Developing Personal Agency: Students' Reaction to Changes in a Community Service–Learning Module during COVID-19 Lockdown

Nita Mennega, University of Pretoria, South Africa
Martina Jordaan, University of Pretoria, South Africa

Abstract: *This article employs an explanatory case study approach to describe students' responses to their community service module and the changes it underwent during the COVID-19–induced social isolation of 2020. Under these conditions, completing the community service module required remarkable efforts from both lecturers and students. The student feedback presented in this article was gained from a reflection assignment they completed after project delivery. It offers rich insights into the challenges they experienced and the outcomes of their projects. The study finds that it was extremely difficult for the students to start with their community service projects. Social isolation measures were still in place, and students were scattered across the country. Students reported that they were initially unsure of the process, but when they took ownership, they were empowered by a sense of agency. They developed a sense of self-sufficiency through the process of identifying a project for themselves and also felt less anxious during the pandemic when they could make a positive contribution. The students were ultimately proud that, as individuals, they could make a difference in their society.*

Keywords: *Agency, Community Service Module, Self-Sufficiency, COVID-19 Pandemic, Lockdown, Change*

Introduction

University teaching and learning were brought to a halt in March 2020 due to global COVID-19 isolation measures. As the initial hard lockdown measures were gradually lifted, universities responded by presenting their theory classes online. Practical courses such as community engagement and service-learning modules each responded differently in their decisions on how to proceed.

Many community service modules adapted their requirements by substituting physical community services with online assignments that could be completed from home. This case study showcases a community service module that adapted to the unusual demands imposed on it by the social restriction conditions imposed by the COVID-19 pandemic during the year 2020 and succeeded in empowering its students to complete their community service while being isolated at home. In particular, it describes the reaction of the students of the module, who had to adapt to a fundamental change in the module structure. The module itself is also described to provide an in-depth understanding of the case.

When the year 2020 started just like any previous year, the students of the community module chose their community partners based on the information provided to them on the university's learning management system and also according to discussions held with students from previous years who had successfully completed the module. They were looking forward to working with respected institutions, such as schools and animal sanctuaries, based on the previous student videos available on YouTube. When the 2020 COVID-19 social isolation measures were announced, everyone had to abandon the familiar and move to their homes. The community service module students felt the loss of their anticipated projects keenly and were also under the impression that their community service module would be canceled. As social

restrictions were systematically lifted, the module coordinators had to redefine the project to allow the students to successfully complete the module under new circumstances and a shorter timeline.

The data on which this specific case is built consists of responses from almost 1,500 students of the module on the challenges and opportunities they experienced while completing the module. These responses are richly descriptive and provide insights into the experiences of the students and the reasons behind their responses to the structural changes in the module. Therefore, the research question underlying this study may be defined as "how did the students of the JCP community service module manage to complete their module requirements during the nationwide COVID-19 lockdown?"

Literature Review

Resilience is defined as the ability to bounce back from difficulties experienced in life. The COVID-19 pandemic had an enormous impact on students, educators, and their respective educational institutions (Beale 2020). All stakeholders demonstrated a great deal of resilience in coping with the changes brought about by the social changes. Individuals had to be psychologically and physically resilient, while institutions also needed to be resilient in responding to the foundational changes that were necessary for survival.

The term *academic resilience* resurfaced, defined as "a student's capacity to overcome acute or chronic adversities in academic settings that could constitute major impediments to their academic success" (Martin and Marsh 2009, 353). Academic resilience (AR) is a construct made up of several components, with five factors significantly correlated with predictors of AR. All of these are character skills or dispositions: self-efficacy (confidence), planning skills (coordination), a sense of control, composure (low anxiety), and perseverance (commitment). Anxiety is the strongest of the negative factors that drive down AR, in contrast to self-efficacy, which raises an individual's AR (Martin and Marsh 2009).

Self-efficacy is the belief we have in our own abilities, specifically our ability to meet the challenges we face and successfully complete the tasks we need to (Akhtar 2008; Bandura 1997). Self-efficacy has been shown to be a better predictor of performance than previous achievement or ability and is particularly salient when individuals face adversity (Cassidy 2015). Therefore, many calls have been made for faculty to develop self-efficacy in students as a direct aim in developing their AR.

Personal agency is related to self-efficacy. Personal agency includes our beliefs, perceptions, preferences, and values. This influences our behavior (Pearson 2019). Accordingly, the better self-worth we possess, the better we can access our own personal agency. However, there are always environmental forces that influence our personal agency. This is called *structure*. It is the various forces that operate outside us that shape or limit our personal agency. Structure exerts forces on our choices and can also provide opportunities for our choices. Some environments present fewer opportunities for individuals to demonstrate personal agency and make it more challenging to demonstrate effective personal agency.

There are many structural impacts that we cannot control or influence, the COVID-19 lockdown being a prime example. Our agency lies in how we react or respond to these events

(Pearson 2019). When an individual believes their structure determines only part of their choices, they will act accordingly and experience more freedom to make choices and decisions.

Service learning during the COVID-19 epidemic allowed students and lecturers to re-imagine the role of the place in community engagement. Students could be engaged and develop a sense of responsibility for their communities while abiding by the rules of social distancing. Faculties found ways to facilitate community engagement through non-direct contact and preserving human connection (Veyvoda and Van Cleave 2020; Vicente, Moredo, and Cordero Jr. 2021). Ferdiansyah, Winarno, and Ardhita (2022) indicated that students involved in community projects during COVID-19 transported their sense of agency as learners into leaders.

