Interdisciplinary Field Placements and Applied Learning During COVID-19: Community-Based Action Research on Face Mask Usage and Policies

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Abstract: This article describes the formation and work of an interdisciplinary team of social work and public health faculty and students. The team developed internships amid the challenges of the pandemic, with a focus on slowing the community spread of COVID-19. The project joined local government, the private sector, and the university in a research study to better understand and influence face mask wearing attitudes and behaviors and in an explicit effort to change related policies. We developed and implemented an action research project that included direct observations of facemask wearing behaviors, surveys regarding beliefs and attitudes about face masks, and interviews with community stakeholders. The project provided empirical data regarding face-covering usage that helped to change local—and then state—policy regarding mask wearing. This article provides a chronological narrative of the experience largely told through the participants' voices, especially those of the students.

Keywords: social work, public health, coronavirus, mask mandate, rural

COVID, Field Placements, and Data Collection on Mask Usage

In the midst of spring semester of 2020, the COVID-19 pandemic caused massive disruptions across higher education institutions in the United States, with more than 1300 colleges and universities canceling in-person instruction, and most moving classes online (Smalley, 2020). Higher education and professional accreditation bodies also worked to meet the crisis, with the Council on Social Work Education (CSWE) releasing modified guidelines in March explicitly centering student safety during the pandemic and granting permission for field activities to be conducted remotely (CSWE, n.d.).

University faculty and staff scrambled to respond to institutional procedural and policy changes, including suspension of in-person field internships. This paper provides a chronological firsthand narrative of one such response, as an interdisciplinary team of social work and public health faculty and staff rapidly self-organized in late spring semester of 2020 to secure viable field placements and internships—with and for students—with an applied research project focused on face mask usage in the local community. We were able to take advantage of the unique opportunity to build interdisciplinary partnerships and improve students' applied learning experiences.

This project, with an explicit goal to promote public health via the widespread use of face masks, was initiated during a time when this issue was becoming increasingly politicized nationally and locally. Along the way, social work and public health faculty and staff from separate departments and colleges collaborated with students in ways that had rarely been

engaged in our previously siloed approaches to applied learning. The pandemic revealed shortcomings in existing processes and opportunities for doing things differently to more purposefully engage students as interdisciplinary team members alongside faculty and staff directly addressing community needs.

This narrative chronicles a journey that includes undergraduate and graduate students, faculty, and staff across the nine-month period of April through December 2020 at the University of North Dakota. It describes the pedagogical challenges and pivots necessitated by the pandemic and shares the voices of participants engaged with designing and conducting research in the context of local policymaking processes and in a politically polarized and unusually unpredictable environment (both institutionally and within the wider community). Adapting to the crisis provided opportunities to probe our too-often-unexamined assumptions about what constitutes teaching, as well as how we have traditionally constructed curriculum (especially research and policy courses), field placements and internships, and the roles of faculty and students. Sustaining the benefits of some of these highly beneficial and hard-won lessons has implications for a "new normal" in higher education.

The Changing Context of Face Mask Usage and COVID-19

The pandemic rapidly worsened in New York City and California in March and April of 2020; across the nation, city leaders, sometimes supported by their governors, enacted strict lockdown measures. California's Bay area led the way with a shelter-in-place order on March 6, 2020 (Evelyn, 2020), and New York imposed a statewide order asking residents to stay at home with the exception of essential activities on March 20 (Robbins, 2020). Horrific scenes unfolded in northern Italy in February and March and replayed in New York City in March and April as hospital systems became overwhelmed with critically ill and dying COVID-19 patients; semi-trucks were brought in to store bodies as mortuary services also became overwhelmed (Zavattaro, 2020).

Over this same period, global debates about the efficacy of widespread mask usage included experts' concerns about the global supply of face coverings necessary to protect health care workers, along with fears that the general public would become complacent about other necessary infection control measures such as avoiding gatherings, social distancing, and handwashing (Shukman, 2020). On April 3, the United States Centers for Disease Control and Prevention (CDC) reversed course and recommended voluntary widespread public use of face coverings (including three-layer cloth masks) for the general public (Dwyer & Aubrey, 2020). The World Health Organization (WHO) did not follow suit until June 6 (WHO, 2020). In the meantime, the global medical community worked to settle debates about whether contact with surfaces or the air we were breathing was more dangerous (Lewis, 2020).

The delays in CDC and WHO guidance and clear messaging regarding widespread mask usage contributed to public health fallout nationally and locally, as the community's public health officials tried to relay their understanding of the evolving science to a worried public relying on politically polarized media and social media. The public's lack of understanding about scientific processes fueled doubt about effective methods for mitigating the spread of the virus. And

instead of sound practices led by public health officials and championed by political leaders, the contradictory messages between major health organizations during the early stages of the pandemic provided opportunities for demagogic political leaders to sow doubt about the recommendations of public health officials. This led to "economy versus health" and "freedom versus responsibility" dichotomies that obfuscated the seriousness of the disease and mired public health in partisan divides (Prasad et al., 2020).

