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# ***Mitigating the Impacts of Confinement and Distancing due to COVID-19 Through Service Learning in Occupational Therapy Education: Evaluation of the Build-A-Box Campaign.***

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## **Abstract.**

In response to the COVID-19 pandemic, students, service users and community partners have had to adapt and reform the collaborative approach to service learning. In this paper, we describe the Build-A-Box Campaign, an innovative, pilot, service-learning project that endeavoured to mitigate the impacts of COVID-19 on vulnerable communities. The partnership was between occupational therapy students from the National University of Ireland Galway, community partners and service users. The aim of this study was to explore the utility of the Build-A-Box campaign with all stakeholders who participated in it. Student groups partnered with community organisations to develop custom-made boxes for “at risk” service-users. Once the boxes were delivered (n=103), a survey design was used to evaluate the impact of the campaign. Data were collected through postal and online questionnaires from 33 participants (10=students; 5-community partners; 18 service-users). Data were analysed using content analysis and describe the impact that the Build-a-Box campaign had on students, community partners, and service-users. Students and community partners acknowledge the challenges of virtual service learning and the effect of the loss of in-person meetings on relationship-building, the Box, and the student experience. The results indicate areas that should be addressed in planning a similar future project, and limitations of the research are acknowledged in the context of COVID-19.

**Keywords:** Community-engaged learning; COVID-19; Occupational therapy; Online learning; Service-learning.

## 1. Introduction.

The impacts of COVID-19 have been far greater than ever anticipated. Entire countries have been on lockdown with far reaching economic, physical, emotional and psychological consequences (Ammar et al., 2020; Naumann et al., 2020). Home confinement in particular has had significant psychological impacts (Ammar et al., 2020; Pietrabissa & Simpson, 2020). Although it is difficult to escape the ramifications, there have been people in our societies that have been worse impacted by the restrictions. COVID-19 has exacerbated health inequalities for vulnerable communities in terms of income, gender, ethnicity and their social situation (Blundell, Dias, Joyce, & Xu, 2020; Le & Nguyen, 2020) thereby increasing the need for social change (Derreth, Jones & Levin, 2021). Confinement and social distancing used as a measure of reducing the rate of infection in many countries worldwide, has worsened social isolation and loneliness across vulnerable communities, contributing to the increasing mortality rate in many areas (Blundell et al., 2020; Gresh et al., 2020). For instance, the COVID-19 epidemic poses a greater threat to the quality of life of older community members, who are already confronted with issues like food shortages (Shahid et al., 2020). People who are homeless have an increased risk of contracting COVID-19 and of other harms such as increased risk to partner violence and substance abuse (Perri, Dosani, & Hwang, 2020). Similarly, children from advantaged backgrounds have been faced with increased risk of obesity while children from less advantaged backgrounds face an increased threat of malnourishment (Kulkarni, Kinikar, & Chandanwale, 2020). In Ireland, the negative impacts on the mental health of children and adolescents, as well as families with children with autism spectrum disorders, is becoming evident (O'Connor, Wrigley, Jennings, Hill, & Niazi, 2021; O' Sullivan et al., 2021). Those living in direct provision in Ireland also faced an increased risk to social isolation and mental health issues on top of an increase likelihood of contracting COVID-19 (Gusciute, 2020).

Internationally, Higher Education Institutions (HEIs) have had to adapt to the consequences of COVID-19, and yet, throughout the pandemic, over half of 424 HEIs surveyed have remained committed to carrying out community engagement activities through pedagogies such as service learning (Marinoni, van't Land & Jensen, 2020). Service-learning is a high-impact experiential educational technique that pairs student learning outcomes with community identified needs. It encourages student engagement, improves retention and academic performance, strengthens civic duty, and develops critical thinking (McMenamin, McGrath, & D'Eath, 2010; Procaro-Foley & Van Cleave, 2016; Strait et al., 2015). While contextualising and

building upon health equality and equity by addressing the social determinants of health and social justice (Sabo et al., 2015), it provides students with the opportunity of using their theoretical knowledge to improve the health of communities (Derreth, Jones, & Levin, 2021). Enhancing community capacity through service (Furco & Holland, 2004) allows students to learn about important societal issues, such as the current global pandemic, inside and outside the classroom. Students are afforded hands-on experiences of community projects that are integrated into their academic curriculum (Piper, DeYoung & Lamsam, 2000) and support their personal and professional development (McMenamin et al., 2010).

An additional challenge undertaking service-learning projects, was the universities worldwide speedy transition to online learning during the pandemic (Veyvoda & Van Cleave, 2020). It challenged community partnerships to become creative, flexible, and adaptable in reaching the vulnerable communities via a virtual platform of service pedagogy (Garcia-Gutiérrez, Ruiz-Corbella, & Riesco, 2021). The transition to being online also posed challenges for students such as the development of their interpersonal skills, and the opportunity to work directly with service-users through the community partnerships (Garcia-Gutiérrez et al., 2021; London & Sanchez, 2020; Veyvoda & Van Cleave, 2020). Despite this, numerous service-learning projects that targeted the impact of restrictions were successfully realised and are now being published. For example, an innovative community partnership between the Johns Hopkins School of Nursing and the Baltimore Neighbors Network highlights the work completed in the face of COVID-19 to contextualise health disparities and build health equity (Sabo et al., 2015). This collaborative partnership supported older adults experiencing loneliness by providing them with weekly telephone calls of support (Gresh et al., 2020). Similarly, students from Iona College partnered virtually with the Hearing Loss Association of America in supporting those in the 'Walk4Hearing' charity event (Veyvoda & Van Cleave, 2020). This enabled students to gain core values, skills and knowledge through creatively removing the barriers of COVID-19 restrictions and guidelines for an underrepresented group (Veyvoda & Van Cleave, 2020).