Veyvoda and Van Cleave (2020) and Vicente, Moredo, and Cordero Jr. (2021) supported the continuation of service-learning events and service-learning projects throughout the COVID-19 epidemic, and various excellent service-learning projects were executed during the pandemic (Ngai et al. 2021; Jordaan and Mennega 2022).

Lin and Shek (2021) concur that students who did projects during the COVID-19 epidemic developed positive youth competencies. These competencies include emotional competence, resilience, self-leadership, caring disposition, and life satisfaction. Students found it especially meaningful to work in the community during a seemingly impossible situation as it added a sense of achievement and enjoyment to their lives (Lin and Shek 2021).

Background to the Module

The University of Pretoria′s Faculty of Engineering, Built Environment, and Information Technology presents a module focused on community engagement, the Community-Based Project Module. This module is an eight-credit module, which translates to eighty notional hours. The module is offered on a project orientation and open-ended basis. Students identify a possible project with the lecturer, work forty hours in the community, and thereafter reflect on their learning experience in various formats (Jordaan 2012). The Community-Based Project module (code: JCP) was created as a separate module to accommodate the large number of students enrolled in the faculty (JCP 2020 = 1,909 students). Most of the students are in their second year of study. The design of the module takes into consideration the demanding schedules and curricula of the students in this faculty (Jordaan 2014).

The module′s main aim is to benefit society and expose the students to real-life issues. The module′s focus is to instill a sense of social responsibility and awareness in students regarding social issues and values in the community. Previous research indicated that students developed group work and teamwork skills, time management, project management, and leadership skills during the execution of their project (Jordaan and Mennega 2019).

The JCP module contains several assessments that are all uploaded to the university′s learning management system (LMS). At the start of 2020, the module contained seven assessments. Two are completed before the students enter the community and five after the students have completed their forty hours of community service.

1. An assignment on the basics of community engagement and service learning is due after the orientation session.
2. The approval of the project plan is formally recorded on the LMS in the form of an assessment.
3. After the forty hours of community service have been completed, the student needs to upload a form containing their on-site assessment by a supervisor from the community.
4. A reflection assignment must be completed on the outcomes of the project using De Bono′s Six Thinking Hats process.
5. Each group submits a final project report.
6. Each group submits a final YouTube or vlog according to the prescribed criteria.
7. Each group creates a PowerPoint presentation that will be presented to the lecturer during the final team meeting (Jordaan 2013).

Typical projects that students identified pre-COVID were teaching mathematics, science, and computer skills to community members and school learners from disadvantaged communities and the renovation of school buildings and animal shelters (Jordaan and Mennega 2022).

COVID-19 in South Africa

The first positive case of COVID-19 was reported in March 2020 in South Africa. The South African government responded and imposed a strict lockdown from March 26, 2020. The lockdown was the most restrictive in the African continent (Stiegler and Bouchard 2020). The national lockdown included countrywide social (physical) distancing and stricter travel rules, such as closing all the national borders (Landa, Zhou, and Marongwe 2021).

All universities in South Africa were requested to shut down and identify alternative ways to lecture online (DHET 2020). This gave the universities the freedom to identify their own strategies. Overall, the response of universities was business as usual except for rethinking the delivery of the teaching of students (Van Schalkwyk 2021). This was a challenge for many universities (Mpungose 2020). However, the University of Pretoria was already using the Blackboard LMS, with most of the students′ assignments being submitted on the LMS.

Adapting the Module to COVID-19 Social Regulations

In South Africa, the academic year runs from February to December. During February of each year, all students attend the compulsory contact session of the JCP module, where they are orientated to the various unique aspects of the module. With the onset of the lockdown in March 2022, a total of 101 out of 535 groups had already formally proposed and registered their projects. The lockdown immediately presented a challenge to the students. During the first two phases of the lockdown, students were prohibited from visiting or working in communities.

As soon as the lockdown regulations were relaxed, the lecturer communicated possible alternatives to students that would allow them to work from home. Suddenly, the decision to proceed with the module lay with the students themselves. The students now had to identify projects themselves and approach community partners in their own communities. Students were exonerated from producing the final YouTube or vlog since it was too timeconsuming. The on-site assessment of a supervisor from the community was changed to a form emailed to the community partner. The final group presentation to the lecturer, using PowerPoint, was conducted online.

During the initial restrictive lockdown stages, students who already had community partners identified worried that they would be unable to complete the prescribed number of community hours at that specific partner. They were allowed to change their projects to online projects and to work from the safety of their homes (Jordaan and Mennega 2021).

Because of the lockdown regulations, the communities experienced new challenges. For the students, this presented new opportunities. It meant that they could work on their projects during the lockdown. An example of a new opportunity for online work came from schools. Many primary and secondary schools were in a position to continue with various forms of online teaching. Their learners and staff possessed the necessary digital devices and access to the internet. However, the teachers were ill-prepared for this kind of teaching. This presented an opportunity for students to assist. They focused on middle-class public schools (Jordaan 2020) because the less advantaged schools and pupils had no digital facilities. The students assisted by helping teachers with Google Classroom by creating YouTube videos and PowerPoints for the teachers. A few groups created YouTube videos on selected topics from the curriculum (Jordaan and Mennega 2022). The students reflected on the difficult tasks the teachers had during the pandemic.

