small, regional predominantly undergraduate institution in the South henceforth referred to as XU, moved all courses online due to the COVID-19 global pandemic. As with many institutions of higher education, faculty did not feel comfortable transitioning their traditional courses to a virtual learning environment due to a lack of

pedagogical or educational technology training in this online only environment (Greeno, 2020).

As planning for Fall 2020 began, administration at XU planned for all courses to be delivered in a remote learning environment pending the rate of infection. Administration defined remote learning as Hyflex, hybrid, 100% online synchronous, and 100% online asynchronous teaching modalities. The remote learning strategy was enforced by administration to ensure the maintenance of enrollment and the high-quality delivery of instruction. Particular emphasis was placed on introductory courses being taught using Hyflex methodologies to retain first- and second-year college students who are 66% first generation students. Hyflex course design is defined as a course that combines both online and face-to-face teaching with flexibility for students to choose how they attend a course without experiencing any learning deficit (Beatty, 2014). The majority of faculty at XU did not have experience designing or implementing remote learning methodologies as most pre-pandemic courses were delivered using the face-to-face modality.

Service-learning traditionally involves a course-based credit bearing educational experience in which students participate in an organized service-based activity that meets the needs of the community. In an effort to train faculty in how to deliver courses in a remote learning environment, XU's Office of Academic Affairs provided a voluntary three-week remote learning professional development. This course capitalized on the internal educational technology and online education pedagogy experts within the university to provide instruction to faculty and staff and created a learning community while the XU community was socially distancing. This professional development met the definition of service-learning within the XU community by allowing internal experts in pedagogy, educational technology and student services to deliver content to their peers. It also gave participants the opportunity to reflect on their experience in this three-week course and have a greater understanding of the course content. This delivery method provided a greater appreciation for the discipline and an enhanced responsibility to ensure high level instruction in a remote learning environment (Bringle & Hatcher, 2000). Faculty were the students in this service-learning experience and also provided professional expertise to the XU community.

Additionally, a learning community from within the XU faculty has evolved from this training. Pedagogy and content experts from the faculty are continuing to train others in this modality and sharing what educational technology, pedagogical techniques, and remote teaching and learning best practices are working or not working in their own courses creating a sustained service-learning opportunity amongst faculty and staff.

By implementing the practices of service-learning into a remote learning professional development environment, the possibility for the university to implement service-learning initiatives which are normally restricted academically, fiscally, or otherwise may be increased (Mayot, 2010). Remote learning offers an effective alternative to traditional methods of service-learning that schools have practiced previous to the COVID-19 global pandemic (Basham, Lake, Leard, et al., 2020).

The current study is intended to enhance the pedagogical and technical skills of faculty and staff at XU in order to enhance the teaching and learning mandated during the time of a pandemic. The study was conducted as experts in various fields provided learning opportunities online. The online model was chosen in order to improve the quality and productivity of instruction that could be given in a short amount of time and keep faculty appropriately socially distanced and safe during a global pandemic (Driscoll, Holland, Gelmon & Kerrigan, 1996; Greeno, 2000). The rationale for service-learning within the realm of professional development for faculty was necessary because of the immediate need for learning to occur in a remote learning environment. By utilizing internal experts in their various fields as the providers of service, the initiative could be timelier, more effective and more efficient and cost effective. Researchers have explored hybrid learning in a faculty development context and suggest that this hybrid community approach creates a flexible and accessible environment for faculty to engage in critical reflection (Vaughan and Garrison 2006). Additionally, these types of professional developments lead learning communities focused on the specific teaching practice presented in the professional development.

While faculty and staff were pursuing their own models and best practices of online learning for their various fields, the university believed that providing a structured remote learning program provided by internal experts would enhance and assist the initiatives of faculty and staff to move into a remote learning environment. In support of these structured plans, XU created a Center for Teaching Excellence whose central goal will be to advance teaching and learning across the curriculum. The summer initiative was the first project of the new Center.

The purpose of this study is to identify how an internally led service-learning initiative impacts faculty and staff during a global pandemic. Through mixed method case study design, the following research questions were examined:

1. Can a service-learning initiative provide faculty and staff with the confidence and necessary skill set in educational technology and pedagogy to teach in a remote learning environment during the COVID-19 pandemic?
2. What service-learning initiatives were most highly valued by participants in the remote learning training?
3. What best practices and or topics for instruction would internal experts utilize if able to replicate this service-learning initiative in the future?
4. How can training in remote learning environments promote future service-learning at XU?

A Review of the Literature

Background on Covid-19 Outbreak

Covid-19, or the Coronavirus, is defined as a flu-like virus, particularly attacking the upper respiratory tract, making it particularly contagious and harmful (LDOE, 2020). In the Spring of 2020, on Monday, April 13, 2020, the state's governor officially closed any establishment that serviced over 250 people across the entire state (LDOE, 2020).

This decision was rooted in the best interest and safety of local communities as a response to the Covid-19 outbreak; however, it closed schools and Universities effective Monday, March 16, 2020 (LDOE, 2020). XU moved to all distance learning courses beginning March 16 "for the foreseeable future" (XU, 2020). Distance learning is defined as learning that takes place digitally in-place of in-person learning in a traditional classroom (Traxler, 2020). Creating a rough transition for society as a whole, distance learning proved to be a challenge for educators to connect their students with both one another and the society around them through an educational setting (Traxler, 2020)

Defining Service-Learning

The process of connecting students with the community around them is defined as a type of learning method called service-learning (Mayot, 2010). Service-learning allows students to provide services to communities, usually those who are considered economically disadvantaged, and to participate in societal development (Mayot, 2010). Participating in service-learning as a student system can be rewarding, creating a deeper sense of civic responsibility (Cuenca-Carlino, Jozwik, Lin, et al., 2017). As a pedagogical method it bridges theory and practice, connecting the curriculum in the classroom with real world experiences and problems (Mayot, 2010). Stemming from universities, especially preservice teacher programs, service-learning is said to prepare citizens to live good lives in their communities (Basham, Lake, Leard, et al., 2020). It allows students to broaden their world views, understand different cultures, and learn about the community's way of life (Mayot, 2010).