The Build-A-Box campaign, an initiative conceptualised by NUI Galway lecturers, and developed by occupational therapy students and community partners, aimed to mitigate the impact of confinement and physical distancing of vulnerable communities due to COVID-19 through the creation of custom made-boxes. Occupational therapists are uniquely skilled in analysing persons everyday skills, advocating on their behalf due to their health needs or disparities and providing pragmatic solutions when mitigating the impact of confinement and social distancing of vulnerable populations due to COVID-19 (Kamalakaran & Chakraborty,

2020). Therefore, this Build-A-Box campaign was a good link between the curriculum and the community needs for the academic year 2020/21.

The Build-a-Box campaign was completed through a service-learning module that is undertaken by third year occupational therapy students. The service-learning module fosters student engagement, civic and ethical responsibilities, critical thinking skills and professional development (Gresh et al., 2020; Procaro-Foley & Van Cleave, 2016; Strait, Turk, & Nordyke, 2015; Veyvoda & Van Cleave, 2020).

The aim of this research was to explore the impact of the Build-A-Box service-learning programme on students, community organisations, and service users. Specifically:

- To understand the community partner's experience of this service-learning project.
- To explore the value of the Build-A Box campaign to service-users who participated in the project.
- To understand the experience of this type of service-learning project to students involved.

## **2. Methodology.**

This research describes the evaluation of a service-learning project (Build-A-Box), using a survey design. Ethical approval was obtained from the National University of Ireland, Galway, Research Ethics Committee.

### **2.1 The Build-A-Box campaign.**

Third year occupational therapy students collaborated with community partners over the course of twenty-weeks on the Build-A-Box campaign. The campaign incorporated review of the literature and stakeholder discussions to select key items for placement in custom-made boxes. Integral to this process, student groups used activity analysis and feedback from service users to ensure the key items reflected the service users' needs and interests. The complete step-by-step process is outlined in Table 1.

**Table 1: Outline of the Build-a-Box process.**

<b>Step 1</b>	<p><b>Design the Box content for each of the groups.</b></p> <ul style="list-style-type: none"> <li>a. Literature reviewed to identify main challenges experienced by community group.</li> <li>b. Findings discussed with community partner in the context of the real-world issues.</li> <li>c. List of needs prioritised and target areas confirmed.</li> <li>d. In conjunction with community partners and using evidence, students designed custom-made boxes.</li> <li>e. Items were supported by evidence from up-to-date research, addressed a need identified, were commercially available and safe to use.</li> <li>f. To ensure feasibility and sustainability of campaign, including approx. 8-10 items, budget was €30</li> </ul>
<b>Step 2</b>	<p><b>Create the '<i>Prototype</i>' box</b></p> <ul style="list-style-type: none"> <li>a. Students presented a '<i>prototype</i>' box intended for their community group.</li> <li>b. Module leaders reviewed box to confirm suitability before moving to next phase of the project.</li> </ul>
<b>Step 3</b>	<p><b>Obtain Service User feedback.</b></p> <ul style="list-style-type: none"> <li>a. One prototype box was provided to a service user from each community group, to obtain honest feedback on content and to trial each item for suitability.</li> <li>b. Written feedback was then obtained from these service-users.</li> </ul>
<b>Step 4</b>	<p><b>Review Service Users feedback</b></p> <ul style="list-style-type: none"> <li>a. Students, in collaboration with community partners, reviewed feedback provided in order to create a "<i>final Box</i>".</li> <li>b. Students considered the scale of the next stage within budget restraints e.g. how many Boxes will be created and for whom.</li> <li>c. Adaptations to boxes were made as appropriate based on feedback discussion, new evidence that was published, and availability of items.</li> </ul>

	d. Final list of items was confirmed.
<b>Step 5</b>	<p><b>Order items and “<i>build</i>” the Boxes for the larger roll-out.</b></p> <p>a. Feedback requested from service-users and community partners to allow for future planning of campaign.</p> <p>b. Instructions for items that might not be familiar to service-users were included in box (taking into consideration language, reading, or literacy difficulties). A page with details of box content, and a letter to the service-user explaining the campaign and introducing themselves was included.</p> <p>c. (Optional) Students at this point were involved in a media campaign to promote the project and raise awareness of the issues.</p>
<b>Step 6</b>	<p><b>Review the process through:</b></p> <p>a. Reflecting on the process with the students.</p> <p>b. Reviewing feedback from the service-users.</p> <p>c. Reflection and planning with the community organisations for sustainability and future plans of the campaign.</p>

Service-user participants received a custom-made box with age-appropriate items (e.g. equipment, and activities) focused on reducing the impact of COVID-19 restrictions. The items were all commercially available and assessed by academic staff prior to being delivered to community organisations. Table 2 has examples of included items.