Several groups developed websites to share information on mathematics and supported learners via WhatsApp. Other students made masks, shields, and hand sanitizers for disadvantaged communities (Jordaan and Mennega 2022). There was a serious shortage of masks in the community since the government had provided every pupil with a single mask only.

Students also created COVID-19–related posters for schools and community centers. When preschool children were allowed to return to school, a few student groups manufactured table dividers for preschools (Jordaan and Mennega 2021).

Another example of a new opportunity that presented itself was the need for a communication tool to support and coordinate the municipality′s efforts to move all the city′s homeless people into temporary shelters. The City of Tshwane, wherein the University of Pretoria is situated, launched an initiative called the Tshwane Homelessness Forum, which created ten different emergency re-sheltering places from March 31, 2020 to April 6, 2020 (Marcus et al. 2020).

Two students assisted with the development of an app to coordinate the logistics of the forum. All ten shelters′ needs and supplies were managed through the app. It allowed shelter managers to submit details of their shelter′s requirements on a central database. The students reflected that they felt they made a difference during the pandemic (Jordaan and Mennega 2021).

During lockdown level 3, students were allowed to return to work in the communities. However, they needed to adhere to strict social distancing regulations and had to minimize human contact. At this point, the students enrolled in this course were still working from home, which meant they were spread over South Africa and the rest of Africa. Using mainly email communication, students identified various projects with different community partners that could be done from their homes and the final projects delivered to the different community partners. Students were resourceful and developed a variety of goods, from educational items for early learning centers to various products for dog and cat sanctuaries, such as dog beds and cat scratchers (Jordaan and Mennega 2022).

Many community partners changed their original community engagement requests because of the limitations the COVID-19 regulation placed on interactions with the students. To ensure the sustainability of the various campus–community relationships, effective communication was important to ensure the successful execution of the students′ projects. The module coordinator also needed to adapt the final assessments and had to opt for online presentation sessions using BlackBoard Collaborate rather than the traditional face-to-face sessions (Jordaan and Mennega 2022).

Theoretical Lens

The COVID-19 lockdown completely changed the structure of the community module. Students were unable to visit their community partners, and the needs of many community partners had changed. To encourage students to complete the module during the same academic year, the lecturers had to change the structure of the module. The number of assignments was decreased to compensate for the time lost. However, the decision to proceed with the module lay with the students themselves. It demanded that the students make a mind shift and take ownership of the situation to complete their community module. This is defined as *agency* or "the power to originate action" (Bandura 2001, 3). The belief in personal efficacy is the central mechanism of human agency (Bandura 1997). Agency is an individual′s ability to intentionally make things happen through their own actions. A person enacts agency by regulating their cognitive, affective, and behavioral processes while interacting with their environment. Bandura (2001) identified four core features of agency: intentionality, forethought, self-regulation, and self-reflectiveness.

Intentionality is a person′s ability to act in a particular way based on a decision they made. Intentions are actualized through goal setting and planning. Planfulness demands rational decision-making, which allows individuals to exercise their agency systematically over time. The projection of agency is managed by forethought. Someone with forethought can anticipate the outcomes of their actions. By exercising forethought, people motivate themselves and act in anticipation of future events. According to self-determination theory, different goals determine different types of motivation. Intrinsically motivated people do something because they are inherently interested in it, extrinsically motivated people are driven to action, and a-motivated people see no value in the activity at all. However, once a person is motivated to act, they can regulate their behavior to achieve their established goal. Self-regulation is an ongoing constructive process where people regulate their behavior and use appropriate strategies to attain certain goals they set for themselves. An individual develops agency when they continually reflect on the exercise and evaluate their task progress. Self-efficacy is a person′s belief in their own ability to succeed at a given task. It contributes to a person′s sustained interest, motivation, and performance at a task and is, therefore, essential to their functioning (Bandura 1997).

Method

This article takes an explanatory case study approach to illuminate the responses of students in a community service module at a time when the traditional structure of the module was upended. Students had to take charge and define their own community service to ensure that they complied with the requirements of the module to ultimately attain a pass rate.

The data for this study consists of students′ reflections on their forty hours of community service work during 2020. After completing their community service activities, students had to complete an assignment that required them to reflect on their experiences. This was implemented

as an online assignment where they had to apply Edward de Bono's "Six Thinking Hats" approach (De Bono 2017) to report on their experience and describe how they implemented their projects.

The "Six Thinking Hats" exercise is an approach that encourages parallel thinking as a means for groups to solve specific problems. It prescribes a set of steps allowing the group to deliberate the aspects of the problem methodically and, therefore, more effectively.

The six hats are metaphorical, and each "hat" defines a certain type of thinking. The "hats" can be put on or taken off to indicate the certain type of thinking you are using. Switching "hats" is essential because it allows each "wearer" to switch from one type of thinking to another. When this exercise is done in a group, everybody should wear the same hat at the same time. This ensures that everyone in the meeting is focused on the same issue at the same time.