While varying between campuses and grade levels, for the majority, service-learning is implemented through three major steps: preparation for activities, execution of activity, and reflection of the experience (Mayot, 2010). Preparation includes learning standards, connecting to community members, and taking care of scheduling and fiscal responsibilities. Execution refers to the actual service that the students provide to community members. Reflection refers to the process of a student internalizing, collaborating, and applying experiences gained through service (Mayot, 2010). By allowing for students of all backgrounds, circumstances, and academic standing to stand on equal footing, service-learning exposes students to career pathways and truly elevates an educational environment (Blanco, 2019). In the K-12 classroom, service-learning can be used to address nonacademic barriers to children's learning such as emotional imbalances, behavioral challenges, economic disadvantages, and family problems that can impact student success rates in school (Cuenca-Carlino, Jozwik, Lin, et al., 2017) As a whole, service-learning creates great partnerships between students and communities (Blanco, 2019), broadening perspectives on needs and assets of the community (Cuenca-Carlino, Jozwik, Lin, et al., 2017).

Service-learning and Faculty Development

Although many studies exist about how service-learning initiatives can impact student learning at the higher education level, very few studies exist about how service-learning impacts higher education faculty teaching and learning (Pribbenow, 2005).

Service-learning has been described as a way to create conditions that support faculty growth and learning while improving teaching and learning expertise (Rice, 1996). Faculty have traditionally approached teaching and learning from an individualistic teacher centered, information dissemination model (Howard, 1998). However, to teach during a pandemic, faculty must learn not only how to use new techniques in delivering curriculum, but also how both student and teacher are responsible for the teaching and learning in a remote learning modality. Remote teaching is similar to how Zlotkowski describes the faculty experience in service-learning in which the faculty member is more like a co-teacher with their students in the context of their classroom community (1998). Pribbenow identified six consistent themes detailing how service-learning impacts faculty teaching (2005). In this study, researchers identified similar themes within the provided faculty development including more meaningful engagement with teaching and learning, deeper connection to students as individual learners, enhanced student learning process and outcomes, increased use of constructivist teaching and greater involvement in teaching and learning communities.

Methods

Background

XU's Office of Academic Affairs provided a voluntary remote, 3 week learning professional development in July 2020. Part of the course completion was providing a final assignment in which faculty and staff write a reflection on how they will use remote learning pedagogy and educational technology tools in their fall 2020 courses.

The professional development was organized by university faculty and staff including those who are directly involved in student success and educational technology. The training was led by 12 faculty volunteers who provided their subject matter expertise on remote learning topics.

Although the training was delivered in a synchronous live format, all sessions were recorded and provided for asynchronous delivery for faculty and staff unable to join live. The faculty who participated in the training were invited to attend daily one hour zoom sessions. Participants also used daily forums and weekly question and answer sessions to participate with one and other and the course materials. All resources and discussion forums were captured on the university learning management system, Moodle. The following topics were addressed during this service-learning event:

Category	Topic Presented	Presenter Expertise
Educational Technology Tools	Best Practices in Screen Casting instruction	PhD Physics Professor of Physical Science
	Uploading screen casts to YouTube, Creation of YouTube channels and incorporating video into LMS	PhD Educational Technology Program coordinator: MED Educational Technology
	Synchronous Course Tools	
	"Ask the ed tech nerd" general Q/A	
	Google Essentials	EdD Instructional Technology Undergraduate Educational Technology Professor
	Advanced Google Tools	
	Physical classroom tools for Hyflex/Hybrid course delivery	PhD Educational Technology Distance Learning Coordinator
	Moodle training - basic and advanced	Instructional Technology Specialist
Best Practices/ pedagogy	Best practices in remote learning course design	PhD Business Administration and Computer Information Systems Director of Online Business Education
	How to make virtual teams and group activities work in a remote learning environment	PhD Business Assistant Professor Marketing and Managing
	Feedback and Assessment techniques in a remote learning environment	PhD Microbiology Assistant Professor in Teacher Education Program Director for Secondary Science Education

	Adopting remote teaching and learning to current course offerings	Instructor of English Department Languages and Literature
Student Services	Creating a syllabus for Gen Z	PhD Chemistry Assistant Professor of Physical Science

Analytic Strategy

Data was analyzed through a mixed methods design. Faculty who participated in the professional development took a post-training survey to determine their attitude towards remote teaching and learning as well topics that were most and least helpful for their course planning. Faculty also provided a reflection in which they discussed how they would implement this training in their fall 2020 courses. Faculty responses were coded to determine what educational technology they planned to use as well as specific pedagogical techniques.

Participant Demographics

     182 faculty and staff members initially enrolled in the 3-week training and 155 of those enrolled completed the training. There was an 85% completion rate and of those faculty who completed the training, 110 took the survey or 71% of participants.

     The majority of individuals who participated in the summer training were faculty who identified themselves as either assistant professor, 35% or instructor, 36%. Additionally, 10% of survey respondents were associate professors and 16% were full professors with the rest identifying as adjunct or visiting professors. The majority of survey participants have been employed at XU for either 0-3 years or over 10+ years and the majority identified as female. We are not sure if this is a direct relationship to who is currently employed by the university as human resource data is still pending.

Results

Research Question 1: Can a service-learning initiative provide faculty and staff with the confidence and necessary skill set in educational technology and pedagogy to teach in a remote learning environment during the COVID-19 pandemic?

