Service-Learning in Times of Crisis: Early Responses to the COVID-19 Pandemic and Their Effects on Reciprocity

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Abstract

This study has two main objectives: (1) to analyze how different constituencies (students, teachers, and community partners) in service-learning courses at VU Amsterdam (Netherlands) responded to the COVID-19 crisis during the first outbreak and (2) to investigate the effects of these responses on reciprocal interactions between them. Our results show that the switch to an online environment caused a high burden on teachers. However, their motivation, adaptability, and creativity have been essential to safeguard students' academic outcomes and the benefit to community partners. Also, the responses to the COVID-19 crisis have created opportunities for urgent and relevant community-based activities and for new conceptualizations of community. This article presents the current state of the impact of a crisis situation on experiential pedagogies such as service-learning and provides recommendations on how to safeguard different types of reciprocity in an online environment and better respond to crises in the future.

Keywords: service-learning, COVID-19, online education, reciprocity

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The outbreak of the coronavirus disease (COVID-19) has heavily impacted everyday life of citizens around the world. Higher education has had to adapt to these rapidly changing circumstances under great pressure (Marinoni et al., 2020). In the Netherlands and many other countries, social distancing measures forced universities to transition to virtual learning, trying their best to sustain courses and rescue the semester. These sudden changes are thought to have amplified and magnified challenges that existed before the crisis (European University Association, 2020). For example, students who have difficulty learning independently or socially disadvantaged students, who lost their jobs or have limited access to technology and high-speed internet, may have fallen further behind (Christian et al., 2021; Sahu, 2020).

Making the abrupt change from in-person to online education has proved difficult for many students and lecturers. This rupture was even more challenging in relation to experiential learning pedagogies, such as service-learning, because the nature of the COVID-19 crisis created significant barriers for hands-on approaches (Butler, 2022). Due to social distancing, in order to successfully coordinate and sustain experiential education, teachers had to create new constructs they could use to make meaning of this new experience in order to function in the changed world (Christian et al., 2021; Morton & Rosenfeld, 2021). These obstacles were particularly frustrating as the benefits of experiential education are more needed than ever, as some have suggested (e.g., Butler, 2022), given the newly emerged challenges that society faces and the flexibility, adaptability, and new ways of connecting that the pandemic requires from students, teachers, and communities (Grenier et al., 2020; Lederer et al., 2021). Service-learning offers a conspicuous example because this experiential pedagogy

holds great potential for making connections and providing support and solutions in times of crisis (Grenier et al., 2020).

Introduction to Service-Learning

Service-learning is defined as

> a course-based, credit-bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. (Bringle & Hatcher, 1995, p. 112)

Service-learning pedagogy is increasingly integrated in higher education to provide students the opportunity to learn from experience in practice, rather than from more formal sources of knowledge, such as textbooks (Kolb, 1984; Tijsma et al., 2020). This form of learning is thought to have many benefits for students. These benefits include enhanced civic engagement competences, such as civic responsibility and cultural sensitivity, as well as improved employability competences, such as problem-solving and collaboration skills (Celio et al., 2011; Jackson, 2015; Sevin et al., 2016; Simons & Cleary, 2006). Through reflection on their experiences in the community in relation to the course goals, student learning is broadened and deepened (Hatcher et al., 2004). In addition, service-learning is considered a valuable method for universities to contribute to addressing problems in their surrounding community as well as tackling broader societal issues. Therefore, fundamental to service-learning practices is the concept of reciprocity: providing diverse benefits to all stakeholders involved (Salam et al., 2019).

Service-Learning in Times of Crisis

Recent studies indicate that the COVID-19 pandemic has impacted service-learning in various ways. Some cancelled service-learning activities, because the physical and psychological concerns and needs that emerged due to the rapid changes did not leave space in their mind for such creative strategies (Veyvoda & Van Cleave, 2020). Others were able to continue courses, but noted that the balance between community service and academic learning, character-istic of service-learning, shifted away from the service component toward an increased focus on academic learning (Morton & Rosenfeld, 2021).

Some early studies seem to indicate that online service-learning can have benefits for students similar to those of face-to-face service-learning (Hall, 2020; Lin & Shek, 2021). For some, online service-learning improved the efficiency of the course, leaving more time for translating findings into action items (Guy & Arthur, 2021). The encountered problems in pivoting to new ways of education in virtual classrooms were even turned into opportunities to learn and foster more equitable partnerships with greater impact (Berkey & Lauder, 2021; Lin & Shek, 2021). Some also responded to the new demands created by the pandemic and tailored service activities to emerging needs (Gresh et al., 2021; Tsima et al., 2020) or noticed strengthened connections between stakeholders due to the shared experience of disruption of all of our lives (Grenier et al., 2020). However, others found that face-to-face service-learning was still preferred by students and teachers, mostly because of communication and technological challenges (Doody et al., 2020; Hall, 2020; Wong et al., 2020). Particularly for fostering connections between participants and engagement in the process, as well as for developing trust, virtual learning seems to fall short (Filoteo et al., 2021; Guy & Arthur, 2021). Mejia (2021) noted that, in times of crisis, the risk of reproducing "community-campus connections, obligations, and responsibilities that are hierarchical and detrimental and, at times, exploitative" (p. 47) becomes more visible; she pressed for centering the community partners' needs to ensure reciprocity is sustained.