By April of 2020, there were widespread, anecdotal claims of how many people were or were not wearing masks in communities around the world, but no empirical evidence or actual studies. Concurrent with those tensions, policymakers recognized that grocery stores are places where large numbers of people necessarily interacted outside of a health care setting. In the US, early mask policies in states with Republican governors were adopted by private businesses well in advance of public mandates, and a University of Washington study found that states with Republican governors adopted statewide policies approximately one month behind those led by Democratic governors (Goldstein, 2020). Amid this national patchwork of often contradictory policies, many regional and national grocery store chains and "big box stores" unilaterally enacted face mask requirements for both employees and customers, often in advance of local or state ordinances.

The Pandemic and Impacts on Student Learning

The pandemic hit our university community, like many across the United States, during the March spring break. At that time, "Taylor," one of the future team members of the mask project—an MSW student and graduate teaching assistant—described being "filled with constant anxiety" about the pandemic. She recalled being crushed by never getting to be in the physical classroom again and struggling "with the ambiguity and motivation of finishing my program, while simultaneously trying to pump up my students to finish the semester out strong. I felt crippled by fear and hypocrisy."

One student intern known to the team had been enjoying a dynamic social work field placement across all levels of practice with the local city council, including work with her field instructor who was both an elected member of the council and one of her social work professors. She engaged direct practice with constituents, mezzo level work with various organizations and agencies, and systems and policy level projects. As pandemic realities sank in, many of her projects were ground to a halt (along with the generous funding stream she had secured), and her work with the homeless took on a new level of urgency. With the university prohibiting face-to-face work for student interns, the work of her field instructor and her placement turned increasingly toward ways that social work could engage with the community's concurrent growing public health and economic crises. Instead of the face-to-face meetings she had been so good at, she now spent much of her time in Zoom. As the university, the community, and indeed the globe wrestled with how to react to COVID-19, she was suddenly attending economic development meetings—engaging efforts varying from work on medical concerns to assuring adequate grocery supplies during unanticipated supply chain shortfalls compounded by panic buying and hoarding.

By April, COVID-19 and the related quarantines and lockdowns colored much of life. At that time, the local community still had relatively few cases compared to the rest of the country, and there was an earnestness across the population to deal with the threat in a common collaborative manner. Like many places around the world, the campus and the streets were eerily quiet, beyond subdued. Traffic was a mere fraction of what it had been. Despite being near one of the busiest airports in the nation (due to the university's large aviation program), the sighting of an airplane overhead was rare. Students were attending classes over Zoom, and internships were scrambling to meet rapidly changing policies regarding in-person contact.

The Genesis of the Project

Amid demagogic and divided responses around the world and the US, the local community around the university anticipated the need to craft its own response. The mayor asked the social work professor who served on the city council to lead a COVID-19 advisory group. An early planning document dated May 4 includes the observation that "This is a 12–24-month problem at a minimum ... Policy and decision-making to balance public safety with economic impact is likely to fall increasingly upon local governments. We must be prepared to act (COVID Economic Advisory Group, 2020)" (COVID Economic Advisory Group, 2020). The city watched optimistically for possible federal and state relief but worked locally. In response to hoarding and supply chain issues, especially in relation to groceries, the city set up websites to inform the public about the availability of different supplies including toilet paper, hand sanitizer, and staples like flour. Grocery store workers came to be recognized as "essential" workers (others later noted that they became "disposable" workers). And, building on the relationships developed to inform the public about availability of various grocery items, the advisory group and the owner of a local grocery chain discussed a project to begin measuring and understanding face mask usage and attitudes.

Professor Weber, the social work faculty/city council member, invited one of his research partners and departmental colleagues to develop a research-related response that could also support student needs. Assistant Professor Karikari agreed and voiced hope for "tangible and meaningful product(s) that project members will be proud of." The dean of the graduate school connected the two social work faculty to a public health instructor with students needing internship hours.

On May 4, during a Zoom meeting involving the city administrator, mayor, and the dean of graduate studies, the group provided an institutional green light to proceed with the proposed university-based interdisciplinary research project between social work and public health. In addition to the public health concerns, everyone was interested in maintaining the growing internship programs supported by the city and promoted by the university.

Eventually, four faculty, a staff member with teaching and internship supervision responsibilities, and eight students (listed below) constituted our interdisciplinary team from social work and public health.