Survey Questions and Responses	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I understand what remote learning strategies are and how to use them.	51.8%	46.4%	1%	1%	0
I am confident in my ability to use remote learning strategies for Fall 2020 in my courses.	33%	59.6%	5.5%	1.8%	0
The remote learning professional development was relevant to my needs.	39.1%	41.8%	7.3%	2.7%	0%
The professional development enhanced my understanding on how to implement remote learning strategies.	45.4%	39.8%	5.6%	1.9%	7.4%
The remote learning professional development helped me gain new information and skills.	51.8%	37.3%	1.8%	1.8%	7.3%
The format and structure of the professional development facilitated my learning.	42.2%	37.6%	9.2%	2.8%	8.3%
The professional development provided useful resources for me.	60.6%	24.8%	5.5%	1.8%	7.3%

The majority of faculty and staff who participated in the training felt confident in their understanding of remote learning instructional methods as well as their ability to deliver instruction in this manner after taking the training. Faculty and staff had an overwhelming response to the feeling they gained new information and skills in remote learning, and that this training provided useful resources for fall 2020 instructional delivery. Finally, they also felt the format of delivery which commonly utilized the educational technology and pedagogical techniques presented during this training facilitated their learning. Faculty and staff noted in their open responses that they appreciated the recorded zoom sessions and discussion boards which allowed asynchronous participation. Brooks (2010) indicates that faculty find online professional development appealing to faculty who want to build skills/knowledge at times beyond campus business hours and that online forums are particularly ideal for new faculty who may not know where or from whom they should seek the support they need.

Interestingly, a small percentage of faculty consistently disagreed with statements involving gaining new information and skills, the format of the professional development and if useful resources were provided. In open responses many of the concerns affiliated with these low ratings were addressed. Faculty noted that they wished that this professional development was offered in a two-track format for beginner and more advanced faculty. More advanced faculty expressed that they already knew much of what was presented in this training and did not gain new skills or understanding on how to deliver instruction in a remote learning environment. Other faculty expressed that they wanted more concrete examples on how to deliver instruction in a remote learning environment for courses that take place in a laboratory, studio or culinary setting.

Research Question 2: What service-learning initiatives were most highly valued by participants in the remote learning training?

Session Topic	Percent most helpful
All things Googles	66.4%
Advanced techniques in Moodle (LMS)	59.4%
How to Zoom	53.6%
How to create screencast videos and upload them to YouTube	50.9%
Best Practices for Screencast Videos	48.2%

Faculty selected the educational technology sessions as the most helpful including how to use Zoom, how to record and upload screencasts to YouTube,

advanced Moodle training and all things Google. Interestingly, when faculty were asked what the least helpful sessions for planning fall 2020 instruction were, they named creating a syllabus for generation Z and evidenced based tips for making virtual teams. These student service topics appeared to be less valuable to faculty during this particular professional development. Faculty valued the most practical and applicable skills, which is consistent with prior studies that indicate effective faculty development program must contain components that have immediate face validity or components that can be immediately used in the participants' course (Bergqhist & Philips, 1975)

Knowing which sessions participants found the most valuable helps trainers understand what faculty currently want to feel prepared for a remote learning environment. It also indicates that future educational technology training would be valued by faculty at this institution.

Research question 3: What best practices and or topics for instruction would internal experts utilize if able to replicate this service-learning initiative in the future?

To identify what best practices or topics for instruction internal experts would utilize if they were to replicate the service-learning initiative in the future, researchers utilized faculty reflection responses. The responses indicated that the majority of participants were planning on using zoom during the fall 2020 semester. XU has a university license for Zoom which was made available during this training. Most faculty indicated using zoom to record and broadcast their classes with fewer indicating they would use other features of zoom such as polling or using the breakout rooms. The majority of participants also indicated that they planned to use proctored exam software. Additional educational technology mentioned in faculty free responses that were not discussed in this professional development included Kahoot ®, Dropbox™, Podcasts and textbook specific online supplemental materials.

When asked how faculty plan to teach their courses in a remote learning environment, most indicated that they planned to use a flipped model of instruction. Bregman and Sams (2012) define a flipped classroom as one where students obtain resources through their learning management system prior to synchronous class. During synchronous instruction, the instructor guides students through active, collaborative and interactive problem-solving activities and consolidates practices applying prior obtained knowledge (Toto & Ngyuen, 2009) rather than spending course time using didactic lecture.

Faculty at XU who were delivering Hyflex, hybrid or synchronous online instruction indicated in their reflections that they planned to do activities in which students apply the knowledge they obtained prior to class, during their synchronous time together. This is in line with Johnston (2017) who indicated that advancement in technological tools such as interactive videos, interactive in-class activities, and video conference systems pave the way for the widespread use of flipped classrooms.

Research question 4: How can training in remote learning environments promote future service learning at XU?

Finally, having faculty understand how to execute remote learning could promote future service-learning by faculty. Remote learning can be a facilitator of service-learning. Faculty providing remote learning in courses frees up the geographic constraints on service-learning (Waldner 2012). Faculty learning how to use these educational technologies and how to deliver content in more effective ways will be encouraged to adopt service-learning in their own classrooms. As faculty get used to remote learning they can learn how to use these techniques to engage with students on a deeper level during class time. Additionally, that can free up instructional time for students to spend more time doing service-learning rather than receiving didactic instruction. Remote service-learning courses can provide new opportunities for civic engagement in which remote learning becomes a tool that expands working in a local community to working in a global community (Guthrie, 2010).

Best practices for both online and service-learning overlap. For example, a deeper connection with the students as an individual can be seen by using reflection. Quality reflection enables students to contemplate their own experience while simultaneously building and growing a community with other students in the remote learning environment (Mills, 2001). To maximize success in service-learning in a remote learning environment, training for all parties (instructor, students, the community partner, and the instructional design team) is critical. (Waldner, 2012). This applies to both technology use and service-learning. Therefore, the newly inducted XU Center for Teaching and Learning has included service-learning in a remote environment in its strategic plan.

This was the first-time faculty and staff at XU participated in a summer professional development that encouraged a university-wide adoption of pedagogy that supports remote learning. This service-learning met the university community's needs as faculty were required to provide Fall 2020 instruction using remote teaching methodologies. XU faculty and staff organized and provided the training in a synchronous and asynchronous manner utilizing live and recorded videos, discussion threads and reflection assignments. This training also created a cross-discipline learning community for those interested in expanding their online pedagogy skill set. In the open response section of the survey faculty indicated that their motivation for attending this professional development was to collect resources and connect with colleagues on a common issue. An unpredicted outcome of the service-learning experience is that a remote learning community of practice has developed. Faculty have continued to virtually share and connect their successes and failures from fall 2020. XU's Center for teaching and excellence plans to target this community of practice to encourage service-learning in future iterations of these faculty's courses.