Overall, the literature reports mixed experiences. In this article we investigate the various effects of early responses to the COVID-19 pandemic on service-learning activities and their beneficiaries at the VU Amsterdam, in order to better understand how a crisis situation influences innovative pedagogies such as service-learning and how, in such a situation, shortcomings of these pedagogies could be accounted for, or mitigated in the future.

Specifically, we aim to answer two research questions:

- How did key service-learning actors (students, teachers, and community

partners) respond to the COVID-19 crisis in the early phase of the outbreak?

- What are the effects of these responses to the crisis on reciprocal interactions between students, teachers, and community partners?

Theoretical Background

To study the effects of the COVID-19 crisis on service-learning activities and subsequently the reciprocal interactions between key actors, reciprocity needs to be conceptualized. In some of the foundational service-learning literature, the idea of reciprocity is conceived as an essential element of service-learning (e.g., Bringle & Hatcher, 1995; Honnet & Poulsen, 1989). The concept of reciprocity as a specific form of relational exchange between individuals and groups has been discussed in various contexts in community engagement literature. The few that have examined the multiple possible understandings of reciprocity in service-learning in more depth tend to describe the concept on a dichotomous spectrum of transactional and transformational, technocratic and democratic, "thin" and "thick," or traditional and enriched (Enos & Morton, 2003; Henry & Breyfogle, 2006; Jameson et al., 2010; Saltmarsh et al., 2009).

Though each of these authors uses slightly different nuances in their framing of such a spectrum, the one end of the spectrum is generally described as a mutually beneficial transaction between the actors, where actors perform activities separately and service is seen as a charity and/or where power balances are unequal. Whereas the other end of the spectrum is described as mutual transformation, challenging and stimulating each other's growth, transcending unequal power balances with combined commitment to a larger goal and with an ability to change the system. These dichotomies can be seen as problematic because they present the latter end of the spectrum as the ideal relationship between service-learning actors, failing to acknowledge the diversity of objectives and contexts, for example in the needs and capacity of the different actors, and the dynamics of the relational processes (Sachs & Clark, 2016).

To provide more depth and nuance to the discussion on the concept of reciprocity, Dostilio et al. (2012) have built on literature from various disciplines to delineate three categories of reciprocity: (1) exchange-oriented, characterized by "the interchange of benefits, resources, or actions" (p. 19); (2) influence-oriented, wherein "processes and/or outcomes of the collaboration are iteratively changed as a result of being influenced by the participants and their contributed ways of knowing and doing" (p. 19); and (3) generativity-oriented, wherein "as a function of the collaborative relationship, participants (who have or develop identities as co-creators) become and/or produce something new together that would not otherwise exist" (p. 20). This conceptualization steps away from a dichotomous framing of reciprocity with one orientation being inherently better, more ethical, or of greater value than the other, and instead embraces the various orientations in which reciprocity can play out in different contexts and can be influenced by a multitude of factors. This flexibility is important, as it allows for the evaluation of relationships as organic processes, without being tied to a focus on a specific orientation as being ideal (Sachs & Clark, 2016). Therefore, these categories are used as a lens through which relationships between key actors in service-learning courses conducted during the COVID-19 pandemic are evaluated (Figure 1).

Figure 1. Three Categories of Reciprocity
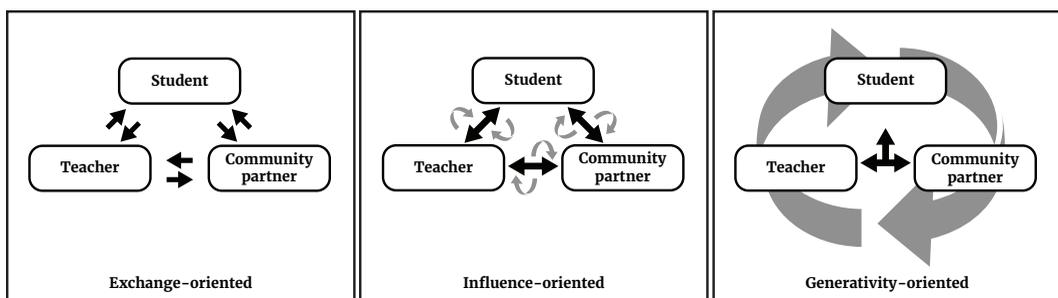
Note. Based on Dostilio et al., 2012.

Study Context

Community Service–Learning at the VU Amsterdam

In the *Strategy 2020–2025* the VU Amsterdam indicates that it wants to "develop future-proof forms of education" (p. 39). The ambition of VU Amsterdam is to involve students and researchers in addressing social issues as a central theme. With the A Broader Mind project, the VU Amsterdam is giving concrete expression to this strategy through, among other initiatives, the implementation of community service–learning (CSL) throughout the university (VU Amsterdam, 2020, p. 43).

The implementation of the CSL program is conceptualized, planned, and coordinated by a dedicated CSL team. The CSL team consists of teachers, researchers, and support staff. Implementation strategies are investigated following an action research approach, in which the CSL team seeks to realize transformative change in both the university and local communities through the simultaneous process of taking action and doing research (Reason & Bradbury, 2005).

The team recognizes four phases: (1) matching of societal issues with education and learning activities; (2) codesign of classroom-based and community-based activities; (3) execution, monitoring, and evaluation; and (4) knowledge sharing. During all phases, CSL activities are taking place. These CSL activities can have diverse levels of interaction with the community, varying from very intense contact to a couple of contact moments. Within the context of the VU Amsterdam CSL program, community partners collaborate with the CSL team. The community partners provide the research questions on which students can work. In this way the community partners are commissioners of projects with societal relevance in lieu of the community. The CSL team thus has to identify potential partners, locate course coordinators, and align interests and possibilities to collaborate.