The social work faculty, which made up three of the total four, included Carenlee Barkdull, a full professor with a background in collaborative action research (see Sagor, 1992); Bret Weber, an associate professor also serving a second term on the city council; and Isaac Karikari, an assistant professor. Weber's city council membership provided many of the community connections, access to limited funding, and years of experience with the local policy process. Karikari took on the role of principal investigator for the project and addressed most of the heavy lifting with the Institutional Review Board (IRB) process. The last faculty member was Tanis Walch, an associate professor from public health who brought significant observational research experience to the team, and the staff member (with a Master in Public Health) was Ashley Bayne, a program manager from the university's School of Medicine and Health Sciences. In addition to teaching public health education courses, she advised and supervised undergraduate and graduate public health students in their applied learning.

The eight students included three undergraduate students from public health (Mikale Kuntz, Emily Possis, and Delton Gabel); four social work students, two MSW students (Stephanie Scallon and Gabby Wavra) and two BSSW students (Courtney A. Leben and Haley Boushee); and a graduate nutrition student who later joined the team. The four social work students all completed field placements at city hall under the supervision of Professor Weber, with the two MSW students enrolled over the summer and the BSSW students enrolled over the fall semester. Scallon continued on for a short time into the fall semester and provided mentoring and coaching to the BSSW students. Of the public health students, Kuntz joined the team over the summer, and Possis and Gabel were the only two students who were part of the project for the first full seven months.

Interdisciplinary Team's Project Proposal and Early Hurdles

The emergent project team began coalescing by email, telephone, and a handful of Zoom meetings. Now, such a process, especially the inclusion of Zoom meetings, seems so mundane as to not require mention, but this was a relatively new way to develop a project among faculty and students who would have normally been in the same building. The advocacy-oriented bent of the faculty team informed an action research framework with the stated goal of promoting science-supported public health messages to help prevent the spread of the virus.

The local grocery chain presented a particularly useful partner due to the significant retail traffic, the communal need for groceries, and the owner's efforts to encourage face mask wearing in her stores. On May 10, team leaders reached out to the management of the grocery chain and proposed the partnership between the city, the university, and their business. Still operating with a pre-pandemic mindset, we originally envisioned students operating inside the grocery stores, collecting surveys, observing and recording behaviors, and providing public education on the benefits of mask wearing. By the end of summer, even the most resistant parts of the country had embraced mask-wearing in grocery stores, but that May, in much of the US, very few wore or even possessed masks.

On Monday, May 11, the full interdisciplinary team of instructors and students from social work and public health held our first team meeting over Zoom. Almost without exception, we met

every Monday from that date until the Christmas holidays. In that first meeting we determined to fill the local (and state) research vacuum, provide guidance to policy makers, and boost local and possibly state health promotion efforts in response to the pandemic. The project team's naïve hopes were that data could be provided in a relatively short time frame to support meaningful policy, and maybe even garner national press.

The early momentum collided with administrative and bureaucratic requirements and processes, and the whole project was increasingly hindered by the nearly unprecedented politics of that summer, all thickened and clouded by the worsening pandemic. University policies restricted direct physical interactions between students, faculty, and especially the general public. A proposal submitted to the university's IRB became mired in the reality that review committees were no longer meeting in person (not to mention summer's usual slowdown to these processes). Nonetheless, team leaders were determined to provide service to the community and meaningful internships for social work and public health students completing their degrees. The pandemic presented challenges, but as one of our faculty colleagues observed, "It was my hope that students could be provided with a practical, hands-on experience. And an experience that is once in a lifetime."

With a year-round program, social work faculty were accustomed to the perennial overlap of the closing of spring semester with preparations for summer semester. Even before summer classes and submission of field timesheets began, proposals and IRB applications were crafted with the students engaged from the earliest stages. Like most academics around the world, none of the team had previously researched pandemics or developed field placements according to evolving restrictions regarding classroom instruction, field internships, and research endeavors. These policy and procedural hurdles had to be simultaneously addressed.

Scallon, one of the MSW students involved from the beginning, noted:

The early stages of planning this potential internship and new action research project were absolute whirlwinds of new learning and cautious optimism. We worked frantically to get the ball rolling despite the fact that we weren't always sure where the ball should be rolling towards or if it would ever even be an official internship.

And, the team quickly embraced the benefits of working with interdisciplinary partners. Kuntz, a public health student, referred to:

a rapidly moving collaboration ... an investigative effort regarding face covering usage in the community. Driven by charismatic and eager faculty from both the Public Health and Social Work departments at UND, the project and its goals swiftly changed and developed before my very eyes. As an undergraduate student, never had I been able to witness and contribute to the laying of groundwork for a research project; ideas were proposed, bounced around, tested, then brought back to the group for further consideration. Complications were dealt with head-on, accomplishments celebrated, new developments discussed at our weekly meetings ... each member lent their unique perspectives to the group, leading to stimulating conversations of recently published

evidence regarding the latest recommendations, individual community observations, and odd observation encounters.