Thinking is divided into six categories, with each category identified with its own colored metaphorical "thinking hat." The white hat calls for thinking of "the facts, and only the facts"— that is, identifying the information known or required. The yellow hat symbolizes brightness and optimism. The hat's wearer explores the positives of the situation and probes for value and benefit. The black hat signifies caution and critical thinking. The wearer of this hat must think of the reasons that something may not work. Because this hat is so powerful, care should be taken not to overuse it. The green hat focuses on creativity, possibilities, alternatives, and new ideas. The wearer of the green hat has the opportunity to express new ideas and communicate new concepts or perceptions. This is where lateral thinking may be used in the group. The blue hat is used to manage the thinking process itself. It is used to ensure that the "Six Thinking Hats" guidelines are observed. Lastly, the red hat signifies feelings, hunches, and intuition. The wearer of the red hat has carte blanche to express emotions without having to explain them. This makes the red hat discussion potentially the most forceful, and it needs to be carefully managed by reminding the group of the balance that should be maintained with the other five hats.

The "Six Thinking Hats" assignment consisted of seven questions. The first asked the student to provide their project number and project name, while the remaining six pertained to De Bono's Six Thinking Hats method of reflection.

Table 1: Reflection Assignment

Question 1	What is the number and name of your project?
Question 2	Put on your *yellow hat* and discuss the benefits, values, and reasons to be optimistic about the project.
Question 3	Put on your *blue hat* and discuss how you organized the project.
Question 4	Put on your *green hat* and search for creative alternatives and solutions related to the project.
Question 5	Put on your *red hat* and discuss feelings, hunches, and intuitions about your project.
Question 6	Put on your *white hat* and discuss all the information you need to know for this project.
Question 7	Put on your *black hat* and search for faults, problems, and dangers related to the project.

Students had to complete the assignment individually. After the hand-in date, the completed assignments were downloaded from the university's LMS into an Excel file. There were 1907 responses, many of which were incomplete, and some were duplicates, where students from a group ignored the instructions and copied each other's responses. These responses were deleted, leaving 1,475 responses, which formed the data for this study.

The data was qualitatively analyzed by isolating all responses per question (or per "hat color"), performing a word count on the responses, and then examining the responses containing the words with the highest frequency counts. The researchers worked critically, using their experience to drive the identification of codes rather than rely on the frequency counts alone. This ensured an emic (insider or subjective) approach to driving the research.

Findings

The reflections from the Six Thinking Hats assignment were coded, and these codes were combined into themes. Both researchers coded the data individually, compared and discussed their results, and then agreed on the themes per "hat color." These themes are listed in Table 2. The replies to the "white" hat were disregarded because it was a summary of the project itself. Some themes spanned "hat colors" and were located in more than one column.

Table 2: Emergent Themes per "Thinking Hat" Color

Hat Color	*Description*	*Themes*
Blue Hat	Project organization	Inertia, trouble deciding, talk to the coordinator Change—Restructuring the project Isolation—difficulty in planning and organizing Group re-organization
Green Hat	Creative alternatives and solutions related to the project	Independently identify own project Adjusting and optimizing of project Service/product improvement Skills development
Black Hat	Faults, problems, and dangers related to the project	Problems with time management The risk of being infected with COVID Could not travel because of COVID Prevented from doing the original project Poor communication Lack of skills and expertise
Red Hat	Feelings, hunches, and intuitions about your project	Make a difference Adapt to the COVID situation Anxiety and frustration Overcome problems Learn new skills Disappointment Fun and excitement Time management
Yellow Hat	Benefits, values, and reasons to be optimistic about the project	Learning new skills, teaching new skills Value of positive thinking/optimism Giving one's time to a good cause Learned a lot A Unique opportunity Helping the community

Table 2 lists the main themes discovered from the responses to the "Thinking Hat" assignment. These themes are now shortly discussed, and verbatim responses from the students are provided to illustrate the themes.

Blue Hat Themes: Project Organization

Wearing the Blue Hat, the students had to reflect on the ways they organized their project. The main theme that emerged from the Blue Hat reflections was that students experienced inertia in starting with their community service module after so much time had passed in social isolation. They had trouble deciding what to do and needed to discuss their situation with the module coordinator. Students had assumed that the module was canceled. When it became apparent that it was still possible for them to complete their community service module, many students were caught unawares:

> Organizing the project was a very difficult process, especially considering we had a long lockdown. Another thing we had to think about was when we would actually do our project because we were all very busy with schoolwork, and we weren't sure when we were allowed to work considering the lockdown regulations. (Blue Hat, Group 205: Bramley Children's Home, Student 426)

> The beginning of this project was quite difficult. We decided during a Zoom meeting which project was best suited for our convenience and then had a meeting with our module coordinator in which she gave her opinion. We then decided on the most convenient dates and times when all of our team members were available, and we made provision for accommodation and transport due to the fact that some of our team members are from other provinces. (Blue Hat, Group 337: Smuts Museum, Student 62)

Restructuring projects was difficult, considering the degree of change that had to be accommodated. Some projects could be converted reasonably easily into online projects, not impacting the groups' time schedule:

> Initially, the project was supposed to be hosted at the University of Pretoria campus, but due to the pandemic, the event was nearly canceled. However, an alternative was made to move the event to an online conference instead of using the BigMarker platform. The planning stage of the project consisted of us creating webinars, scheduling presentations, creating thumbnails, and loading introductory videos and presentations in preparation for the event on the 7th and 8th of July. (Blue Hat, Group 78: 16th World Congress of Music Therapy 2020, Student 1230) Other projects required considerable planning:

> A meeting was held with the owners of the owl sanctuary regarding what we could do that would be of help to them. One of the group members lives within close proximity to the owl sanctuary, so it became convenient to use his house as our place of accommodation. A time frame that suited all the group members needed to be discussed and worked out. The budget was needed so that our project would be feasible. All the necessary components had to be purchased and transported from the shops. A schedule was discussed regarding what each member was expected to contribute toward the project. (Blue Hat, Group 17: Owl Rescue Centre, Student 1350)