On March 13, 2020, the Dutch government implemented a lockdown in the Netherlands to slow the spread of the SARS-CoV-2 virus. As a result of social-distance measures, all higher education institutions were closed and education started being offered online. This change also affected the CSL courses offered at the VU Amsterdam. The timing of the distancing measures meant that the ongoing courses had to switch to an online format halfway through, and courses offered in the period April–June had to be adapted. The CSL team, teachers, and community partners had to come up with alternative design choices in a very short time frame.

Methods

Overall Research Design

Given the severe and abrupt disruption caused by the lockdown in the Netherlands, we adopted an exploratory design in our study. This research design is appropriate for the novel character of the research topic and allows for identification of new facts, issues, and conditions that are also specific to our research context. Thus, we intentionally did not rely on an existing theoretical framework to guide our study. Instead, we chose to adopt an abductive reasoning approach, allowing us to dynamically shape our study based on the evolving empirical evidence. As our investigation progressed and we delved deeper into our research, we found it valuable to incorporate the categories developed by Dostilio et al. (2012). These categories proved instrumental in guiding our exploration, especially in addressing our second research question. Their insights not only provided a structured foundation for our analysis but also enabled us to uncover meaningful patterns and connections within our data, ultimately enhancing the depth and rigor of our research.

Sampling and Data Collection

In this study, we selected four CSL courses offered at the VU Amsterdam. The selection was based on the starting date, which indicates how much time was available for the actors involved to adapt to the online education context. In line with the exploratory nature of our research, inclusion criteria sought for diversity in this regard so that a wider range of perspectives could be identified. Nevertheless, the number of included courses was constrained by the restrictions in place during the study. To preserve anonymity, we have omitted the names of the courses. As described in Table 1, Course 1 was running when the lockdown was announced and had to switch to online during the course activities. Course 2 and Course 3 started in May 2020, and thus they had 3 weeks for a complete switch to online, whereas Course 4 started in June.

Participant Recruitment and Data Collection

Invitations were sent to all teachers, coordinators, and commissioners to schedule interviews and focus group discussions just after the end of each course. Students were contacted through the course coordinators and lecturers, either via the electronic learning environment or during (online) course activities. Included participants by stakeholder group and course can be found in Table 2.

We collected data through semistructured interviews (*n* = 23) and focus group discussions (*n* = 3) to explore the experiences of teachers, students, and community members during the rapid switch to online learning. Interviews have enabled us to gather individual perspectives and experiences, and focus group discussions have facilitated the exploration of shared experiences and group dynamics. The use of both interviews and focus group discussions has also contributed to the overall quality and validity of the study, since the diversity in perspectives has helped us to uncover nuances and contradictions within the data, leading to a more robust interpretation of findings (Ottmann & Crosbie, 2013). For both methods, we developed a topic list for each stakeholder group. The main topics in these guides were the design of community–based activities, the benefits for the community partners involved, and students' reflection and outcomes.

Interviews were conducted in Dutch or English depending on the participants' preference. Due to the COVID–19 situation, all interviews were conducted online via Zoom. Interviews lasted approximately 45 minutes and focus group discussions 60 minutes. All data was transcribed verbatim.

Table 1. Overview of Courses Included in the Study

Course	Time	Description
Course 1	February–June	An elective master's course offered to master's students of any faculty in the VU university. In this course, 11 students from various master's programs were enrolled in two interdisciplinary teams: • The Connected City team addressed digital possibilities and challenges for all Amsterdam citizens, and the increasingly data-driven society. • The Clean City team addressed waste management, circularity, sustainability, and a healthy living environment in Amsterdam.
Course 2	April–May	An 8-week bachelor's course offered within the Faculty of Science. In this course, students perform tasks for clients from society within the framework of community service-learning. In addition to social services, the aim is to learn to reflect further on their role as an academic professional in the field of health by entering into a discussion about health & well-being with groups in society that are distant from the academic world. In other words, this course is aimed at introducing students to the translation of academic knowledge into daily practice in society.
Course 3	April–May; June	An 8-week master's course in health communication science and its practical application. The course consists of a theoretical component that addresses behavioral change and (health) communication science, which students learn to apply during the collaboration with a community partner acting as the commissioner, to whom students present a recommendation report. The same course is also offered in June (4 weeks long, but with the same study-load).
Course 4	June	A 4-week second-year bachelor's course that is part of one of the programs offered within the School of Business and Economics at the VU Amsterdam. In this course, students have to propose a solution to a real-life business problem by applying relevant theories and methodologies, and to convincingly present a set of evidence-based recommendations to a broader audience.

Table 2. Overview of Participants by Stakeholder Group

Course	Students	Teachers	Commissioners
Course 1	11 (interview)	4 (FGD*)	1 (interview)
Course 2	2 (interview)	3 (interview)	1 (interview)
Course 3	8 (2 FGD*)	1 (interview)	2 (interview)
Course 4		1 (interview)	1 (interview)
Total	21	14	5

Note. * FGD = focus group discussion.