Besides being engaged in the earliest discussions and decisions regarding research design, students also took leadership roles in engaging with agencies and businesses providing food and other emergency services to help assess and address immediate community human service needs related to COVID-19. Over the next several months students conducted interviews, helped with the dissemination of surveys, and, perhaps most importantly, they were responsible for the direct observations of community residents' mask-wearing behaviors.

After numerous consultations with university IRB staff, the submitted proposal described an action research project aimed at increasing knowledge about and promoting the use of face masks in the local community to reduce the transmission of the COVID-19 virus. The three data collection methods included no-contact observations, online surveys, and semi-structured, purposive interviews with key stakeholders conducted via Zoom. Contrary to our initial idea that students would directly engage with the public, the proposal explicitly noted that research activities including the research team's routine meetings and data collection would not include in-person interactions, and that no such contact would be required or in any way be a part of the design.

Students were directly involved in all three data collection methods. First, observations were carried out by individual researchers (all students) unobtrusively parked in their cars somewhere in the parking lot of each of the five locations of the local grocery chain. Ideally, and in most cases, students were deployed in teams of two (both in their own cars) as a way to provide a check on interrater reliability and for safety. Second, the surveys were publicized via flyers as grocery bag stuffers and made available to shoppers via a QR code/survey link. And third, interviews were conducted over Zoom, through purposeful sampling, with the intent of providing both a qualitative triangulation to the observation and survey data, as well as an historic record. In the surveys and interviews, individuals were queried about their views on face masks and related public health messages and policies. Overall, the intention was a non-randomized, exploratory study, with no power analysis. Nonetheless, the intention was to create uniform and consistent observation, survey, and interview methodology to inform policy and improve population health outcomes in regard to COVID-19. Original estimates of the number of people to be observed (200–300) and surveyed (perhaps 75) were dramatic underestimates of the data that were actually collected.

The observation methodology did not accommodate any process for obtaining informed consent. Instead, the process and observations intentionally avoided collection of identifiable information beyond age (split across four categories), and admittedly binary guesses regarding gender. Students and instructors had long discussions about the risks and benefits of being more inclusive across a gender continuum, and about the inclusion of "observable racial aspects." Ultimately, we decided to avoid overly complex collection methods and, more importantly, any possibility of profiling or anything that could create racial or other tensions beyond an attempt to describe, in broad terms, who was and who was not wearing a mask as they entered the grocery store. (The related decision processes are discussed in greater detail below.)

Despite the pandemic's impact on bureaucratic and safety processes, with support from the graduate dean and provost, the team was able to receive IRB approval in less than a month. The team was not able to begin observations early summer, nor to provide data reports until midsummer, which was not in accord with the probably unrealistic early hopes. For our partners at the city and the private sector, this seemed like an unnecessarily long delay. However, given the unprecedented challenges of COVID-19, the university's just-implemented new and stringent research requirements, and the provision that all such projects would now require approval from the university president's office, the relatively short turnaround must be seen as one of the team's early victories.

Hitting the Parking Lots

Approved observations began June 22, but students had been actively developing and testing their methods for nearly a month prior to that. The team's meeting notes from late May through early June describe the discussions about gender, race, age, and other considerations. The most basic observation was whether or not persons entering the grocery store were wearing some sort of mask, but this was complicated by other factors. Was the mask worn correctly or not (hanging under the chin, AKA a "maskhole" in the emergent parlance), and what served as a mask? At that early date, there was a broad variety ranging from medical masks to people simply pulling their t-shirt collar up over their face. With the guidance of the public health professor Walch, the team decided to record four broad age groups (children, birth–17; YA or young adults, 18–40; MA or middle-aged adults, 41–64; and seniors, 65+). These, like much of the observation criteria, were necessarily subjective, but useful.

Students, and indeed most of the team, had not previously collected observational data, and the work led to unexpected learning opportunities. With experience in this area, Walch ably guided the students who—during their practice observations—sparked many relevant decisions.

Notably, Scallon, an MSW student, noted she had not previously

designed such a data collection tool before, nor had I ever completed an observational study. I was surprised how easily I could tap into the lessons taught by our [research professor] ... seven different alternative forms [were] systematically tested by multiple data collectors. The tool sparked an incredible conversation within our research team around race, ethnicity, ethics, and best practices in our decision to exclude an observed "racial" category in our collections.