Social isolation created problems in planning and organizing. Planning was difficult as there was no physical communication or interaction allowed. Students had to communicate via social media and decide together as a team on their project plan, fitting their community work in between their academic responsibilities:

> Organizing the project, I would say was challenging for me personally. Having to figure out how to communicate with so many people and the different nature of the project made monitoring and logging hours challenging. I even considered quitting at some point. (Blue Hat, Group 337: Mathematics at Secondary Schools, Student 770) With the COVID-19 pandemic, it was difficult/impossible for us to have physical meetings and plan our project—but thanks to technology, we could engage in live online meetings where we used the Discord application as a platform for our meetings. We joined video calls a number of times to discuss our transport, budget, and other required resources. (Blue Hat, Group 7: Lion and Cheetah Sanctuary, Student 1208)

Group re-organization was another hurdle. Many groups had members scattered across the country. Some groups disbanded so the individuals could work alone, while other groups remained together despite doing different projects:

> Initially, all our members had an entirely different project in mind involving fieldwork, but given COVID-19, we adapted our group: I was in the Cape during lockdown, and other team members were scattered across Gauteng. We thus split our group into two problem-solving teams: one-half of our group sewing aprons and the other (my half) recording online maths videos using tablets/iPads and a stylus. (Blue Hat, Group 315: The Wilgers Aprons/Online Videos, Student 709)

> Since we were all separated as a result of lockdown, the organization on the project had to be done well. We started a group on WhatsApp in which we could all communicate with each other and sent regular updates on our contribution. (Blue Hat, Group 383: Greenline, Student 1306)

Green Hat Themes: Creative Alternatives

This was the opportunity to seek creative alternatives and solutions related to the project. The students reflected that they had to be creative in identifying a COVID-19 project themselves. It was difficult for them to abandon a project that was already in place for a new, unfamiliar, but COVID-friendly project. Most of the reflections in this category pertained to the difficulties and opportunities in independently identifying their own project:

> If we did not decide to make masks we would′ve still had no JCP project for this year resulting in us failing the module, that was the possibility. (Green Hat, Group 153: The Mask Makers, Student 268)

> This was one of the hardest aspects of the project this year. Being able to rethink project ideas and being able to work around the nationwide restrictions which were in place proved to be a lot more challenging than we had previously thought. I am extremely thankful for the internet as it allowed for communication across provinces as our group was scattered all over the country, and in-person meetings were not possible. We all had

> to work together to innovate ideas that could allow us all to work together and achieve the final goal. (Green Hat, Group 471: Lesedi Secondary School, Student 73)

Another creative aspect identified was the process of adjusting and optimizing the work processes of the projects. During mask-making, some students realized that they could save on material by cutting rectangles instead of circles and save on time by giving each team member one step to perform, creating an assembly line in the process. Many reported that they kept adjusting the mask-making process until they could produce a high-quality mask reasonably quickly. They also realized that teaching a community member to make their own masks would be better than giving them complete masks. It would empower the community by teaching them a skill, and community members can then earn money by making masks themselves and selling them.

The students had various suggestions for improvements in the artifacts they made for their project:

> A solution would be to have laminated the posters so that they could be placed outdoors. (Green Hat, Group 196: Posters on Gender-Based Violence and COVID19, Student 399)

> While recording the videos I also thought: 'What about deaf children in government schools…? How could they benefit from my videos without subtitles…?' So I thought a solution to this could have been that I typed out my script for each video to post along with the blank notes. (Green Hat, Group 315: The Wilgers Aprons/Online Videos, Student 709)

A few groups used 3D printers to print headpieces for face shields. They identified a possible improvement by suggesting padding on the headpiece for a more comfortable fit. Students quickly realized that more could be done with more time and a bigger budget.

Using the Green Hat, skills development was seen as an opportunity. Students had to teach themselves new skills, relying on the information available on the internet. One student reflected, "We watch lots of YouTube videos to fix our mistakes" (Green Hat, Group 153: The Mask Makers, Student 268), and another indicated, "The way that I overcame my fear of video editing was practice and YouTube. I watched several YouTube videos before editing and practiced using the editing app multiple times so that I would not waste time when I was editing the actual videos" (Green Hat, Group 105: Elim Church Outreach Videos, Student 134).

Black Hat Themes: Faults, Problems, and Dangers Related to the Project

Wearing the black hat, all faults, problems, and dangers related to the project had to be identified. Most students battled with time management. One student indicated, "The project was very rushed and as such I would say that timing was the greatest problem" (Black Hat, Group 37: Mask Making, Student 869), and another reflected as follows: "We left ourselves with limited time to complete a lot of work, which drained us at the end of the day" (Black Hat, Group 238: PEN NGO COVID-19-Masks, Student 513).