Data Analysis

Inductive thematic analysis was conducted to generate themes. In the first step, the first three authors read a selection of two transcripts and inductively developed codes. Codes generated by the first three authors were then discussed and a harmonized codebook developed. Using the codebook, authors FO and EU analyzed all the transcripts. Themes were iteratively developed from the analysis of the transcripts. To better understand the effects of the COVID-19 crisis on reciprocity, those themes were clustered around the categories defined by Dostilio et al. (2012), and they give the structure to report our findings in relation to the second research question. These categories proved instrumental in guiding our exploration, especially in addressing our second research question.

The inclusion of interresearcher analysis and frequent discussion among the authors played a pivotal role in enhancing the quality and validity of our study. This collaborative process helped in identifying biases, challenging assumptions, and ensuring that the research was grounded in a rigorous and well-rounded interpretation of the data (Swanborn, 1996).

Ethics

All participants received and signed an online informed consent form prior to the interview or focus group they volunteered to be part of. This consent form included the purpose of the interview and the study, and the procedures around how the data are processed and stored. Interview transcripts were stored on a protected VU Amsterdam server. We also ensured participants' confidentiality in the reporting of this data. To this end we have anonymized the courses, referring to courses with a generic name. Additionally, quotes have not been ascribed to individual participants. To ensure that students did not feel coerced or concerned about implications of participation on their grades, data collection took place after the course was completed and the final grade provided.

Results

From March until July 2020, the COVID-19 pandemic and the measures that were implemented in response resulted in a crisis situation in the Netherlands. In our study we investigated how the crisis affected the reciprocal interactions in four service-learning courses at the VU Amsterdam during this period. In all courses included in this study, teachers were able to adapt and continue their course. However, redesign of community-based service activities was considerable. In this section, we first summarize per course how courses and respective activities were redesigned due to the crisis (Table 3). Next, we describe the effects of the crisis on different views of reciprocity.

The Effects of the COVID-19 Crisis on Reciprocity

Exchange-Oriented Reciprocity

High burden on teachers. In all courses included in this study, course coordinators were able to adapt their courses to the circumstances and change the course to an online format. In doing so, they carried out the courses according to the intended schedule, as both classroom-based and

Table 3. Redesign of Courses Due to COVID-19 Crisis

Course	Initial community-based activity	New community-based activity
Course 1	Team members (master's students) devoted their thesis, research project, or internship to a discipline-specific subquestion of the challenge, and integrated the individual, discipline-specific insights into a collective interdisciplinary report based on interviews and focus groups, presented during a final event.	Switch to online data collection and the final event took place online. New service opportunities were identified during the course. The Clean City team created a website to disseminate their findings to a wider audience. The Connected City team supported the digital inclusion of a community of migrants who could no longer meet in person due to the pandemic.
Course 2	The initial assignment comprised a collaboration with the Municipality of Amstelveen for whom students would research the needs of the Indian community of the city regarding health care services. This collaboration was put on hold as students could no longer recruit and speak with participants in person, and online recruitment could not be arranged on such short notice.	The new community-based activity consisted of identifying how the student community at the VU Amsterdam experienced COVID-19-related issues and how this impacted their well-being. Students presented their findings and policy recommendations based on interviews with fellow students.
Course 3	The assignment consisted of a collaboration with the tobacco/antismoking team of a national mental health and tobacco, alcohol, and drug (mis)use research institute and the communications department of the VU responsible for the "smoke-free campus" campaign. Students focused on a specific stakeholder group and presented their insights and their own proposed health communication intervention based on interviews with different groups of stakeholders, including fellow students.	The mode of communication, data collection, and final presentation were now all online).
Course 4	The community-based activity was designed in an online context, as this was the first time this course included a service-learning component.	COVID-19 presented the coordinator with the opportunity to include a real case in addition to the existing fictional cases. Students acted as a team of consultants and analyzed the effect of the COVID-19 crisis on the employees of the Salvation Army. Based on qualitative and quantitative research, the students provided recommendations to management on how they could mitigate the negative effects of the crisis on the organization and its employees.

community-based activities were adapted (or completely redesigned) to match current challenges and be carried out with online methods and materials.

To meet this schedule, however, teachers interviewed reported that they had to commit additional working hours to their courses. This additional time was necessary to adapt courses to the online environment and to get acquainted with the required technology. Also, in two courses, the teaching staff decided to offer additional online contact time with students to maintain a steady pattern of knowledge exchange and to discuss how to adapt to the changing and uncertain circumstances.

Teachers reported facing considerable barriers and challenges and stressful conditions during the initial phases of adaptation. Specific challenges included the very uncertain nature of the new online setting resulting from COVID-19 measures and the associated increased workload to keep courses running in the best way possible. Teachers in Courses 1, 2, and 3 emphasized that they did not have enough time to prepare for the abrupt transition to online teaching. Course 1 was the most extreme case, as the course had to be moved online while it was in progress. Nevertheless, teachers and

students indicated that the long duration of the course (20 weeks), in combination with the relatively low frequency of classroom-based activities, made it possible for them to respond more effectively to the changing circumstances. In the case of Course 3, which was offered in two periods, the teachers noted that the experience acquired with online teaching in the first edition of this course helped to make the course smoother in the second edition.

In all courses, teachers reported they were unfamiliar with the platforms they could use (e.g., BigBlueButton, Skype, or Zoom) and the resources available in those platforms (e.g., private chat, whiteboard, pools, breakout rooms). Also, they were unfamiliar with other tools that they could use to make meetings more interactive, or as interactive as they had been when offline (e.g., use of sticky notes, mind maps). Most of the time, teachers engaged in a trial and error process and the outcome could be different from what was initially intended. They relied on information shared either informally between colleagues or more formally through official university communication channels to cope with these challenges.