In relation to Scallon's recall, it is worth considering the larger, national political context in which these discussions occurred. George Floyd was killed on May 25 and was a frequent topic of conversation among students and in their classrooms. More specific to the pandemic, people of color and especially indigenous persons were disproportionately impacted by COVID-19 (Laurencin & McClinton, 2020). For these and other reasons, the team wanted very much to capture these racial dynamics and to include these social justice aspects in our action research agenda. However, especially amid the emergent political divides concerning mask wearing, the

team was concerned about the vulnerability of certain populations and the risk that our work could result in people being targeted. Additionally, recognizing race as a social construct—and the further complications from people wearing masks—the extremely subjective nature of trying to catalogue race was going to be highly problematic. Amid the protests emerging across the nation, many of the team members felt that we had to do something in relation to race, but, in the end, after passionate discussion, the team made the conscious decision to not include race as an observable category.

The observational phase of the study commenced in late June, a time when sitting in one's car for a two-hour shift, in an unshaded parking lot, was often uncomfortable. Walch worked with the students on a schedule to provide adequate coverage of all five grocery store locations and at regular, representative times of the day and week, all in an attempt to capture possible changes in customers' mask wearing behaviors. For instance, seniors were given priority shopping hours early in the morning, shift workers often shopped for groceries on their way home from work, weekends tended to be busier, and each of the five locations had some uniqueness in terms of its customer base. There were times when, as Kuntz observed, "High traffic locations and periods were accomplished by teaming up, each observer collecting data from their assigned entrance. Busy shifts consisted of my fingers flying across my laptop's keys to ensure no data was missed." On the other hand, there were safety issues, and she remarked that "slower shifts made me increasingly aware of the inquisitory looks I often received from onlooking shoppers." Indeed, at one meeting, students discussed fears that they were actually at risk. The increasingly heated political debates around COVID-19 created an atmosphere where grocery store workers in the community were occasionally being attacked by "anti-masker" shoppers. On more than one occasion, students chose to cut their observations short due to what they perceived as aggressive staring from people in the parking lots, though it is entirely unclear what people's motivations might have been.

That summer semester, the five student members of the team logged approximately 144 hours of observation over 72 shifts, with over 16,000 observations all completed according to COVID-19 protocols with no direct contact with store customers or staff. Perhaps not surprisingly, women were more likely than men, and older customers more likely than young adults, to wear masks. But each week there were marked increases in mask wearing, and, independent of legal requirements, there was essentially 100 percent compliance by the date the store implemented its unilateral mandate.

The observations ended when the grocery chain began requiring masks on July 29. After that point, 100 percent compliance was anticipated, and seems to have occurred. In addition to providing useful data, the students had unique learning experiences. Gabel noted that

sitting alone in my car for 8–10 hours a week ... felt very isolating ... like everyone else, I was struggling not having as much human interaction. While a research project like this would generally be done in teams, I was very much missing this aspect.

Possis was among those who frequently teamed with Gabel. She recalled that they "observed many stores together over the summer texting back and forth from across the parking lot talking

about the experience." After noting the need for air conditioning on particularly hot days, she remarked that

[it] got harder when it rained, shoppers were bundled up in windbreakers and tucking their chins into their chests and you could barely see their faces let alone if they were wearing a mask while they sprinted from their cars to the entrance. We could have as many as 400 people recorded in the 2-hour time frame and recording up to 5 separate people all walking into the door at the same time was really challenging.

More generally, she reflected that the work helped her to see the people in the community (where she had lived most of her life) "in a new light. It was absolutely hilarious to see [what] people deemed acceptable to be worn as masks, I once saw a middle-aged woman wrap her entire head in a sweatshirt only leaving her eyes visible." She was particularly amused by "all the [older] men that would exit the store . . . and dramatically rip the mask of their face and take a deep breath of relief as if it were the biggest inconvenience in the world." Alongside the humorous moments, all the students shared a sense of meaning and value in the work as they saw "more and more masks being worn" over the length of their observations. Gabel reflected, "it is often a small group of people who oppose wearing masks. The majority of people are willing to comply if it is best for the community."

Kuntz offered the most profound reflection of the observation component of the project:

While initially, I had not planned hours of observations in a grocery store parking lot in the summer heat ... I quickly realized this project was much more than that. I had been swept up in a community-based observation I had only considered in textbook readings of public health courses [but] ... the ability to utilize these capabilities to contribute, analyze, and apply my knowledge to real-world situations so relevant to our lives today, was incomparable. Though unexpected in more ways than one, this opportunity yielded unique glimpses into research and data collection, tested the practical application of course work, and granted an unparalleled vantage point through which I could observe my community.

Kuntz's revelation captured the spirit of the project, and the energy and excitement that held all of us, instructors and students alike.