The findings from this study are intended to be useful to other universities trying to provide a university-wide training in similar methodologies as well as the identification of commonly used technology and pedagogical techniques utilized by faculty at a public, regional, primarily undergraduate university during the COVID 19 pandemic. The themes of best practices in remote learning pedagogy, paired with educational technology tools were found to be the most helpful for faculty. Furthermore, the utilization of experts in the fields of pedagogy and educational technology at XU was

found to be highly effective, removing the barrier of bringing in outside trainers for professional development. This university-wide remote teaching and learning training can lead to greater service-learning by faculty as they will be prepared to provide instruction to students no matter if they are on campus or at a community site.

In summary, the XU community led professional development was both necessary and well received during the COVID-19 global pandemic. Researchers hope that faculty will adopt some of the educational technology and pedagogical tools used during 2020 in future courses and the Center for Teaching Excellence can capitalize on faculty motivation and current skill set to encourage adoption of service-learning in their classes.

References

Basham, A., Lake, J., Leard, C., & Spector, B. S. (2020, January). Service-Learning: A Vehicle for Inquiry Teaching and Learning. Journal of Service-Learning in Higher Education, 10(1), 1-23.

Beatty, B. (2014). Hybrid courses with flexible participation: The HyFlex course design. In Practical applications and experiences in K-20 blended learning environments (pp. 153-177). IGI Global.

Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. Washington, DC: Internal Society for Technology in Education.

Bergquist, W. H., & Phillips, S. R. (1975). Components of an effective faculty development program. The Journal of Higher Education, 46(2), 177-211.

Blanco, Megan (2019, November). Harnessing service-learning to Build Social, Emotional, and Academic Skills. Policy Update. National Association of State Boards of Education, 26(5), 1-2.

Bringle, Robert G., and Julie A. Hatcher. "Successful Service-Learning Programs: New Models of Excellence in Higher Education." The Journal of Higher Education, vol. 71, no. 4, 2000, pp. 504–507., doi:10.1080/00221546.2000.11778848.

Brooks, C. F. (2010). Toward 'hybridised' faculty development for the twenty-first century: blending online communities of practice and face-to-face meetings in instructional and professional support programmes. Innovations in Education and Teaching International, 47(3), 261-270.

Coffey, H. (2011). Moving into communities: Developing cultural competence with pre-service teachers through community service-learning experiences. Partnerships: A Journal of Service-learning & Civic Engagement. 2(2).

Cuenca-Carlino, Y., Jozwik, S., & Lin, M.. (2017, December). Using Backward Design to Develop Service-Learning Projects in Teacher Preparation. New Waves-Educational Research and Development Journal, 20(2), 35-49.

Deck, Stacy M., et al. "Students' Perceptions of Service-Learning in an Advanced Research Course." Advances in Social Work, vol. 18, no. 2, 2017, pp. 456–473., doi:10.18060/21548.

Driscoll, A., Holland, B., Gelmon, S., & Kerrigan, S. (1996). An assessment model for service-learning: Comprehensive case studies of impact on faculty, students, community, and institution. Michigan Journal of Community Service-learning, 3(1), 66-71.

Greeno, N. (2020). "Inside Higher Ed." Prepare to Move Online: Continuity Planning for Coronavirus and beyond (Opinion), www.insidehighered.com/views/2020/03/10/prepare-move-online-continuity-planning-coronavirus-and-beyond-opinion.

Guthrie, K. L., & McCracken, H. (2010). Making a difference online: Facilitating service-learning through distance education. The Internet and Higher Education, 13(3), 153-157.

Howard, J. P. F. (1998). Academic service-learning: A counter normative pedagogy. In R. A. Rhoads & J. P. F. Howard (Eds.), Academic service-learning: A pedagogy of action and reflection (pp. 21-30). San Francisco: Jossey-Bass.

Johnston, B. M. (2017). Implementing a flipped classroom approach in a university numerical methods mathematics course. International Journal of Mathematical Education in Science and Technology, 48(4), 485-498.

Louisiana Department of Education. (2020). Department Expands At-home Care and Learning Supports for Families with Young Children. https://www.louisianabelieves.com/newsroom/news-releases/2020/04/21/department-expands-at-home-care-and-learning-supports-for-families-with-young-children.

Mayot, C. (2010). Bridging Classrooms to Communities in Service-learning Programs. In C. Hok Ka Ma & J. Xing (Eds.), Service-Learning in Asia: Curricular Models and Practices (pp. 17-29). Hong Kong University Press.

Mills, S. (2001). Electronic journaling: Using the web-based, group journal for service-learning reflection. Michigan Journal of Community service-learning, 8(1), 27-35.

Toto, R., & Nguyen, H. (2009). Flipping the work design in an industrial engineering course. ASEE/IEEE Frontiers in Education Conference. San Antonio, TX. Retrieved fromhttps://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5350529

XU. (2020). Nicholls Moves to Online Classes due to COVID-19. [Press release]. 12/March.

Pribbenow, D. A. (2005). The impact of service-learning pedagogy on faculty teaching and learning. Michigan Journal of Community service-learning, 11(2), 25-38.

Rice, R.E. (1996). Making a place for the new American scholar. Washington, D.C.: American Association for Higher Education.

Traxler, John (2018). Distance Learning--Predictions and Possibilities. Education Sciences, 8(35), 1-13.

Vaughan, N., & Garrison, D.R. (2006). How blended learning can support a faculty development community of inquiry. Journal of Asynchronous Learning Networks, 10(4),139–152.

Waldner, L. S., Widener, M. C., & McGorry, S. Y. (2012). E-service-learning: The evolution of service-learning to engage a growing online student population. Journal of Higher Education Outreach and Engagement, 123-150.

Zlotkowski, E. (1998). "A service-learning Approach to Faculty Development." New Directions for Teaching and Learning, 73.