**Table 2: Examples of included Box items.**

<b>Women living in Direct Provision</b>	<b>Women who are Homeless</b>	<b>Children with additional needs in disadvantaged communities</b>	<b>Older adults living alone</b>
Skipping rope	Lavender oil	Skipping rope	Birdfeeder and recipe
Mindfulness colouring book	Sleep mask	Magic board	Planner and pencils/pens
High vis jacket	Goal setting journal	Puzzle book	Mindfulness book

Hand cream	Colouring pencils	Diary	Postcards
Uno	Pedometer	Modelling clay and pages (instructions)	Bird book
Fabric, elastic and sewing kit	Mindfulness colouring book	Yoga dice with exercises	Pots, seeds, and compost
Pots, seeds, and compost	Microwave cookbook	Workstations and Crayons/pencils	Exercise plan and stress ball

## 2.2 Participants.

### 2.2.1 Sampling strategy.

Participants included third year undergraduate occupational therapy students, community partners, and service-users who received the boxes.

The module, in OY3115, linked to the Build-a-Box campaign is mandatory for all third year occupational therapy students in NUI Galway. All students undertaking this module were eligible to participate in the research component (survey completion) of this project. Students were under no obligation to take part in the research.

Community partners were selected if they were based in Galway city and worked with “*high risk*” populations. Because of the challenges of forging new partnerships at the height of the pandemic, community partners were approached who had previous involvement working with students in the in OY3115 module. Of the Community Partners approached, only one was not able to participate because they were experiencing significant additional strain on their services.

Service users were chosen by the community partners who were provided with the inclusion criteria. Students had no direct contact with service-users or their selection.

### 2.2.2 Criteria for participation.

Inclusion criteria for participation:

- Students had to be enrolled in OY3115 to be eligible to participate.



- Community partners had to be working with service-users who were:
  - in a “*high*” or “*very high*” risk group as defined by the Health Service Executive (HSE) Ireland coronavirus guidance or
  - significantly restricted in daily occupations due to confinement and/or social distancing measures.
- Service users, chosen by community partners, were eligible to participate if they were:
  - in a “*high*” or “*very high*” risk group as defined by the HSE coronavirus guidance or
  - significantly restricted in daily occupations due to confinement and/or social distancing measures.

One hundred and thirty-seven people were eligible to participate in the research (29 students; 5 community partners; 103 service-users). Students, community partners, and service-users were able to participate in the Build-a-Box campaign even if they decided not to participate in this research evaluating its’ impact.

## **2.3 Procedure.**

Participation was voluntary for all stakeholders. All data collected were anonymous. Students in the undergraduate programme were invited to participate in the evaluation of the project. These students had been involved in the project through designing and creating the boxes that were sent to the community organisations. Following completion of the module, a lecturer, with no involvement in the project, emailed the student group and invited them to participate. It was made clear to students that the decision to participate or not participate had no academic implications. Community organisations were invited to participate in the Build-a-Box campaign if they worked with service-users that fit the inclusion criteria. Community organisations were approached that worked with children, older adults, women who were homeless, and women who lived in direct provision centres in Ireland. Five community partners (from three overarching organisations) worked with seven student groups. Community organisations acted as gatekeepers for service-users involved in the project.

## **2.4 Data collection.**

A custom-designed questionnaire was used to collect data. Community partners and students were invited to complete the questionnaire through Microsoft Forms. Service-users were provided with a paper copy of the questionnaire in their box, along with a stamped addressed

envelope and were invited to complete and return the questionnaire via post. The questionnaire took no longer than ten minutes to complete. The online version of the questionnaire had the option of voice completion and text reading of questions for those who may have had literacy difficulties. Guides to survey design and implementation were followed as described by Oppenheim (2000).

Students and community partners were asked questions relating to their experience of participating in the project, what they thought the impact of the project was, and how useful they felt the project was. Service-users were also asked about their experience of the project, but they were invited to comment specifically on the items in the box and their usefulness in addressing their needs during the COVID-19 pandemic.

## **2.5 Data analysis.**

The data were exported into Excel and screened for errors and omissions to ensure data integrity. Descriptive statistics were calculated, which include totals (n), percentages, as well as ranges, the median, means and standard deviations. Data yielded from the questionnaires were analysed both quantitatively (via descriptive statistics) and qualitatively using content analysis. Content analysis was used to analyse the open-ended responses in the questionnaire as it is a flexible method (Cavanagh, 1997) and suitable for the data collected from the three stakeholder groups. Summative content analysis was used (Hsieh & Shannon, 2005) which allows for the quantification of certain words or concepts and then developing an understanding of these words or content. The early quantification stage is used to explore usage rather than infer meaning (Hsieh & Shannon, 2005), see Table 3. The frequency of specific words was counted but this was then followed by discovering the meaning of the words/content (Hsieh & Shannon, 2005). The aim was to organise large volumes of text into fewer categories, and following this undertaking interpretation of the concepts presented in the data. The interpretation was presented thematically according to each participant group. The research team analysed and interpreted the content related to certain units/codes that were repeated across the data. The analysis of this pattern allowed the research team to provide contextual meaning to the content of the survey data, in the form of themes. This summative approach lends itself well to the inclusion of co-researchers in the analysis phase, which allowed for group involvement in the data analysis and close supervision of the student researcher during this phase.

### 3. Results.

A total of 33 participants took part in the research portion of the project. This included ten students, five community partners, and eighteen service-users. The service-users included eight older adults, five women who were using homeless services, two women living in direct provision and four parents of children with additional needs in disadvantaged communities.