Many students were acutely aware of the risk of being infected with COVID-19 and listed the risk as one of the dangers of the project:

> Having to go out and do the project during a pandemic where a person can be easily infected with the virus if they can get in contact with a person who has the virus. (Black Hat, Group 60: COVID-19 Mask Making, Student 15)

> This created risks for getting the virus and also complicated the project with all the regulations. (Black Hat, Group 24: Eleos, Student 518)

The biggest danger of assisting at school every day is that you risk being infected by COVID. (Black Hat, Group 337: Mathematics at Secondary Schools, Student 769) Students were prevented from traveling or entering the community because of COVID:

> Some schools accepted the posters but did not allow us to physically enter the school because of COVID-19 regulations. (Black Hat, Group 68: COVID-19 Posters, Student 1199)

> COVID-19 was also a problem in terms of communication and travel. (Black Hat, Group 33: Kitten Corner, Student 753)

> Another problem was obviously when COVID-19 began whereby all of us were at different locations and thus had to adapt. (Black Hat, Group 509: Sensory Wall Panels and Musical Instruments, Student 1134)

Some groups were very excited about their projects and were disappointed when they were prevented from doing their originally identified project:

> Due to COVID we had to change our project, at first it was the Lion and Cheetah

> Sanctuary but we then changed it to painting building blocks for children. (Black Hat, Group 48: Lion and Cheetah Sanctuary, Student 1093)

> Due to the COVID-19 pandemic we were unable to do our original project of fixing the day care′s floors. (Black Hat, Group 107: Grace and Mercy Day Care, Student 144)

Poor communication presented various problems to the geographically dispersed groups:

> Sometimes it was hard with communication only via phones being that some group members are in different provinces and connection or data constrains sometimes occurred. (Black Hat, Group 425: Making of Sensory Boards, Student 992)

> A fault in the project would be that I worked alone; unfortunately, due to lockdown and the pandemic, I was unable to work in a group with my friends, which at times made the project seem a bit lonely as half of the fun was working and making jokes with your

> friends throughout the project. (Black Hat, Group 421: Howick High School, Student 984)

Another problem for the students was a lack of skills and expertise:

> I did not know how to sew; this was a major drawback as I had to develop this skill first before commencing with the actual project work. (Black Hat, Group 436: COVID-19 Masks and Hands-Free Sanitizer Dispensers, Student 1425)

> It was in the sense that we all have different skill sets...as every person might not be able to perform their best in certain things, such as fixing a fence or painting; when this happened, we allowed it to a certain extent and let them focus on their skills they are better at, such as IT. We had very heavy-duty, manual labor toward the end of our project—a concrete splash pool. (Black Hat, Group 423: Husky Rescue, Student 991)

Red Hat Themes: Feelings and Intuitions about the Project

The Red Hat allowed the students to reflect on the emotions, feelings, and intuitions they experienced during the project. Because of the social isolation measures, students needed to make a mind shift to adapt their project to the COVID situation:

> It was disappointing when we could not do our previous project due to COVID. We did make a mind switch and tried to see how we could help people in this time of need. (Red Hat, Group 2: COVID-19 Masks, Student 1)

> But due to COVID-19, we could not proceed with our plans and decided on a new project. (Red Hat, Group 73: Moja Gabedi, Student 106)

> At the beginning of the project, I was very excited about doing community work and challenging myself, but when the lockdown was announced and the possibilities of going back to campus were looking slim, I became worried. The move to online learning became a little overwhelming. With tons of emails from different lecturers filling up my inbox, it was easy to get lost in the information. After a few weeks and getting settled into the "new normal," I got excited about finally starting the project. After our project was approved and we set a date to start the field work, I felt relieved that we were finally on a roll. (Red Hat, Group 207: Monkey Bars at the Hatfield Community Park, Student 434)

Anxiety and frustration were rife. At first, most students were anxious because they could not do their initial project, but as the lecturer communicated with them, they felt relieved when they realized that they were allowed to identify something else:

> I was quite worried that we would not be able to complete the module this year because of COVID complications. I was very relieved when we found this new project and had a chance to pass. (Red Hat, Group 36: COVID-19 Masks, Student 46)

> We were quite annoyed by being restricted to not take full advantage of the JCP program because of the COVID-19 regulations. We were also very frustrated by the travel restrictions, which caused a delay in completing our project. We as a group also felt very stressed during the duration of the project because we might not make the due dates set out for us. Anxiety was high for all group members since we basically had to wait for the situation to improve so that we could do what we needed to for our project. We felt very joyful leaving the school after the delivery, knowing that we helped someone in need. (Red Hat, Group 334: Whispers Speech and Hearing Centre, Student 763)

> This project had me feeling annoyed because it did not feel like the course coordinator understood how difficult it was to still finish the project in the given time frame. We lost a lot of time, and our holiday was cut super short because of the pandemic. I got really frustrated when my group members did not want to see how difficult it would be to build the deck we were supposed to. The only good feeling I got from this project was when I contacted the organization and heard how thankful they were for my donation. (Red Hat, Group 37: Lion and Cheetah Sanctuary, Student 866)

Students felt that they managed to overcome many problems and, at the same time, learn new skills:

> I am proud because I overcame the problems and learned a new skill. I know our project is going to help children in need. (Red Hat, Group 1: COVID-19 Masks, Student 2)

> I felt proud after being given good comments on the design of the masks that I had made with my own hands. (Red Hat, Group 197: COVID-19 Masks, Student 436)

> I had to use a lot of new skills which never crossed my mind before the project. (Red

> Hat, Group 147: Barnaviya Progressive Kids Care and Development Centre, Student 284)

Many students felt very disappointed that they were denied the opportunity to interact with the community: "Not being able to directly hand out the masks was disappointing, but restrictions were put in place for a reason" (Red Hat, Group 202: Tsako Thabo Online Teaching, Student 500). Others were excited and found it fun to do the project: "I never knew I could be so productive and creative" (Red Hat, Group 184: Sign for the Irene Concentration Camp Memorial, Student 350).