> I think, like in, when we moved online we were not well prepared for that as teachers. Like, I think we did our best and it was good enough. . . . Also, we had the benefit of this interaction between the two groups [of teachers], so we could also learn from each other. (Teacher)

Safeguarded Students' Academic Outcomes. Overall, teachers felt that the academic outcomes for students, such as the integration of course-specific theoretical knowledge and the development of writing, presentation, and collaboration skills, were not affected by the COVID-19 crisis and therefore were mostly realized as intended. In line with this finding, students felt adequately prepared for their exams and indicated they were able to carry out written assignments and online presentations as required. However, evaluations of outcomes such as civic engagement, reflexivity, and social responsibility were mixed. On the one hand, a teacher in Course 3 believed that the learning objective of connecting academic, disciplinary knowledge with civic engagement was realized. She observed that independently collecting data and formulating a policy recommendation for the commu-

nity partner helped the students to identify issues of public concern and gave students a clear perspective on the value of academic theory.

> I have to say that this year, in spite of Corona, I'm actually very enthusiastic about how the assignment went. . . . The partners hosted one lecture together, so around half an hour each. I got the impression that it gave the students a clear impression of the link with the community partner, and why it was important for this course. (Teacher)

This point of view was supported by the students, who noted that the community-based activity showed them the value of academic theory for practice, making the theory much less abstract.

Moreover, all teachers indicated that it was difficult to instigate and observe reflexivity. Reflection is one of the key pillars in service-learning, and one teacher explained (Course 4) that the opportunity for valuable reflection was an important reason for incorporating service-learning into his course in the first place. Teachers attributed the struggles they experienced to the limitations of the online learning environment. Several teachers explained that, during previous editions of the courses, they facilitated reflection on the collaboration process and on students' views and ideas by asking context-specific questions during group discussions. In an online setting, the teachers felt unable to instigate this type of interaction and unable to adequately and specifically respond to students' ideas and arguments. They described the online conversations as forced, rather than spontaneous:

> Seeing reflection online, I think is much, much more difficult than offline. . . . It's different if you talk to them individually in the room. . . . But here, remotely, really experiencing reflection from the side of the student was really difficult. (Teacher)

Community partners experienced direct benefits from community-based activities. In all courses, community-based activities moved online due to the social distancing measures. Students and community partners noted that the online format allowed for more flexibility, making it easier to include

all target groups in research. All community partners received a report, a poster, or a video, and/or attended a live presentation online wherein the students communicated the outcomes of the community-based activity. The community partners interviewed were satisfied with the findings and recommendations they received. In general, the partners noted that the students were able to present a good overview of the issues, interventions, and recommendations and formulate concrete conclusions. For example, in Course 3, the two partners felt that the collaboration was a win-win for both of them because the collaboration resulted in original and relevant insights and interventions. One group in this course placed COVID-19 at the core of their intervention by stressing the importance of lung health in their antismoking campaign. The partners reported that the online nature of the course did not seem to have an impact on the project outcomes. The community partner explained the value of directly collaborating with the students in the service-learning project:

> I can read all the articles about youth programs I want, but I would much rather just have a conversation with them. . . . I'm always curious about what students come up with themselves, what they think works. (Community partner)

The community partner in Course 2 shared this view, indicating that the collaboration contributed to his improved understanding of student perspectives and that the outcomes could be used to enhance the communication between the university and the students regarding the impact of COVID-19 on student well-being. One partner in Course 3 specifically noted that she was pleasantly surprised with the concreteness and specificity of the interventions that the students recommended, and felt they were "very practical." The community partner in Course 4 also felt that the recommendations from the students were practical and helpful, providing concrete insights to build upon.

Generativity-Oriented Reciprocity

The need to switch courses to an online format has enabled teachers and course coordinators to demonstrate creativity, adaptability, resilience, and motivation to contribute to a relevant societal issue. Thus, the COVID-19 crisis also opened up opportunities for urgent and relevant community-based activities and for new conceptualizations of community. The nature of the community-based activities in Courses 1, 2, and 3 was directly related to the COVID-19 outbreak and the resulting social-distancing measures. In Course 1, the crisis sparked a sense of urgency for addressing topics related to digital literacy and digital inclusion among the students. It motivated a group of students working on the digital divide to go beyond course requirements and, supported by a teacher and a community partner, design a new community-based activity wherein the students assisted community members in connecting with each other during the crisis (e.g., teaching them how to set up a video-conferencing or chat account).

In Course 2, to avoid the cancellation of the course, the teachers had to come up with a new community-based activity on short notice. They then saw an opportunity to respond to a need that emerged as a result of the pandemic, namely investigating the effects of the COVID-19 pandemic on student well-being. This choice opened up new opportunities for service and research. After the start of the course, the Student and Educational Affairs department at the VU Amsterdam showed an interest in this assignment and got involved as a community partner, as the results could be used to inform their policy toward students' well-being during the crisis. Also, during the course, due to a collaboration between the course coordinators and other research in the same department, this assignment was embedded in an international research project on comparing the impact of COVID-19 on students in different countries.