A summative content analysis of the data provided in the questionnaire is presented in Table 3, along with corresponding quotes. The data from students, community partners, and service-users has been analysed separated and presented below.

#### 3.1 Students.

Twenty-nine students participated in the Build-A-Box campaign, of which ten completed the questionnaire and are included in the student data. When asked (on a scale of 1-10) how much they gained from the project students reported a mean score of 7.75 (SD1.2) with a range of 6-9. From analysis, two key themes were identified.

##### 3.1.1 Experiences of partnership and service-learning in the face of COVID-19.

The occupational therapy students highlighted the importance of collaborating with their community partner and appreciated the work they do. The students' described positive experiences within the community partnership, with one participant appreciating their partners time, knowledge and support during this campaign acknowledging "*we gained invaluable information from having the time to speak with her*".

There was, however, an acknowledgement of drawbacks in the two-way work dynamic. This was due to factors such as the virtual nature, and the impact of COVID-19 on the partnership. Student responses illustrated challenges with virtual service-learning, stating that it was "*extremely difficult to complete this project remotely*", and communicating through the virtual platform contributed to stress levels as this process was slow. Some community partners' work priorities also meant their time to communicate with students was limited and this acted as an additional burden of stress. Similarly, students recognised COVID-19 impacted their ability to complete in-person work, with one student's response stating, "*It would've been nice to meet them and discuss our project in person*".

**Table 3: Reported experience of Build-A-Box campaign- summative content analysis**

<b>Code</b>	<b>Student (S) n %</b>	<b>Community Partner (CP) n %</b>	<b>Service User (SU) n %</b>	<b>Example Quotes</b>
Impact of Build-a-Box (BaB)	N=9 100%	N=1 100% 8	N=3 100% 3	<p><i>"I will always remember this experience." (S)</i></p> <p><i>"Positive experience of working with genuinely interested and engaged student." (CP)</i></p> <p><i>"I can honestly say each item in the box I found very useful and so grateful to receive" (SU)</i></p>
Restrictive budget	N=6 50%			<i>"Budget was very restricting and made it difficult to include items that we really felt the population would benefit from." (S)</i>
Meeting the needs of the service users	N=17 75%	N=6 75%	N=1 77.8% 3	<i>"Student groups and service provider had a good conversation about the issues and about how we could best support the client group." (CP)</i>
Students experience and values of BaB	N=18 100%			<i>"Experience gave me a lot of knowledge around working as a team and gaining experience with local businesses &amp; community partners". (S)</i>
Challenges to the	N=8 50%	N=3 40%		<i>"Difficulty with doing the project remotely." (S)</i>

virtual learning environment				<i>"If we had been able to meet face to face it may have been better."</i> (CP)
Impact of COVID-19 on community partnerships.	N=5 60%			<i>"The experience more stressful particularly when the group could only communicate via zoom, emails, etc."</i> (S)
Importance of supportive community partnerships	N=21 60%			<i>"Clear line of communication and we gained invaluable information from having the time to speak with her."</i> (S)
Teamwork skills development	N=4 50%			<i>"I enjoyed the group aspect as we all brought different perspectives to the project."</i> (S)
Motivation	N=5 60%			<i>"I was determined to put as much effort as I could into this project since it had real-life impacts which motivated me."</i> (S)
Time constraints of BaB.	N=4 25%			<i>"Time-consuming, however, a project with a meaningful purpose as such requires this, and was worth the time and effort."</i> (St)
Utilising knowledge and skills in BaB	N=9 80%	N=4 80%		<i>"Projects where we can do something really practical and put our knowledge to use!"</i> (S) <i>"The students listened and delivered on what we had communicated."</i> (CP)

Isolation	N=2 40%			<i>"I would have been nice to have somehow met socially distanced ... as it was a very isolated period during the college year"</i> (S)
Impact of COVID-19 on relationship-building.	N=2 40%			<i>"Gave me insight into how different vulnerable groups had suffered the impacts of the pandemic."</i> (S)
Future planning of the project and alternative solutions	N=1 20%		N=1 77.8% 1	<i>"I think the box would be highly useful, even in the absence of a pandemic there are still those who are isolated who could benefit from the provision of these resources."</i> (S)
Impact of COVID-19 on service users	N=1 20%			<i>"Gave me insight into how different vulnerable groups had suffered the impacts of the pandemic."</i> (S)
The community partnership relationship	N=21 60%	N=1 75% 3		<i>"The students listened and delivered on what we had communicated."</i> (CP)  <i>"Clear line of communication and we gained invaluable information from having the time to speak with her."</i> (S)
Clarity of role		N=2 40%		<i>"More clarity from the outset would have been helpful."</i> (CP)
Acknowledgement of the students work.		N=1 100% 3	N=5 22%	<i>"Positive experience of working with genuinely interested and engaged students"</i> (CP)

				<i>"Hope you have a good study because in a few years there will be a lot of people with problem after I sent mine and it will help so thank you very much in advance."</i> (SU)
Acknowledging work involved.		N=2 40%	N=7 39%	<i>"We felt listened and responded to."</i> (CP) <i>"What a great idea this box is and have really enjoyed getting it. And so well thought out. Thank you so much."</i> (SU)
Appreciation of the BaB			N=3 94.4 % 0	<i>"Thank you so much for the box. It's great that even though one reaches a century one is not forgotten."</i> (SU)
Mitigating COVID-19			N=1 66.67% 7	<i>"Most certainly it covered a large area for people minds and health."</i> (SU)
Highlighting everyone's needs are different			N=4 22%	<i>"It all depends on the recipient as to how useful that selection would be."</i> (SU)

n= number of times the code was mentioned % percentage of participants who mentioned code