Author Information

Aimee M Hollander, PhD is an assistant professor of science education and director for the center for teaching excellence at Nicholls State University, Thibodaux LA aimee.hollander@nicholls.edu

Cynthia B Vavasseur, PhD is a professor of educational technology at Nicholls State University, Thibodaux LA cynthia.vavasseur@nicholls.edu;

Hayden Robichaux, B.S is a graduate candidate of educational technology at Nicholls State University and teacher at LaCache Middle School in Southern Louisiana. Haydenrobichaux@tpsd.org

Abstract

COVID-19 presented challenges to the Health Coaches Program at the University of Arkansas. This undergraduate pre-professional health careers service-learning program has operated for over six years with success for improved patient health outcomes in Fayetteville, Arkansas through a partnership with Washington Regional Medical Center. This program partners students with vulnerable patients and a medical team for weekly patient visits and a reporting session with medical providers with the aim to further patient-centered goals within our local community population. With precautions for health safety during a pandemic, not only did the traditional classroom pedagogy shift, but our protocols in the field with our community partners, practices with remote technologies and patient relationships had to adapt quickly and have continued to evolve over the past nine months. The focus continues to be on strong communications, relationships and adaptive training through shared values for continued patient success.

Moving Forward in Protocols for an Undergraduate Pre-Medical Careers Service-Learning Program during COVID19

Laura Gray
University of Arkansas

Lady Gaga and COVID19

My aunt is dying of an early onset form of dementia. At my last visit, I reached out to touch her hair and she recoiled. In that instant in her eyes, I saw that she no longer knew who I was. It was the first time this experience has happened for me, loving someone you have known all your life who is going away. Before her illness, she was known for her quick wit, stories and practical jokes. She loved to laugh and make everyone around her laugh. A natural entertainer, in charades, her rendition of Lady Gaga wearing a meat dress killed (Her grandkids had put that entertainer's name in the bowl hoping to stump her). First, that anyone could accomplish translating such an image in a remarkably short time was phenomena, but also, that she was the kind of middle-aged person aware of personalities like the singer, and in the meat suit, and willing to take the risks to get all that into miming on the spot and accomplish it. She was surprising and fun.

University of Arkansas Health Coaches

This matters to the story I am about to tell about teaching undergraduate pre-med students in a service-learning community program because we, as practitioners in experiential learning, already bridge spaces in understandings and build on "soft skills" for students in the work, but now, in this "New Norm," we are often doing so at deeper levels and across technologies and traumas, some obvious and some not. Just how we make the

curriculum and programs adaptive, useful and evolving, and how do we know if we are on the right track? I am losing my aunt slowly, over many years. In my more traditional classes, I could teach literature and can talk at a distance through characters or scenes, metaphor, with small understanding about what loss might mean. It is largely theoretical. But, out in the world where our actual programs and partners occur, there are less easy answers or solutions for the adjustments, the protocols, and in a program dealing with elderly patients, death. Over the phone, this is tough to face.

The Health Coaches program at the University of Arkansas pairs teams of undergraduates who are medical humanities or pre-health professionals majors with vulnerable patients in our community who, pre-COVID19, went out to visit these patients weekly in their homes to assess and work toward wellness goals. They accompanied these patients to doctors' visits, at the patients' requests, to help in better understanding instructions and next steps. They often met and talked with family members and helped with community resources when needs arose. We operate in a team with medical professionals to accomplish this. My co-lead from the University, Dr. Fran Hagstrom, is a speech pathologist and comes from the College of Education and Health Professions; I teach English courses and come from the Fulbright College of Arts and Sciences, as the humanities and service-learning side of our partnership since I have worked in experiential and service-based projects both internationally and here in the US for over 15 years. Much of my work was in long term study abroad sites in villages in the developing world and with national programming to support local communities. Those international projects limited the kinds of students who could often afford to join them. I very much wanted to focus service-learning curriculum toward academically meaningful experiences alongside local community development and partners, and that was how I found my way into this medical humanities program. The students in this project come who want to pursue healthcare careers in diverse paths from nursing to general medical practice to occupational therapy, and it helps them learn more about their career choices and skillsets toward those. The program offers a series of three courses alongside field service that gives students something the classroom alone cannot—the chance to be with real patients and medical professionals to see how our healthcare system works to affect lives. It helps students better understand how lives are affected by many factors, individual and collective. Our lead doctors, Dr. Mark Thomas and Dr. David Ratcliff, are both skilled physicians, teachers and administrators; our nurses, Brooke Billingsley and Karen McIntosh, are dedicated and amazing communicators. We invite guest lecturers from many academic areas across campus to lend knowledge and guidance. Our patients say they are helping students in their career paths and callings.

At five years into the Health Coaches program, which was two years ago, and before COVID19, we saw the need to grow and adapt the materials from its beginnings with much technical and clinical information—necessary lectures like "Medicaid Versus Medicare: Understanding the Socio-Economic Gaps and Politics" and "Metabolic Syndrome"—to build out into the less tangible aspects of patient care, adding content such as strategies to develop more meaningful communications through motivational

interviewing, how to navigate professional interpersonal relationships (both the intimacies and distances necessary in this work), and how to shift and disrupt health narratives to empower an even fuller patient-centered goal setting process, among other things. Our hospital team took the initiative to ask for those kinds of instructions for the students. These lessons were occurring, of course, but there was a need for more targeted learning strategies as our program became stronger and the roles the students played in the patients' lives grew more vital to directly address the humanities issues. We were planning the curriculum adjustments to guide this work more formally and had begun to pilot some of these lesson plans and guest speakers with success.

Health Coaches has been one of our strongest service-learning models on campus, and it has been an effective tool to support improving individual health outcomes for the patients of our community partner, Washington Regional Medical Center, our largest hospital system in the city of Fayetteville, Arkansas. WRMC saw emergency room visits decrease from the population served and increased health literacies. So, we were gearing up to adapt our curriculum and to increase our student enrollment and patients to serve even larger populations, based on the strong foundation. Then, in year six, amid these adaptations in process, a pandemic hit. It changed everything.