Finally, in Course 4, the teacher had decided to incorporate a community-based service activity for the first time, introducing a real-life business problem as one of the topics a subset of the students (32 out of 150 students, in eight groups of four students) worked on. The collaboration arose from the need of a community partner, the Salvation Army, who searched for advice in mitigating the negative effects of the COVID-19 pandemic on its organization and its employees, and who was brought into contact with the teacher of this course via the service-learning team at the VU Amsterdam. The teacher's decision to collaborate with the community partner was motivated by a perceived match between the community

issue and the goals of the course, as well as a sense of urgency to address the consequences of the COVID-19 pandemic. However, the teacher did not observe substantial difference in motivation between the students who collaborated with the Salvation Army and the students who worked on a fictional business problem, which he attributed to the limitations that online education imposes on the types of experience offered to students:

> I didn't experience a big difference between the engagements in the case with a real organization compared to a fictional case. And it's a bit disappointing, to be honest. . . . It might have made a difference if in a non-COVID world, if we go with these students into [a shelter of the community partner], and you know, students see what's going on and why they are doing it. (Teacher)

Interestingly, in the only course of our study that did not incorporate a topic explicitly related to COVID-19 (Course 3), several students in this course were somewhat frustrated that they could not develop a health communication intervention for COVID-19. Given the urgency and relevance of the topic, students expected that the course would be more responsive to the crisis:

> I thought [the assignment] could have been a bit more responsive to Corona time. I thought maybe they were going to explain how to go about conveying information to the whole of society, for example, . . . that Corona is out there, and that you have to wash your hands. I thought it would be nice to respond to that. . . . So I thought that it was a shame [that this was not the case], because that was sort of my expectation. (Student)

Influence-Oriented Reciprocity

The redesign of both classroom-based and community-based activities to fit an online environment influenced the frequency and quality of interaction between the different constituencies. For instance, in Course 2, workgroup sessions were shortened considerably (from 4 hours per session to approximately one hour per session) because the teachers deemed it too intense for the students and for themselves to participate in 4-hour online sessions. We also noted that

the abrupt change caused by the COVID-19 crisis had a negative impact on one teacher's motivation and commitment to the course:

> Yes, very honestly, I think I was a lot less involved in the course as it was now. Well, part of that was due to the change in the assignment, if we still had the [original community-based activity] I think I would have invested a bit more than I have done now. (Teacher)

This teacher's reduced investment may in turn have had an impact on students' outcomes. This kind of negative perception toward online education can be a relevant barrier to realizing principles of reciprocity in online service-learning. In most of the courses (Courses 2, 3, and 4), this redesign resulted in less frequent involvement of community partners in the collaborative process. In Course 2, the need to develop a completely new community-based activity on very short notice meant the course started without a community partner. As the community partner became involved when the course had already started, there were no opportunities for interaction between the students and the partner at the beginning of the project. In Course 3, the frequency of interaction between the students and the community was reduced from three to two moments in the course. Also, the format of one interaction changed: The initially planned live lecture and Q&A session, wherein the community partners introduce the assignment to the students, was replaced by a prerecorded lecture and the opportunity to ask questions via email. This change was implemented to give more flexibility to both students and partners. The second interaction moment was at the end of the course, when the community partners attended an online presentation session where they were invited to directly engage with the students. The first and second edition of this course were both organized according to the same design. The community partners did not report any difference between the two courses. In the case of Course 4, the teacher was reluctant to overburden the community partner and therefore did not incorporate any meetings between the students and the community partner during the course.

Those design choices seem to have impacted the way community partners perceived their service-learning experience. Several of them

noted that, partly due to the COVID-19 crisis, they were not able to have as much direct interaction with the teachers and the students as they would have liked. For example, the partner in Course 2, due to the urgency of the redesign, unfortunately was unable to participate in the design and framing of the community-based project. In normal circumstances he would have been able to specify that a more in-depth focus on the views of a particular target group (i.e., international students and students with a foreign background) would have benefited his department more. The partner stressed that, in the future, he would like to be more involved in formulating the research questions and designing the activity, as well as to have more interaction during the course to be able to fine-tune the question and build on students' preliminary findings. The community partner in Course 4 also noted that he missed the opportunity to discuss the outcomes with the students and gain a better understanding of their thought process:

> It would have been nice [for me] to be able to just ask [the students] a few critical questions. Yes, it's great that you offer this recommendation report, but what can I do with this? So it is important for them [the students], to learn from this [collaboration], but it's also just about the connection between who is asking the question [the community partner] and the answer that is being given [by the students]. (Community partner)

Finally, in relation to the interaction with their peers, both students and teachers reported that student–student interaction remained functional in the online environment, and students did not perceive online communication as a major issue. This mode of communication was facilitated by their previous knowledge and experience with some technologies for online communication and collaboration.

Discussion

Since March 2020, as a result of social-distance measures to slow down the spread of the SARS-CoV-2 virus, service-learning courses at the VU Amsterdam have had to switch to a full online format. In this article we have assessed to what extent reciprocity principles have been upheld in community-based activities undertaken in four courses at the VU Amsterdam during these initial months of the COVID-19 pandemic. By the means of a case study design, we have assessed the overall experience of the online setting of those courses according to different constituencies, namely teachers, students, and community partners, as well as their perceived outcomes.