Balancing the practical and theoretical demands of the Build-A-Box campaign within the community engagement module proved to be challenging for all students. Several elements including the guidance provided, clarity of students' roles and expectations of the academic learning, and the grading of different components of the module were highlighted. For example, students felt some aspects of the module deserved more attention and therefore should have been equally considered in the marking scheme as one student states “*We spent more time fiddling with the video software than brainstorming ideas for items.*”

### **3.1.2 The challenges in meeting the needs of service users.**

All students surveyed appreciated the impact and difference they were making to vulnerable communities through their knowledge and skills as one student appreciates “*projects where we can do something really practical and put our knowledge to use!*”. Some students recognised that the skills they acquired could transfer to future projects and make a difference to the lives of those who are isolated “*in the absence of a pandemic there are still those who are isolated who could benefit from the provision of these resources.*” All students acknowledge the Build-A-Box campaign was a positive, interactive, and rewarding experience: “*I will always remember this experience*”.

For some students, factors such as the time constraints of the Build-A-Box campaign and the impact of COVID-19 on relationship building with service users hindered the sense of achievement. Students reported mixed experiences of the time pressures during the campaign. One participant highlighted that it may have impacted decision-making as “*some decisions we were making were under time pressure and our partner had other commitments*”. Other groups highlighted, however, that the time constraints of the Build-A-Box campaign encouraged them to efficiently use “*their time and resources*”.

As part of the work involved, students used published literature (see Table 1, Step 1) to decide on the specific items to be included. However, this experience, for some students, was deliberating, with students citing it lacked “*client-centredness*” as “*some items weren't included in the box because there was no published evidence on its benefit*”. In parallel, the restrictive budget impacted upon students' creativity as one student notes “*budget was very restricting and made it difficult to include items that we really felt the population would benefit from.*”

During this timeframe, COVID-19 impacted on students' lives as they faced the feeling of isolation behind the virtual screen of the Build-A-Box campaign with one student stating “*It would*



*have been nice to have somehow met socially distanced for the purpose of the project". Yet the challenges faced did not deter students motivational drive nor their comprehension of the difference they would make to the lives of vulnerable communities as one student exclaims "I was determined to put as much effort as I could into this project since it had real-life impacts which motivated me."*

### **3.2 Community partners.**

Community partners reported spending a mean of 16.2 hours (SD 11.5; range 3-30) working directly with students on the project, and an additional mean time of 23.6 hours (SD 20.36; range 3-48) on indirect activities.

The impact of the Build-A-Box campaign was acknowledged by all community partners as this experience led to mutual recognition of the teamwork and effort applied, a sense of positive belonging in the community partnership with the students, as one community partner notes "*very enjoyable and worthwhile partnership, the service, staff and clients are very grateful for the opportunity to be involved.*" Similarly, nearly all community partners felt the community partnership efficiently addressed the needs of the service users through open discussions as one community partner states "*student groups and service provider had a good conversation about the issues and about how we could best support the client group*".

Recognition of the students' effort and work was noted by all community partners. One of the community partners states that it was a "*positive experience of working with genuinely interested and engaged students*", with another noting that "*the students listened and delivered on what we had communicated.*" However, one drawback is noted by almost half of the community partners which is clarity of their own roles and responsibilities as one highlights "*More clarity from the outset would have been helpful*".

As with students, the community partners indicated the Build-A-Box campaign experience would be enhanced if face-to-face interactions had happened, as one community partner reveals "*If we had been able to meet face to face it may have been better*".

### **3.3 Service users.**

Each of the three stakeholder groups reported on how they thought service-users gained from the Build-a-Box campaign (scale 1-10). Table 4 reports overall score and per-group.

**Table 4: Service users gain from the project**

Group	Number	Mean	SD	Range
Overall	31	7.94	1.97	2-10
Students	8	7.75	1.2	6-10
Community partners	5	8.6	1.2	7-10
Service -users	18	7.83	2.34	2-10

All service users who responded to the survey highlighted the usefulness of the box and the recognition of each item in box as mentioned by one service user: *“Everything in the box is a well thought out item. Each item is very useful.”* Almost all service users felt that their needs were met by the items in the box as one exemplifies *“I can honestly say each item in the box I found very useful and so grateful to receive.”* Yet, a minority of service users felt the Box was not a good match for them: *“I’m not into wellbeing journal but could see how it would help someone else.”* The service users noted that they felt remembered during this difficult time of the COVID-19 pandemic, as one service user mentions *“It’s great that even one reaches a century one is not forgotten.”*

Almost half of service users acknowledged the effort applied to the Build-A-Box campaign, as one service users mentions *“What a great idea this box is and have really enjoyed getting it. And so well thought out. Thank you so much.”* Correspondingly, the service users emphasised and recognised how the items, whether meeting their needs or not, benefitted from the perspective of a wider vulnerable communities’ physical and mental health needs in the face of the COVID-19 pandemic as one notes *“Most certainly it covered a large area for people minds and health.”* Comparably, a minority of service users acknowledge the difficulty faced by the community partnership in holistically tailoring the community needs by a service user recognises *“It all depends on the recipient as to how useful that selection would be.”*