Students Disseminating Data Amid a Dynamic Context

The student members of the team helped design the research, collected much of the data, and helped analyze it. Perhaps most importantly, they were on the front lines of disseminating the findings and were directly involved in advocacy efforts. The local press picked up on their work in July. Then, after weeks and months of contentious debate—a troublesome and problematic component of the presidential election—students first pitched a public education effort to the city council in August and then a more direct advocacy for a policy shift in October, helping to spark a major turning point in both local and state policies regarding COVID-19 and especially mask wearing.

The project did not occur in a vacuum. There was extensive coordination with the efforts of Professor Weber. The mayor's advisory committee he led continued their work concurrent with a local election, which, in early June, led to a dramatic shift in the municipal administration. The previous mayor had been in office since 2000, and had taken a very collaborative, even laissez faire approach to city government. The new mayor, understandably, had his own plans. Additionally, the mask issue must be understood along a continuum rather than an either-or debate, and the new mayor was inclined toward "personal responsibility," initially, publicly resisting any sort of a local "mask mandate." Part of the work that bridged the two administrations was an expert panel aimed at keeping decision-making processes above the political divisions that were increasingly heated that summer. The panel included the local public health officer, a biostatistician, an epidemiologist, and an infectious disease specialist, the latter two both from the state's only medical school. At each meeting, the experts unanimously recommended the immediate implementation of a mask mandate. The new mayor disagreed with that recommendation, as did a sufficient number of council members. By early July, having been in office for less than a month, the mayor curtailed any future meetings of both the advisory committee and the expert panel. However, as a result of the relationships developed during the panel's tenure, the council member and public health officer promoted the development of a local COVID-risk dashboard. Prior to that, there was only a single dashboard for the entire state, which disproportionately represented rural counties and skewed data toward a politically beneficial downplaying of infections in the state. The development of the state's first local dashboard led to similar developments across the state. Importantly, the local dashboard and the mask project results—disseminated by the students at council meetings and in the local press—impacted policy formation at the local and then state levels, including, eventually, a statewide mask mandate.

The local press caught wind of the study at a time when COVID-19, and particularly issues around mask wearing and related policies, dominated much media. The paper noted that the project was seeking ways to assure that students could return to a safe community, and that the larger community also needed to be "safe from all the students returning in August" (Mook, 2020). In relation to the explicit agenda of the action research project, MSW student Scallon was excited "to see the genuine response from [her] community." The owners and management of the grocery chain expressed hope that the study might "encourage more people to wear face covering to protect others," and that "partnering on this study made perfect sense to us." Already, at that point in the study, it was apparent that peer pressure and social norms were contributing to sharp increases in the numbers of people wearing masks over the observation period. Bayne, the team member from the university's Master of Public Health program, noted that "seeing [other] people wearing masks" is a powerful influence in changing behaviors. The newspaper article (Mook, 2020) noted the lack of any other communities conducting this sort of study, and featured a striking photograph of Wavra, the other MSW student, recording observations from her parked car. Kuntz, expressing a sentiment shared by the whole team, later wrote we were part of "an observational study of the evolution of the community [responding to] an extraordinary circumstance."

On August 10, public heath students Kuntz and Possis gave the first official presentation to the general public. Based on the best science at that point, their presentation was titled simply and directly, "Face Covering Advocacy." After months of contradictory statements from public health agencies, and then obfuscation from political leaders, there was a great need for clear messaging and education about the team's findings and the need for more action from community leaders. Public health officials across the nation were being threatened and found themselves in the crosshairs of political factions. It may be surprising to future readers, but, during that early August, with thousands of university students returning to the community and amid the political winds of that time, it took great courage for students to stand up and publicly promote the wearing of face masks. Additionally, they shared a key finding from their observations: the grocery store's announcement that mandatory mask wearing would be initiated on July 29 correlated with dramatically increased customer compliance over each of the four weeks that followed until the policy's inception. In other words, the students' observations provided correlational data regarding the potential efficacy of a "mask mandate" at an important local business.

Over the next weeks, the team shared various insights from the observation and survey data with the city council. Increasingly, mask wearing had moved beyond a public health recommendation, and even beyond a politicized debate, to a demonstration of which side a person stood in that summer's political divisions. Having experienced a predictable spike in infections after the return of the students, and an even higher rate of infection after students hit the city's bars and engaged with the energetic social calendar of sorority and fraternity rushes, there were debates over the very need to prevent the spread of the virus. The touchstone of that struggle was masking policies.