Reciprocity builds the most important foundation of service-learning (Furco, 1996). To a larger extent, we found that it was possible to achieve an exchange-oriented view of reciprocity in all the courses with online service-learning, in spite of the challenges posed by the COVID-19 circumstances. The need to switch courses to an online format has enabled teachers and course coordinators to demonstrate creativity, adaptability, and resilience. This finding is consistent with the empirical analysis of Iivari et al. (2020) on basic education in India and Finland. These authors have found that educators arrived at creative and innovative solutions and showed resilience and perseverance that supported the learning and well-being of their students during the COVID-19 pandemic.

Due to the context posed by COVID-19 measures, we found that teachers had to adopt those technologies even when their expertise in learning and teaching online was not well established, and in the absence of extrinsic motivators. However, lacking the appropriate time to prepare, design, and implement the online learning and community-based activities was an important challenge faced by teachers. The need for time to prepare and implement courses is often a critical element present in the literature on both online education in general (Gacs et al., 2020) and online service-learning (Bringle et al., 2016; Garrison & Arbaugh, 2007; Guthrie & McCracken, 2014; Helms et al., 2015; Meyer, 2014; Waldner et al., 2010, 2012). In times of crisis, however, redesigning the course to be virtual was not entirely possible, especially in the case of courses that were running during or about to start just after the announcement of COVID-19 measures. To some extent, teachers tried to compensate by working extra hours, increasing contact time with students, and other creative solutions. The high burden on teachers as a result of the pandemic pivot is true for the majority of courses, whether or not they had service-learning components (Bruggeman et al., 2022; Stevens et al.,

2023). Nevertheless, the burden on teachers who are involved in service-learning has been considered higher because they also were often confronted by additional workload and stress associated with the need to safeguard reciprocal relationships with partners involved in those courses (Khiatani et al., 2023) and to manage the increased contextual uncertainty of service-learning activities during the pandemic (Andrade et al., 2022). It is also worth noting that some teachers discontinued the adoption of service-learning due to the constraints and restrictions posed by the pandemic (Andrade et al., 2022; Khiatani et al., 2023).

Nevertheless, both students and community partners reported issues they faced that might have been avoided if the transition to online education and the required changes in the community-based activities had taken place in a noncrisis context. In retrospect, we believe teachers can be proud of what was achieved in their courses given the circumstances. In spite of the challenges, they were able to maintain the integrity of the community-based activity while being sensitive to students' additional commitments and the needs of community partners.

The community partners we interviewed did not experience the sudden online switch negatively. Rather, they valued the students' input and effort, and in most instances valued the output that was presented to them. They did not experience working in an online setting as an obstacle, but rather appreciated the efficiency in terms of scheduling and communication. As in the context of the courses we assessed, the intended outcome and benefits for the community partner generally concerned the output (results and recommendations by students); the sudden switch did not affect the outcomes. We have seen that within the context of CSL within the VU, online communication between students and community partners remained after the COVID-19 pandemic. Now most courses combine both online and face-to-face meetings.

In our study, we could also observe that in some cases generativity-oriented reciprocity was achieved. The flexibility required from students and teachers offered new opportunities for the community partners, as the nature of the assignment/project was adjusted to meet the current needs and problems experienced due to COVID-19. Donnelly et al. (2021) pointed to the flexible and adaptable nature of CSL projects, which is often positioned as a limitation of this type of education because of a lack of rigor, and argue that, in times of crisis, it could actually be a benefit. We showed that some courses creatively focused on the students' community and their relation with the VU Amsterdam in COVID-19 times. The outcome of this choice was appreciated by the partners and, to some extent, by students—especially in the assignment about smoking-prevention campaigns. This outcome suggests that the collaboration in the community project posed new opportunities and benefits during the observed periods during the COVID-19 crisis, particularly to community partners, and that the perceived lack of rigor of CSL methods could result in creative and insightful adaptations in response to changing circumstances (Donnelly et al., 2021).

Particularly, we would like to point to two examples of students' creativity in response to the circumstances of the pandemic. First, a group of students saw an opportunity to work with a social worker in order to help a group of women from a disadvantaged background connect to each other digitally during the pandemic, as the way they were used to gathering together in the past was no longer possible. Second, in the same course, another group of students came up with the idea of building a website to showcase their work online. These findings confirm the suggestions posed by others that the integration of digital technologies may expand students' use of technology to creatively approach and contribute to civic and social issues in communities (Bringle & Clayton, 2020; Grenier et al., 2020). However, the process of collaboration was hindered due to limited interaction between students and community partners as a result of the COVID-19 measures. The intended site visits and in-person meetings with the community partner were cancelled, and all interactions and communication took place online. The result was a reduction in essential elements of the community project: for students, a personal affinity with the activities and goals of the community partner; for the community partner, a deeper understanding of the development process of recommendations on which students based their report. Our results suggest that in order to establish and maintain a stronger and deeper connection between students and community partners, purely online work and learning environment may not suffice. Thus, our findings are in line with other studies that

reported that in the online context of service-learning in times of crises, students' learning outcomes were attained (Lin et al., 2021; Morton & Rosenfeld, 2021), but engagement and transformative learning were impaired (Guy & Arthur, 2021; Sturgill & Motley, 2013; Veyvoda & Van Cleave, 2020).

Transformative learning is often presented as a critical component of service-learning because it empowers students to become active, engaged, and ethical citizens who are capable of making a positive impact on their communities and society at large. However, there is, at least in the European context, a rising demand for service-learning as a pedagogy to increase employability by promoting competences deemed valuable by the labor market. This expectation is not a problem per se, but our findings suggest that transformative learning outcomes may not happen if there is no careful consideration for them in the service-learning activity—even in the presence of more generative (or less transactional) forms of reciprocity. Thus, in a context wherein an increasing number of universities include service-learning as a pedagogy that contributes to society, careful—and preferably explicit—considerations must be made to accommodate not only what kind of contribution is aimed for, but also the envisioned benefit to students' learning.