The service users explain the value and support this Build-A-Box project holds, not only for themselves, but for others as one service user mentions *“In a few years there will be a lot of people with problem...it will help so thank you very much in advance.”* Additionally, the service users also recognise the societal and health care need for and importance of both community partners and occupational therapy students in their role of advocacy to voice vulnerable communities as one service user states, *“people who do not have this information – reach them and the voice of those who need to speak.”*

## 4. Discussion.

Through this research we aimed to explore the experiences and impacts of the Build-a-Box campaign on students, community partners, and service-users. Overall, we found positive experiences across the three groups, though a number of challenges related to the campaign were highlighted, in particular from the student participants. All groups recognised the complexity of meeting the needs of all service users through the campaign, with drawbacks of not having face-to-face contact noted by both community partners and students. All stakeholders recognised the time and effort involved in the Build-A-Box campaign and acknowledge the impact both occupational therapy students and community partners can make, through work such as the Build-A-Box campaign. The content analysis highlighted values such as respect, empathy, listening and teamwork as positive contributions to the community partnership relationship. The efficient use of time and resources was also a key element in shaping the partnership.

In the data collected from students and community partners, there was a strong emphasis on discussions related to their experiences of the virtual element of the campaign. The virtual component of service-learning provided students with the opportunity, in the context of the COVID-19 pandemic, to interact and understand the importance of project and team-based management (Veyvoda & Van Cleave 2020). This allowed students to reconnect and provided a sense of '*virtual community*' in which they may otherwise have felt disconnected (Veyvoda & Van Cleave, 2020). Unsurprisingly, students' preference in current and future service-learning experience is for face-to-face interactions when possible. This is congruent with the literature in which students in virtual service-learning experiences express preference for face-to-face interactions (Gresh et al., 2020; Jordaan & Mennega, 2021; Veyvoda & Van Cleave, 2020). This highlights that although the virtual platform is readily available to students and offers a unique opportunity to collaborate in the face of a global epidemic (García-Gutiérrez et al., 2021), there is a strong preference for face-to-face partnerships.

It was clear from the data collected that both students and community partners of the Build-A-Box campaign experienced the project as positive and meaningful. Occupational therapy students and community partners who participated in Build-a-Box campaign did, however, acknowledge the loss of interpersonal interactions because of the virtual platform. Students also wanted the chance to spend time with service users to understand their needs, which is as acknowledged within the literature to be a key element in the enhancement of the virtual service-

learning (VSL) experience (García-Gutiérrez et al., 2021; Veyvoda & Van Cleave, 2020). Although the decision was made not to further burden community partners by setting up virtual meetings with service-users (in-person was not possible with COVID-19 guidelines), this must be recognised as a potential drawback to the Build-A-Box campaign.

The academic component was recognised by students as challenging, with some students feeling they were not provided adequate guidance, as the objectives and outcomes within service learning is complex and new for many students (Madsen et al., 2018). Therefore, universities implementing service learning need to balance work demands of both academic and practical learning as the literature highlights this service-learning experience is academically, emotionally, and physically demanding (Beaver, Munly, & McGregor, S, 2021).

The collaboration between students and community partners enabled students to understand the social systems that impinge on vulnerable communities and how COVID-19 may have exacerbated social inequities (Beaver et al., 2021; London & Sanchez, 2020). This was achieved through engaging in critical reflection (e.g. Table 4, Step 6), discussions and debates with their peers on topics such as the impact of COVID-19 on their communities social, cultural and political systems (Derreh, Jones & Levin, 2021). Students gained feedback on their reflections from community partnerships which enabled prioritisation of potential key items to be placed into the box for the Build-A-Box Campaign (Derreh et al., 2021). This process of reflection and action involving students and community partners can be impactful and is recommended for future similar service-learning projects.

The community partners emphasised their motivation to work with engaged students. Students emphasised the motivational reward and drive they experienced in the Build-A-Box campaign due to community partners' encouragement and support as they wanted to make real life differences to the specific vulnerable community they were collaborating with. Community partners in the Build-A-Box campaign felt the students listened, acknowledged and responded to the feedback provided to them. This mutual respect has been found to be key to effective and dynamic partnerships (Jordaan & Mennega, 2021). Successful community partnerships allow for avenues of institutionalised change whereby advocacy is at the forefront (Bennett, Sunderland, Bartleet, & Power, 2016). Skills such as problem-solving, teamwork, professionalism, social and communicational skills are valued and recognised by community partners as facilitators to a positive experience and relationship (Beaver et al., 2021; Derreth et al., 2021; Gresh et al., 2021).

The virtual approach offered a novel experience for students to become autonomous with technological tools and when integrating both practical and theoretical knowledge, ethical and civic responsibility (García-Gutiérrez et al., 2021). However, some students highlighted this level of autonomy in the community engagement module and Build-A-Box campaign led to a sense of being “lost” in guidance and in their roles and responsibilities. Some community partners also highlighted being unclear of their role and responsibilities within the project which may have impacted the community partnership-student relationship. Positive community partnerships are dependent on how community partners perceive their role as either mentor or supervisor to the students, expectations of the project, and their level of motivation (Jordaan & Menega 2021).