Economics

In higher education, the benefits of a program like ours are undeniable toward intangible things like student personal growth successes, educational benefits and community outreach; but, we cannot escape the material, that budgets are based in student numbers in classes, majors and programs and ratios and outcomes. To be responsible and successful, service-learning programs, especially those working closely with vulnerable patients like ours, need dedicated and experienced oversight and guidance, and often, smaller numbers, which is how we began. Our program began enrolling around 15 students for the initial course. The intangible costs like faculty who work with community partners to manage the system gets added to the teaching and curriculum development mix, and, as practitioners know, this often lowers research output and publications. So, there is actually incentive built-in to not evolve and grow and increase numbers or curriculum change. In times of non-crisis, this ratio is often left outside monetary equations. These programs can be top-heavy, financially speaking, as well as in workload. Our university development offices promote these kinds of programs to our donors, and these are the same programs that alumni offices and admissions offices share with those on the outside to show how the academy reaches across the divide to forward meaningful intellectual exchanges into real world training, support and solutions for our communities. In shrinking economies' do-more-with-less principles, academic budgets must meet the needs for as many as they can. So, we were not unlike so many other service-learning programs in Health Coaches at year six, in early spring 2020, when the before-unimagined happened.

"We're due for a pandemic," Dr. Mark Thomas, Director of Population Health at Washington Regional Medical Center, prophetically said to the class last fall in the first series of our classroom training before students go out into the field. He added this as hyperbole to a lecture about the ways socio-economic factors affect medical choices disproportionately for those most disadvantaged and only to emphasize that tipping the balance for the public even in small ways has devastating effects, pointing at what could happen if a real unknown event occurred. He posed the question for students to imagine the implications for systems and what that could then mean in a worst-case scenario future. How could any of us have known then? The topics in that class had already looked on the strain building in current healthcare markets and the shrinking profit margins for hospitals, the regulations on those margins and the issues unfolding to provide adequate care for the most vulnerable. He highlighted the emergencies in rural areas for even the most basic services and providers. He explained to students how systemic insurance policies affect individuals in Arkansas, our state--how national and state politics made Patient X unable to receive specific care services or medications, and how that might arise in the day to day for our program work. The complexities are a lot for students to imagine.

Students in this program come from across two colleges, Arts and Sciences and Health Professions, and from disciplines like nursing and pre-professional health to psychology, medical humanities, biology and chemistry, and they do so to begin to apply the information they are learning in those paths toward deeper understandings of what those things mean for their future dreams to serve others as health care providers. For one example that occurs more often than not, when their patients, in homes that usually look very different from the ones they grew up in, do not exactly say that they are not filling certain prescriptions because doing so would mean choosing to not be able to pay the heating bill or their granddaughter's gas money or food or another sometime mounting medical expense (etc. etc.) for that month, Health Coaches undergrads have learned it takes time to learn the landscapes of these intersections, and they have learned how to ask sensitive questions about the patients' priorities, the costs, insurance issues and to take a note of all the medications prescribed at the latest visits (and on record through the hospital) to check with pharmacies and our nurses about other options that might be available that can help the patient better navigate the intricacies. They learn to keep building trust so that we are there to support patients' wellness in any and all the ways we can because many things are not directly said, or at least not easily or right up front. Relationships take time and continuity to build. One of the first ways the program was directly affected by the pandemic was economically; our summer funding was by necessity not possible after COVID19 hit. This program has operated year-round since its inception to support and follow patients for that established contact and trust, and though we do operate with less than our full student team, we have provided services and check-ins for all patients, even in summer previously. Cutting summer costs this past summer allowed us to operate into the unknown economies of what is now this next year.

Colleges and universities across the country face this health and economic crisis with no easy options. The University of Arkansas is the flagship higher education institute for the state, and here is what the pandemic meant more immediately for our support, from information shared from our Chancellor, Dr. Joseph Steinmetz: at first, last spring, it was reported that the State Legislature suggested cuts of around $8.2 million from the remaining overall budget of 2020. Cuts for this next year, approved on April 15, 2020, were for an additional $6 million, so that meant university-wide, we would operate at $116 million planned for 2021, away from the past projected $122 million. There was a Board of Trustees ruling supporting no tuition or fees increases for students during this crisis at the onset, so we are very dependent during a pandemic on holding enrollment and housing numbers, which at this writing, have been steady based off predicative indicators like orientation and housing agreements. And, since last spring, we have had some good news on our campus that COVID19 numbers are declining as of the end of September, most likely due to increased testing and quarantine spaces and isolation for students infected or exposed, which could mean the ability to stay on campus through the term safely, though with many classes in remote learning. And, from an update on September 30, 2020, these numbers reflected a more accurate picture for how the funding has evolved on our campus moving forward: the State Legislature actually cut $8.3 million from last year's budget but then restored all of that on the last day of the fiscal year. This academic year, University of Arkansas leadership budgeted for a $15.7 million reduction in state appropriations. Some or all of this may come back to us, as was possible this past year. We will know more in coming spring when state leaders have a better idea of actual state revenue. Tuition was kept flat. There have been an additional $6.3 million in losses through August 3, 2020, in COVID19-related expenses (for example, our campus has programs in summer that generate revenue like the Walmart Shareholders meeting that rents space for housing and meetings that did not happen this past summer; there were tuition cuts for summer classes which created the need to cut faculty summer teaching and programming, like ours). The COVID19 expenses/losses to campus revenue will likely be much higher when they are updated over the next several months. These are additional, unexpected expenses, and in this unknown, administrators often have to plan very conservatively. What we know for programs with a small faculty to student ratio in times of uncertainty and the need to generate tuition income, small programs are expensive and can therefore be vulnerable.

Shifting Program Protocols

Fast forward to the middle of New Norm where many of us find ourselves today and what this means for students and the work: Sally Barnes, a senior pre-med student was entering a medical program this fall and was an experienced Health Coach, who had been through the three-course training series and was volunteering her time because she loved the work. She was serving on a team to mentor younger students who were rising in our program, and it was April. Campus had shifted to remote learning last spring, beginning March 12.

Our hospital also regulated that we shift from in-person visits to remote phone check-ins for patient safety. This brought many challenges both for students and for patients. What had been at minimum an easy hour spent with students and patients who had come to know and like each other very much, was now sometimes awkwardness and silence over the phone. The average calls lasted about fifteen minutes. Patients expressed that they missed seeing the student teams and some could not understand or keep up with the phone calls to answer them. Our hospital partners remained dedicated to support the program while they shifted focus to additional work directly related to COVID19, so they still were available for texts and calls if students ran into immediate medical issues that needed to be reported; but, our hospital team could not be with us for our weekly sessions as before. The patients had adjustments to the loss of the socialization that they had come to expect with the students, and most became more isolated from family and friends not stopping by and visiting and offering the supports they had received before. Life and its health issues went on however. The students and I shifted to our online learning platform for anonymous reporting and talking on our personal cell phones when questions arose.