Strengths and Limitations of the Study

An important strength of this research was the inclusion of a variety of courses, disciplines, and levels of previous experience with both service-learning and online education. This abundance of sources has offered thick data and multiple perspectives.

One important limitation of the current study refers to the limited number of student interviews. We found it particularly hard to recruit and engage with this group as a result of absence of face-to-face contact. For one course we were not able to collect from the student perspective, so this element was assessed indirectly through interviews with the course coordinator and community partner. For the other courses, however, the limited number of students also yielded, at best, a partial and nonrepresentative view of this group.

Another limitation refers to the fact that the community-based activities in the majority of the courses in this study included some sort of primary data collection that could be relatively easier online. As suggested by one of the courses in which the original community-based activity was deemed "impossible to continue online" by the course coordinator and teachers, other variations of service-learning are facing additional challenges due to COVID-19. These challenges, most likely, have an impact on perceived benefits and reciprocity. Although we agree with Krasny et al., (2021) when they affirm that social distancing is no reason to stop service-learning, when teachers switch to online service-learning, they must make sure that existing social exclusion and divides are not accentuated.

Implications for Service-Learning

Our results indicate that the crisis offered an opportunity to break through perceived barriers of online education, and of online service-learning more specifically. It is possible that such a forced adoption of online education under significant time pressure caused by the COVID-19 crisis has exacerbated existing negative preconceived ideas about online education and online service-learning displayed by some teachers. However, this study confirms that the use of digital technologies and virtual environments due to the loss of physical shared space forced creative and innovative ways of conducting service-learning that can stretch and expand everyone's ideas of community (Bringle & Clayton, 2020; Grenier et al., 2020). Our findings show that digital technologies are helpful but a blended approach may be necessary, as some essential elements, such as engagement and deeper learning, may have received less attention in the response to the crisis. Relationship building between teacher and student, teacher and community partner, and student and community partner are key to a successful online service-learning experience (Grenier et al., 2020). Specifically, an in-depth interaction that informs both the students and the community partner of one another's expectations, progress, and satisfaction with the outcomes of the project is one of the most valuable elements of the collaboration process (Seru, 2021), and unfortunately this type of interaction appeared to be at risk during the evaluated courses. Therefore, more attention must be given to involving the community in the design and through the collaborative process, including activities aiming to facilitate community-student interaction.

However, our findings corroborate recent

research on online education which suggests that at least some online features will most likely stay in the long term (Nogales-Delgado et al., 2020; Witze, 2020). Therefore, to ensure that teachers are offered the best conditions to support online experiential education, institutional platforms for training and (formal and informal) mechanisms for knowledge sharing on digital technologies for education must be implemented and nurtured (Sotelino-Losada et al., 2021). This type of support is essential to building teachers' self-efficacy with digital technologies and online tools, to enhance their education and thereby their interactions with students and communities. Also, knowledge sharing of best practices and positive experiences can help to address existing negative perceptions toward the adoption of digital educational technologies. It is also important that teachers consider the familiarity of both students and community partners with the core technologies used in the course (Tapia & Peregalli, 2020). Although in our case study, students reported that their existing knowledge and experience in online collaboration with their peers helped, such familiarity cannot be taken for granted in other contexts. Actually, we also found some evidence that additional measures should be taken to make sure communities that are already facing difficulties accessing digital technologies are not further excluded due to the quick transition triggered by the COVID-19 pandemic.

The limitations imposed by the COVID-19 pandemic on in-person interactions between students and community partners have raised important questions about the potential impact on transformative learning in service-learning initiatives. Although it's clear that students can still achieve learning outcomes through online interactions, the deeper level of engagement and transformation may be compromised. Here are some considerations and strategies to deepen transformative learning even in an online service-learning environment:

1. Consider virtual immersion experiences. Virtual immersion technologies may contribute to bridging the gap caused by the absence of physical site visits. Although challenges remain, these technologies may contribute to the construction of joint narratives and create transformative learning experiences (Yepez-Reyes & Williams, 2021).

2. Action projects with real impact have the potential to encourage students to design and implement action projects that have a real impact on the community partner's goals. Within the VU Amsterdam, the interdisciplinary community service-learning module is a successful example of this approach (Tijsma et al., 2023).

3. Long-term engagement can extend the service-learning project beyond a single semester or academic term. Through long-term engagement, students can develop deeper relationships with community partners and experience more profound transformations over time (Tijsma et al., 2021).

Conclusion

In line with the ever-growing literature on service-learning during the COVID-19 pandemic, our study showed that courses that were redesigned in the early months of the crisis at the VU Amsterdam were still able to provide reciprocal relationships and outcomes to the parties involved. Nevertheless, it is important that teachers receive optimal support both on mastering online education technologies and on the different design possibilities that can offer both students and communities the best service-learning experience possible. Such support is particularly relevant because switching to an online environment without a proper consideration of the challenges and opportunities may accentuate existing social exclusion and divides. Finally, our findings also show that the redesign of service-learning activities has varying impacts on different kinds of reciprocity, and more research on how these outcomes relate to each other is needed.

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