#### **4.1 Limitations.**

The limitations of this research are acknowledged by the team. No data were collected from participants prior to receiving the Box, or becoming involved in the campaign, which would have allowed for more accurate measuring of the impact of the Box. Across two groups, there was a relatively low response rate, but this was especially low for service-users. As the Boxes were provided anonymously to service-users it was not possible to remind participants to return the questionnaires provided. There is also a need for students to be culturally competent within service-learning experiences which can be achieved through collaborating and meeting service users within their own environment (Veyvoda & Van Cleave, 2020). Students in the Build-A-Box campaign solely discussed the needs of the service users with community partners who may not have been representative of the service users they work with.

### **5. Conclusion.**

The Build-a-Box campaign was found overall, to be a positive experience for students and community partners, with real impacts reported for service-users. Challenges were seen in tailoring the Boxes to the needs of individual service-users and in undertaking a project and a partnership such as this remotely. Service-learning is recognised to be most impactful when allowing for both face-to-face contact and virtual experiences as it enables students to acquire a mixture of technological and in-person skills (García-Gutiérrez et al., 2021; Veyvoda & Van Cleave, 2020). COVID-19 has provided many and varying challenges across HEI but it is possible to embrace the forced change and allow our teaching and service-learning to “Build Back Better” (Whalley Hammell, 2021) and ensure a less ableist, more inclusive society and

HEI in a post-pandemic world.

## 6. References.

- Ammar, A., Mueller, P., Trabelsi, K., Chtourou, H., Boukhris, O., Masmoudi, L., ... and ECLB-COVID19 Consortium. (2020). Psychological consequences of COVID-19 home confinement: The ECLB-COVID19 multicenter study. *PloS one*, 15(11), e0240204. doi: 10.1371/journal.pone.0240204
- Beaver, S., Munly, K. and McGregor, S. (2021). New Program in the Field: Enhancing Wellness in Older Adults through Intergenerational Community-Engaged Learning Programs in Long-Term Care Settings. *Journal of Intergenerational Relationships*, 19(2), 272 – 279. doi: 10.1080/15350770.2021.1908042
- Bennett, D., Sunderland, N., Bartleet, B. L., and Power, A. (2016). Implementing and sustaining higher education service-learning initiatives: Revisiting Young et al.'s organizational tactics. *Journal of Experiential Education*, 39(2), 145 – 163. doi: 10.1177/1053825916629987
- Blundell, R., Dias, M.C., Joyce, R. and Xu, X. (2020). Covid-19 and inequalities. *Fiscal Studies*, 41(2), 291 – 319. doi: 10.1111/1475-5890.12232
- Cavanagh, S. (1997). Content analysis: concepts, methods and applications. *Nurse researcher*, 4(3), 5 – 16. doi: 10.7748/nr.4.3.5.s2
- Derreth, R.T., Jones, V.C. and Levin, M.B. (2021). Preparing Public Health Professionals to Address Social Injustices Through Critical Service-Learning. *Pedagogy in Health Promotion*, 7(4), 354 – 357. doi:10.1177/23733799211007183
- Furco, A., and Holland, B. (2004). Institutionalizing service-learning in higher education: Issues and strategies for chief academic officers. In M. Langseth & W. Plater (Eds.), *Public work and the academy: An academic administrator's guide to civic engagement and service learning*, Bolton, Ankler Publishing (pp. 23 – 39).
- García-Gutiérrez, J., Ruiz-Corbella, M., and Manjarrés Riesco, Á. (2021). Virtual Service-Learning in Higher Education. A Theoretical Framework for Enhancing its Development. *Frontiers in Education*. 5: 630804. doi: 10.3389/feduc.

- Gresh, A., LaFave, S., Thamilselvan, V., Batchelder, A., Mermer, J., Jacques, K., Greensfelder, A., Buckley, M., Cohen, Z., Coy, A. and Warren, N. (2020). Service learning in public health nursing education: How COVID-19 accelerated community-academic partnership. *Public Health Nursing*, 38(2), 248 – 257. doi: 10.1111/phn.12796
- Gusciute, E. (2020). Leaving the most vulnerable behind: Reflection on the Covid-19 pandemic and Direct Provision in Ireland. *Irish Journal of Sociology*, 28(2), pp.237 – 241. doi:10.1177/0791603520940145
- Hsieh, H. F., and Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277 – 1288. doi: 10.1177/1049732305276687
- International Association of Universities (2020). *Regional/National Perspectives on the Impact of COVID-19 on Higher Education International Association of Universities*. The International Association of Universities. Available: [https://www.iau-aiu.net/IMG/pdf/iau\\_covid-19\\_regional\\_perspectives\\_on\\_the\\_impact\\_of\\_covid-19\\_on\\_he\\_july\\_2020\\_.pdf](https://www.iau-aiu.net/IMG/pdf/iau_covid-19_regional_perspectives_on_the_impact_of_covid-19_on_he_july_2020_.pdf)
- Jordaan, M., and Mennega, N. (2021). Community partners' experiences of higher education service-learning in a community engagement module. *Journal of Applied Research in Higher Education*, 14(1), 394 – 408. doi: 10.1108/JARHE-09-2020-0327
- Kamalakaran, S., and Chakraborty, S. (2020). Occupational therapy: The key to unlocking locked-up occupations during the COVID-19 pandemic. *Wellcome Open Research*, 5(153). doi: 10.12688/wellcomeopenres.16089.1
- Kulkarni, R.K., Kinikar, A.A. and Chandanwale, A. (2020). Impact of COVID-19 on Children and Pediatricians. *Indian Pediatrics*, 57(5), 480 – 481. doi: 10.1007/s13312-020-1833-7
- Le, K., and Nguyen, M. (2021). The psychological consequences of COVID-19 lockdowns. *International Review of Applied Economics*, 35(2), 147 – 163. doi: 10.1080/02692171.2020.1853077
- London, M. and Sanchez, M. (2020). “Becoming Proximal” in Preclinical Medical Education: Community Engaged Learning Addressing Disparities in Care. *Journal of Health Care for the Poor and Underserved*, 31(4S), pp.104 – 113. doi: 10.1353/hpu.2020.0141