Leben was one of the two new members of the team that Fall semester. She remembered nodding her head when it was decided during a regular weekly project meeting to present study findings to the city council, but she was surprised by the suggestion to have the students take the lead. She "felt unqualified," but as the work continued, she was grateful for support from the team, including multiple opportunities to rehearse. The experience led to a "newfound confidence in [her]self, in [her] schooling, and in [her] involvement in the project." Possis recalled agreeing to the internship mainly because she feared not having another opportunity during the pandemic, and then feeling confused. Students were used to courses with clear guidelines, rubrics for assignments, and fixed expectations. The organic, nonlinear nature of this project was overwhelming for her at first. By that October, with months of work behind her, she noted that preparing for the presentation was one of the "most terrifying and exciting" things she had experienced as a student. Gabel had a similar reaction, calling it a "frightening but awesome experience." He also recalled being nervous, appreciating the rehearsals, but then being proud that "our data and conclusions offered insight [to] the ... community that no one else could offer." Noting that council votes and policy changed shortly after the presentation, he proudly views that experience as his "first public health success."

Ultimately, over the next couple of weeks the city council first passed a non-binding mask resolution. That was followed by an enforceable mandate by the local public health officer, and, almost within a couple of days, a statewide mandate passed by the governor. What followed was

a "bad news, good news" series of events. As dramatic spikes in infection rates began affecting large swaths of the country, including the Upper Plains, our state quickly emerged as one of the worst sites in the world in terms of escalating infection rates. However, the mask mandates and the broad change in behaviors that followed seem to have been one of the major factors in reversing the virus' course in the area. After terrible numbers in early October, infection rates continued to decline. The state and the university community avoided an anticipated post-Thanksgiving spike. The blessing continued with no spike after the return of students following the Christmas break. By the middle of January, the governor noted the lower COVID numbers that were being seen across the state and admitted "some people credit the mask mandate," while also recognizing the ongoing debate in which some view masks as "infringements on personal freedom" (Nicholson, 2021, para. 7). Focused on numerous priorities and political tensions, there was never any official recognition from the press, the mayor, or the governor regarding the role of the mask project team. Nonetheless, those closest to the process, including members of the city council leadership and numerous local public health workers and officials, credited the team's work for playing a pivotal role during the long process.

Lessons and Recommendations

The COVID-19 pandemic presented a unique opportunity to build interdisciplinary partnerships and to improve students' applied learning experiences. We hope that these benefits will persist and be incorporated into our ongoing systems and processes. The work of the team continued long after the passage of relevant mask mandates, and as of submission of this article we continue to serve local public health needs relevant to COVID-19 with our interdisciplinary team that incorporates action research, public health promotion, policy advocacy, and student internships. A series of meetings with state public health officials led to another round of surveys, this time expanded across the state and with official collaboration. Students involved with the project never lacked for required hours, and the social work students more than met the reduced time requirements set by CSWE in response to the pandemic. Most likely, they would have easily exceeded normal, pre-pandemic requirements. Additionally, the interdisciplinary aspect of the team created new connections and networks that promise to enhance projects beyond COVID-19. Perhaps most importantly, the students received valuable learning experiences and professors and field instructors developed new ways of thinking about student internships including an interdisciplinary, faculty-staff-student team approach to applied learning experiences that integrates research, practice, and policy.

While the unique opportunity facilitated new interdisciplinary partnerships and improved students' applied learning experiences, there were challenges. The social work faculty on the team tended to dominate the project all in terms of academic seniority, the realities that the principal investigator was a social worker, and the role of the city council member in the team. This was not necessarily all bad, but greater attention to public health's emphasis on public education, as opposed to social work's fixation on policy, may have produced more beneficial health outcomes. Also, despite the rhetoric about democratic process, faculty tended to dominate discussions and had to learn to more fully embrace student voices. For instance, the discussions around race were among the richest during the project, but our legitimate decision to not include race in our data collection ignored the reality that COVID disproportionately impacted

communities of color and deserved greater emphasis. We continue to wrestle with the correctness of that decision. Long term, while our field program has been and remains supportive, efforts like this will be difficult to sustain beyond the exigencies of the pandemic. There is limited institutional infrastructure to support creative faculty and staff deployments and blended scholarship, service, teaching, and internship activities across colleges and departments. We are working hard to stay connected with students and connect them to publishing opportunities even after they've graduated. Hopefully articles like this will encourage greater institutional flexibility.

The project demonstrated the value of interdisciplinary work in relation to enhanced research and scholarship efforts, and to student learning. For faculty, the project broke down academic silos, provided access to broader networks, and removed the unnecessary and counterproductive boundaries between research, practice, and policy. For students, perhaps counterintuitively, the opportunity to work with and learn more about other professions enhanced their emerging professional identity. And rather than the project offering an acceptable compromise—a goodenough-for-the-pandemic solution—faculty and students collaborated to achieve a highly beneficial and improved applied learning experience. Hopefully it will not be a one-time experience and can instead demonstrate the evolving nature of our two professions in service to "new" post-pandemic realities. Finally, the project leveled the playing field between faculty and students. Faculty were able to be authentic, vulnerable, and open about both research design and the development of teaching processes. Rather than embodying the "sage on the stage" with all the answers, faculty collectively problem-solved with students to address unique challenges. Indeed, the older, more privileged and quarantined faculty, more sheltered from pandemic life, depended on the students in their service jobs and ongoing engagement with day-to-day life including direct interactions with the politically polarized environment. Students brought "realtime" essential worker experiences and other circumstances to the process, including infected roommates, or, in several cases, their own COVID-19 infections and symptoms. This reality of the project suggests a metaphor for broader dynamics deserving of deeper examination!