Time management was a problem for the engineering, built environment, and information technology students, who already had a full schedule: "I am also worried about the time since we have a busy schedule during COVID with online classes and fitting in the time to complete the project" (Red Hat, Group 172: Veritas College, Student 329).

Yellow Hat Themes: Reasons for Being Optimistic about the Project

Here, the students reflected on the benefits of their projects and the reasons for being optimistic about them. Most students reported that during their community work, they learned new skills and also had the opportunity to teach others new skills:

> This project is about using my abilities to help others. Specifically for the mentorship program, I need to be open and willing to find and give information to my mentees. I needed to realize that I can really make a difference by giving them information that I wish I knew last year. (Yellow Hat, Group 101: Stars Mentorship, Student 45)

The value of our project is that underprivileged children have the opportunity to learn how to play chess. This is beneficial as chess teaches patience and forward thinking. It aids in the development of the brain and builds cognitive ability. Chess can also improve problem-solving skills, which at a later stage can be beneficial when children are learning mathematics. (Yellow Hat, Group 119: Chessboards, Student 111) The students realized the value of positive thinking and optimism:

> This project will give hope to the community; by making masks, I will be showing the community that they are not alone in facing this pandemic. It was the most rewarding experience when my masks and posters were delivered. Because of all the positive feedback I received, all the hard work had become worthwhile. This project taught me that by being optimistic and having positive energy, you can transfer that positive energy to your surroundings and have an overall positive impact on the community you live in. (Yellow Hat, Group 164: COVID-19 Posters/Masks, Student 307)

Students realized the benefits of giving one′s time to a good cause and that a little of one′s own time can go far:

> We were able to learn things by doing the project and also building the zoo a vertical hammock for the gibbons. This benefits the gibbons because it is a new addition to their enclosure that they can play on. This project showed us that if we work together, we can do so much good for animals and people for very little cost. All we need to give is our time. (Yellow Hat, Group 124: Lory Park Zoo—Climbing Structure, Student 128)

In conjunction with the first theme, students reflected that in the process of doing their community work, they also learned a lot about their community: "The project helped me to learn more about the museum and history of J. C. Smuts and all that he achieved, everything he did and everything he was a part of" (Yellow Hat, Group 133: Smuts House Museum, Student 218). Students also realized that their project had given them unique opportunities to learn things they would not have attained otherwise:

> The project gave me a unique opportunity to learn how to deal with and manage people. I also learned how to successfully conduct a project, especially in the time of COVID-19. I benefited from learning how to quickly adapt when situations and plans changed at a rapid rate. I learned how to conduct meetings through the internet and communicate long-distance with my colleagues. (Yellow Hat, Group 126: Lory Park Zoo, Student 196)

There were many benefits to helping the community:

> Helping out in a community greatly improves the morale of both the person doing it as well as the people receiving help. I was able to help out during difficult times for our

> country with a project that no one was ready for. I was optimistic to see my hand in the change and ensure the safety of the less privileged. It was greatly beneficial to the health of the people I helped to have masks to save them from COVID-19. (Yellow Hat, Group 37: Mask Making, Student 943)

> We were able to help a community. It helped teach us as a group to work together and manage our projects. By doing something we had never done before, it taught us new skills. It broadened our worldview to see how people, who are financially less well-off than ourselves, live. It is always good to give back, especially when you are in the position to do so. (Yellow Hat, Group 194: Bramley Children′s Home, Student 367)

Discussion

Many students availed themselves of the opportunity to complete their community module, even though it meant abandoning a much-anticipated community experience (such as working at a wildlife center) for a more mundane experience, such as making masks from home. The structure of the module had also changed, allowing them to identify their own project and their own community partner. Working from home also meant that some groups had to disband because they were geographically dispersed. Other groups decided to stay together, even if it meant they had to communicate electronically. The experience of the students is now discussed according to Bandura′s four agentic features: intentionality, forethought, self-regulation, and self-reflectiveness.

Intentionality

Intentionality is reflected in the students′ plans, ideas, and decisions they made to complete their projects:

> We first planned for our project to be done in March. We organized a date for us to start our project but then due to COVID-19 lockdown happened. After that we waited for lockdown level 3. We decided to then communicate via email and
>
> WhatsApp. (Blue Hat, Group 20: Chrysalis Preschool, Student 410)

> Our project initially started through a WhatsApp group where all our group members were, we set out plans to do for our entire project before the pandemic of the coronavirus started, and then we had to change our project in the second semester due to lockdown regulations that we were faced with, upon changing, some group members never got back to Hatfield while some did, we spoke via WhatsApp as well as Google meets to set out tasks and discussing who is going to be responsible for which task. (Blue Hat, Group 60: COVID-19 Masks, Student 15)

> We started off rough, we changed our project three times throughout the pandemic. Since we were all separated we had to come up with a plan to help the community from our different locations. (Blue Hat, Group 113: COVID-19 Masks, Student 20)

Forethought

Forethought is reflected in the students′ actions, project execution, and motivation they demonstrated in the process:

> An action plan and proposal were written up, the proposal was accepted. We then prepared the development outline of the project making the choice of what software we were going to make use of. (Blue Hat, Group 3: Hatfield CID, Student 94)

> We would meet every week via zoom to discuss the plan of action for the week and touch base to see where everyone was in the making of their videos. (Blue Hat, Group 105: Elim Church Outreach Videos, Student 136)

> Once the plan of action was agreed upon all group members were assigned tasks.