- Madsen, W., Bricknell, L., Langham, E., O'Mullan, C., Oorloff, A. and Trott, D. (2018). Planning to Practice: Developing Partnership-Building Skills Across the Curriculum. *Pedagogy in Health Promotion*, 5(1), 24 – 29. doi:10.1177/2373379918776675
- McMenamin, R., McGrath, M., and D'Eath, M. (2010). Impacts of service learning on Irish healthcare students, educators, and communities. *Nursing & health sciences*, 12(4), 499 – 506. doi: 10.1111/j.1442-2018.2010.00568.x
- Marinoni, G., van't Land, H. and Jensen, T. (2020). *The Impact of COVID-10 on higher education around the world: IAU Global Survey Report*. International Association of Universities. Available: [https://www.iau-aiu.net/IMG/pdf/iau\\_covid19\\_and\\_he\\_survey\\_report\\_final\\_may\\_2020.pdf](https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf)
- Naumann, E., Möhring, K., Reifenscheid, M., Wenz, A., Rettig, T., Lehrer, R., ... and Blom, A. G. (2020). COVID-19 policies in Germany and their social, political, and psychological consequences. *European Policy Analysis*, 6(2), 191 – 202. doi: 10.1002/epa2.1091
- Oppenheim, A. N. (2000). *Questionnaire design, interviewing and attitude measurement*. Bloomsbury Publishing.
- O'Connor, K., Wrigley, M., Jennings, R., Hill, M., and Niazi, A. (2021). Mental health impacts of COVID-19 in Ireland and the need for a secondary care mental health service response. *Irish Journal of Psychological Medicine*, 38(2), 99 – 107. doi: 10.1017/ipm.2020.64
- O'Sullivan, K., Clark, S., McGrane, A., Rock, N., Burke, L., Boyle, N., Joksimovic, N. and Marshall, K. (2021). A qualitative study of child and adolescent mental health during the COVID-19 pandemic in Ireland. *International journal of environmental research and public health*, 18(3). doi: 10.3390/ijerph18031062
- Perri, M., Dosani, N. and Hwang, S.W. (2020). COVID-19 and people experiencing homelessness: challenges and mitigation strategies. *Canadian Medical Association Journal*, 192(26), E716 – E719. doi: 10.1503/cmaj.200834
- Pietrabissa, G., and Simpson, S. G. (2020). Psychological consequences of social isolation during COVID-19 outbreak. *Frontiers in Psychology*, 11. doi: 10.3389/fpsyg.2020.02201
- Piper, B., DeYoung, M., and Lamsam, G. D. (2000). Student perceptions of a service-learning experience. *American Journal of Pharmaceutical Education*, 64(2), 159 – 165.



- Procario-Foley, C., and Van Cleave, T. J. (2016). Curricular infusion of service-learning. In: M. Levy & B. Polnariev (Eds.) *Academic and Student Affairs in Collaboration* Routledge, pp. 85 – 100.
- Sabo, S., de Zapien, J., Teufel-Shone, N., Rosales, C., Bergsma, L. and Taren, D. (2015). Service Learning: A Vehicle for Building Health Equity and Eliminating Health Disparities. *American Journal of Public Health*, 105(S1), S38 – S43. doi: 10.2105/AJPH.2014.302364
- Shahid, Z., Kalayanamitra, R., McClafferty, B., Kepko, D., Ramgobin, D., Patel, R., Aggarwal, C.S., Vunnam, R., Sahu, N., Bhatt, D., Jones, K., Golamari, R. and Jain, R. (2020). COVID -19 and Older Adults: What We Know. *Journal of the American Geriatrics Society*, 68(5), 926-929. doi: 10.1111/jgs.16472
- Strait, J., Turk, J., and Nordyke, K. J. (2015). Pedagogy of civic engagement, high-impact practices, and service-learning. In J. Strait & K. J. Nordyke (Eds.), *eService-Learning: Creating experiential learning and civic engagement through online and hybrid courses*, Stylus Publishing (pp. 7 – 19).
- Veyvoda, M.A. and Van Cleave, T.J. (2020). Re-Imagining Community-Engaged Learning: Service-Learning in Communication Sciences and Disorders Courses During and After COVID-19. *Perspectives of the ASHA Special Interest Groups*, 5(6), 1542 – 1551. doi: 10.1044/2020\_PERSP-20-00146
- Whalley Hammell, K. (2021). Building back better: Imagining an occupational therapy for a post-COVID-19 world. *Australian Occupational Therapy Journal*, 68(5), 444 – 453. doi: 10.1111/1440-1630.12760