I am in my kitchen. Zoom is not yet the norm on our campus two weeks into campus shifting to remote learning that it later would become for us by this fall. It's midday, I'm wearing sweats. It's a Sunday. Sally, the student Health Coach, and I were processing the impending death of her patient who was in the final days of her life. What we would have done before was to be able to coordinate with Hospice care and to visit at our patient's bedside. To be physically present with a smile, a hand hold, an offer to the family to support them with community resources or guidance, while not easy, is often done in a way that so many words are not necessary. The gesture of showing up speaks volumes of understanding in these situations. Over the course of our program, our population is elderly with complex medical health issues, patients have passed. And for some deaths, we have known very clearly they were coming and been able to prepare for the losses together, sitting with doctors and nurses, faculty and classmates to process and plan for the experiences.

I remember distinctly looking out the window at times as Sally talked. The woman who was dying liked to garden, and I studied the new bed of oak leaf hydrangea just installed in the increased time at home to keep focused off a global epidemic. The new plants were getting cropped by deer in the evenings. Though I had not met this patient personally, in the circles I sat with the students and medical team each week, I knew intimately about her garden, her life, her health, just as I knew about another's grandson, one's extended tumultuous family lives, as well as the personalities and strengths of the students, and felt deep kinship and care to them. I knew that there were things not spoken by this student now, how in her calling and the day, that she simply wanted to have something to say or know to make better the gaps made even more uncrossable over the phone and in this shift between her and the patient dying, things that there was no way to convey before and made more difficult in this new medium and without much time to adjust to it. So, Sally and I talked very openly awhile about more simple things: how to have meaningful presence in a moment and exactly

what she could say, how she might be able to express her care over the phone. It was a moment we had planned for in class with a Hospice director who comes to present slides. That is a theory of death, and it is abstract. But death is an individual practice. We only get one. This student seemed worried that she might fail in this task somehow because the patient she had come to know so well was distant on their last call together. In our program, the shift to using phones rather than our regular face-to-face appointments had come so abruptly and by necessity for the physical well-being of our patients within one day, and it was only within a few weeks of this turn in this particular relationship that this moment had arrived. It was also my own shift from the classroom setting to the phone with the students. We were all feeling it out, but there was not time for much of a learning curve, and that was what I understood coming from Sally, on top of the usual terribleness of loss in death. Death, it seemed, she could have handled easier, had it been pre-COVID, where she could have seen her patient, held her hand one last time to assure her she was there and cared for her. But death, like life, does not happen clinically. So, I shared with her about the visit with my aunt that did not involve words because my aunt was beyond making sense of those or even of me anymore. I teach English which mostly means dealing in writing, reading and words. I shared with her what I knew of being in a moment, how moments will not be what we expect them to be, no matter how much looking or talking about them ahead of time we do. How the ability to be in those moments deeply comes and goes, takes experience and willingness and capacity to go beyond where we start—that these moments are felt more than thought out ahead. I am sure my words did not matter. The experience with my aunt only helped me to understand that plans change and some gaps cannot be crossed. Talking about those things on that day was not exactly metaphor and not exactly a direct translation for what this student was trying to make sense of and going through or for her next steps that would be her final contact with her patient. But, our talking like that was not meant to be. It was what was left of our classroom after it moved into fragmented, individual spaces via phone where we were all looking for ways to make things work. We talked for about an hour. Moments like that are the ones I return to as most important in my professional life. These are also essential for service learning work, being available and willing to find solutions and build our relationships and now, more than ever, as we have to shift with compassion and lean into uncertainty to adapt in mostly people-programs with the changes made necessary by social-distancing and technologies for that that works against all our usual people skills.

So, the parameters of how our service-learning program worked changed overnight, and the program is continuing to evolve to meet the patients' needs. Our plans for growth in our student numbers have been on hold, and we have not completed the curriculum adjustments planned for that growth, as yet because we await decisions on the long term support of the program, though we are working towards grants for funding at several levels and across two colleges. I could tell you generally that the program moved to a telehealth model over the medium of telephone, and it is successful. Both things are true. With each student team's individual accommodations and adjustments for their patient situations and relationships, the phone visits times are

increasing; we are moving up this fall from shorter calls in the spring to much longer ones, with an average of at least a half hour per call. Patients are getting used to the phone check-ins, but some have had a harder time remembering when these are and some do not answer the calls as regularly as they received the in-home visits. The regularly say that they miss seeing the students. One patient struggles to speak loudly enough over the phone for communication to be easy and clear. During this, we increased our patient load to accommodate another program eliminated by the pandemic; we have ten new patients, and these are patients that will only know Health Coaches through the phone visits. The phone visits will continue into Spring. Most of our patients do not have the technology for video conferences so those patients have remained in contact with our teams only via phone. Our classroom by this Fall regrouped into a Zoom virtual class, and our medical team rotates in one representative in and out of those because they are still in great demand at their work. With our hospital partner serving a college town, they have been operating at or near capacity for their COVID unit for the month of October, and we expect this number to increase as the months get colder, so we may shift again to not having as much contact with our medical team partners. There were challenges such as overcoming the summer months' lapse for the time that we did not meet in the lack of our summer school program: our patients were slow to respond and to set up schedules at first to the phone call visits, and the calls were shorter in time length, which means the information and relationships will likely be greatly reduced as well, which likely affected health outcomes over what we were able to do before. But, with each week, we see adaptations improving. The virtual classroom work has evolved to focus more on how to work with not only the patients over technologies but with a partner you can no longer see to get social cues from, mostly on three-way calls so that the conversations are smooth and not adding an additional layer of awkwardness or confusion for the elderly patients.