References

Council on Social Work Education. (n.d.). *Resources addressing Coronavirus (COVID-19)*. https://www.cswe.org/About-CSWE/Responding-to-Coronavirus

COVID Economic Advisory Group. (2020). *Planning the way forward and the Economic Response Advisory Group's role* [Unpublished Raw Data].

Dwyer, C., & Aubrey, A. (2020, April 3). *DC now recommends Americans consider wearing cloth face coverings in public*. NPR. https://www.npr.org/sections/coronavirus-live-updates/2020/04/03/826219824/president-trump-says-cdc-now-recommends-americans-wear-cloth-masks-in-public

Evelyn, K. (2020, March 20). *Here's what a 'stay home' order means for New York*. The Guardian. https://www.theguardian.com/us-news/2020/mar/20/new-york-90-day-stay-home-order-what-it-means

Goldstein, A. (2020, September 3). *Governor's political party is biggest factor in whether a state has imposed mask mandate, study finds.* Washington Post. https://www.washingtonpost.com/health/coronavirus-masks-politics-study/2020/09/03/00c5d32a-edf3-11ea-b4bc-3a2098fc73d4_story.html

Laurencin, C. T., & McClinton, A. (2020). The COVID-19 pandemic: A call to action to identify and address racial and ethnic disparities. *Journal of Racial and Ethnic Health Disparities*, 7(3), 398–402. https://doi.org/10.1007/s40615-020-00756-0

Lewis, D. (2020, April 02). *Is the coronavirus airborne? Experts can't agree*. Nature. https://web.iitd.ac.in/~jay/dsl810/dsl810_spring2020/topics/minor_test_2/research_papers/air%20quality%20for%20COVID-

 $\frac{19/\text{new}\%20\text{papers/Is}\%20\text{the}\%20\text{coronavirus}\%20\text{airborne}_\%20\text{Experts}\%20\text{can}\%e2\%80\%99t\%}{20\text{agree.pdf}}$

Mook, S. (2020, July 24). *UND studying how many people in Grand Forks are wearing face masks*. Grand Forks Herald. https://www.grandforksherald.com/newsmd/coronavirus/6583336-UND-studying-how-many-people-in-Grand-Forks-are-wearing-face-masks

Nicholson, B. (2021, January 16). Statewide mask mandate to expire Monday; business restrictions will be eased. Bismarck Tribune.

https://bismarcktribune.com/news/local/health/statewide-mask-mandate-to-expire-monday-business-restrictions-will-be-eased/article c250a214-4a20-5d30-8deb-13465431e869.html

Prasad, V., Sri, B. S., & Gaitonde, R. (2020). Bridging a false dichotomy in the COVID-19 response: A public health approach to the 'lockdown' debate. *BMJ Global Health*, *5*(6), e002909. https://doi.org/10.1136/bmjgh-2020-002909

Robbins, R. (2020, March 16). *In strictest US coronavirus response so far, six Bay Area counties order 'shelter in place.'* Stat News. https://www.statnews.com/2020/03/16/coronavirus-bay-area-counties-shelter-in-place/

Sagor, R. (1992). *How to conduct collaborative action research*. Association for Supervision and Curriculum Development.

Shukman, D. (2020, June 6). *Big shift in guidance*. BBC. https://www.bbc.com/news/health-52945210

Smalley, A. (2020, December 28). *Higher education responses to Coronavirus (COVID-19)*. National Conference of State Legislatures. https://www.ncsl.org/research/education/higher-education-responses-to-coronavirus-COVID-

19.aspx#:~:text=Closures%20%26%20Learning%20Disruption&text=The%20spring%20semest er%20of%202020,shifted%20to%20online%2Donly%20instruction

World Health Organization. (2020, June 5). *Advice on the use of masks in the context of COVID-19*. https://apps.who.int/iris/bitstream/handle/10665/332293/WHO-2019-nCov-IPC_Masks-2020.4-eng.pdf?sequence=1&isAllowed=y

Zavattaro, S. M. (2020). "We've cared for the dead since we started caring": COVID-19 and our relationship to public and private deathcare. *Public Administration Review*, 80(4), 701–705. https://doi.org/10.1111/puar.13221

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