> Our goal was to complete all three owl boxes in a week. (Blue Hat, Group 115: Owl Rescue Centre, Student 163)

> Our plan of action for this project was relatively clear. Our mentor clearly helped and showed us what was expected of us and checked in with us regularly to see if our work was of high quality and that we still knew what was going on. (Blue Hat, Group 14: Spitfire Project, Student 233)

Self-Regulation

The students′ self-regulation is reflected in their goal setting, strategy, and behavior:

> We organized the project to have proper goals per work day. We planned for the project time frame and what the end result should be. We discussed and prepared techniques to work efficiently. (Blue Hat, Group 230: Swartkops Airforce Museum, Friends of the Museum, Student 494)

> I undertook the task of editing the videos along with the creation of the posters. For each of these, a clear goal and reachable outcome were set. Afterwards, I set a schedule along with goals for when each of the videos and posters should be completed. Thus ensuring that I stayed on track with the work. (Blue Hat, Group 232: Queenswood Primary School, Student 500)

> The majority of the project timeline was organized by group member Miss Jacalyn Brancken who shared with the rest of the group a timetable with goals for each day. (Blue Hat, Group 237: Gauteng North Service for People with Disabilities, Student 510)

> The plan of action was very straight forward in that the team leader set clear-cut and reasonable goals that would not burden us too much. (Blue Hat, Group 251: Rock of Hope, Student 548)

Self-Reflectiveness

The students′ self-efficacy beliefs showed in their reflections, their stated judgments, and the results of their respective projects:

> Many of the videos required to be redone as we weren′t happy with the results, it also took a lot of editing to make sure the content and structure of the videos flow. (Blue Hat, Group 299: Educational Videos, Student 1384)

> Managing our time, logistics and feelings were of great importance and something that every one of us embraced and did to the best of our abilities. (Blue Hat, Group 391: Leamogetswe Safety Home, Student 1415)

> We spread out the fieldwork we needed to do so that we did not get overwhelmed and too tired. We also had good communication between group members which resulted in proper results. (Blue Hat, Group 122: Young Talents Preschool, Student 182)

Contribution

The reaction of all local community engagement projects to the lockdown measures of the COVID-19 pandemic was to cancel all activities. They did not consider possible alternatives. However, the Joint Community Project lecturers were acutely aware of the heavy academic load of their students. Postponing the community module would add an unbearable burden to the third-year students′ academic responsibilities. By modifying the existing module structure, the lecturers gave the students a choice to still complete their community service during the same academic year.

The module could not proceed as planned due to the countrywide isolation measures. The responsibility of identifying a project had to be transferred to the students themselves. Consequently, this study attempted to answer the question: ″how did the students of the JCP community service module manage to complete their module requirements during the nationwide COVID-19 lockdown?″

The answer lies in the fact that each student knew their own community best and had to be trusted to make their own choices. As the students gradually realized that the success of their community module lay in their own hands, they started thinking creatively and took ownership of their project. Embracing their agency, they realized that they have the freedom to pursue a personal passion. The students consequently worked harder on the project while at the same time deriving greater personal benefit from it.

Studies published during the COVID-19 pandemic in the year 2020 identified the importance of self-confidence in students and how it contributes to positive learning outcomes. These studies called for research to discover differences in student self-efficacy amid the similarity of the shared experiences during the pandemic time (Blanco et al. 2020) and also for research to improve our understanding of AR and how to develop it (Beale 2020). This study responds to these calls by describing the various roads students traveled to attain self-efficacy and ultimately gain an unexpected bonus: a feeling of satisfaction and solidarity that supplanted the feelings of fear and isolation. It also confirms that lasting AR can be developed in cases where conditions

are favorable: sufficient support from faculty, a manageable workload, and a dedicated and self-regulated student.

Limitations

While this study is based on a large data set containing the responses of almost 1,500 students, the respondents were all from the same university and from a single faculty within it. They were all engineering, built environment, and information technology students. These students are involved in non-service-related courses; therefore, their responses may differ from those in service-related faculties such as the Health Sciences.

Conclusion

Students were initially reluctant to relinquish their identified projects and waited to see if the social restrictions would be lifted so that they could proceed. It was only when they realized that the module completion rested in their own hands that they took ownership. They identified non-profit organizations in their own community and, by following module guidelines, identified their own project, ultimately reporting enjoying their freedom of choice in that regard.

The students also reported gratification when the community showed appreciation for their efforts. At the conclusion of their project, they expressed their appreciation to the lecturer, saying that the module gave them the agency to do a project they would not have attempted by themselves. Concurrently with existing research in the field, the students finally reported feeling empowered by helping others during the pandemic. They felt less anxious and more positive and were proud that, as individuals, they could make a difference in their society.

Informed Consent

The authors have obtained informed consent from all participants.

Conflict of Interest

The authors declare that there is no conflict of interest.

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ABOUT THE AUTHORS

Nita Mennega: Lecturer, Department of Informatics, University of Pretoria, Pretoria, Gauteng, South Africa
Email: nita.mennega@up.ac.za

Martina Jordaan: Head, Community Engagement Research and Postgraduate Studies, Mamelodi Campus, University of Pretoria, Pretoria, Gauteng, South Africa
Corresponding Author's Email: martina.jordaan@up.ac.za