I share these stories because as we all move into realms of the unknown (in planning, teaching and executing), the solutions we find are human ones without clear answers sometimes. It can feel like fumbling between what we imagine and what is. We do not know how long we will be working remotely for our main campus classes or this program. We phased out bringing new students on board this term, in favor of focusing on our trained students and volunteers this year. As we take away connections and structures, funding and classrooms, and for our program, the very visit settings where we could sit with patients in their homes or appointments, we still find means to learn and support one another, though the planning and future may be very different from our shared vision pre-COVID-19. Our virtual classroom has been adaptable to the patient issues that arise each week. How do we operate and adapt when the unthinkable occurs, and ultimately, what do the people we are serving need as we move forward in the best ways we can? For us, so many of the visual, physical, informational and social cues in a medical support program are simply not there right now, and using a phone or even a screen just do not come close to our old ways of operating. Simply being near another, in a home or the classroom, was taken for granted—so much that we exchanged. But we are finding our ways.

About the author

Laura Gray has taught in the English Department at the University of Arkansas for the past twenty years. She became involved with service learning projects in Central America, Vietnam and Kazakhstan over 15 years ago. Her work toward local community engagement is in medical humanities and general studies with technical and professional writing student service projects. Her email contact: lgray@uark.edu

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

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.

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 (Saldańa, 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.	"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" "And it's a weird time and you know I think kids are scared and they're wondering what's going on."
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. School: Reference to pedagogical issues impacted by remote learning environments, including access to immediate interpersonal feedback versus remote feedback.	"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." "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.
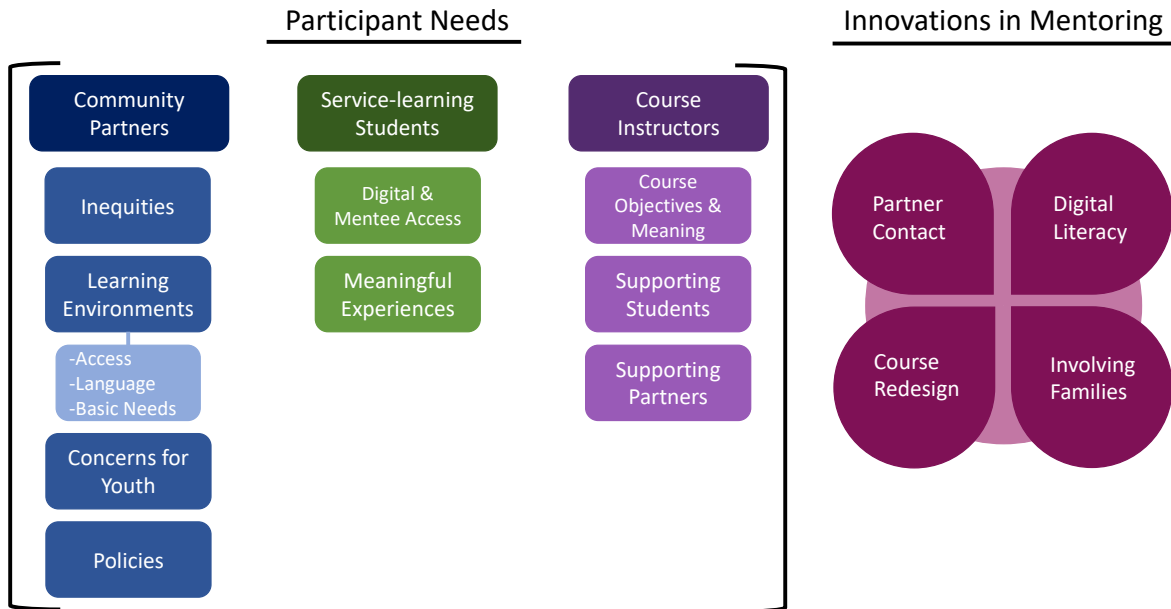

Figure 1. Needs of all participants lead to four innovations in mentoring.

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.
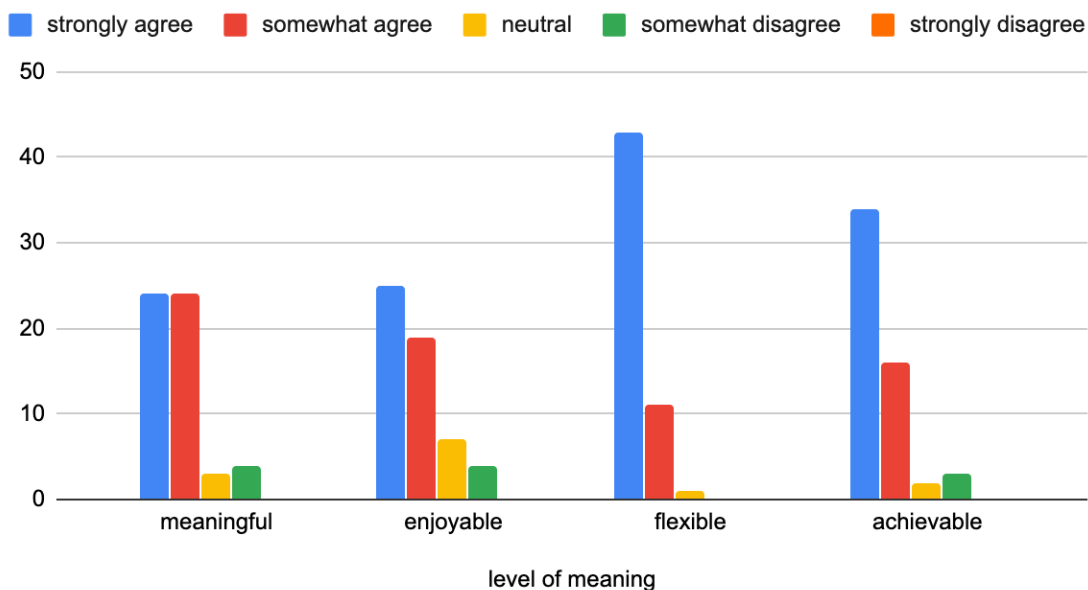
Students thought practicum was:

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=EAIaIQobChMIvfegvcTf6wIVoCCtBh1yFwQtEAAYASAAEgI-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.ctvddzzcc.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