

The Development of the Community Impact Feedback Questionnaire for Service-Learning: A Delphi Study

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Abstract

Community impacts of service-learning have gone largely unexamined by researchers, partly because of the absence of a well-established feedback tool. This study is a step toward filling this research gap by developing and validating the Community Impact Feedback Questionnaire (CIFQ) as a means for collecting feedback from partner organization representatives (PORs) on the impacts of particular service-learning projects on community partner organizations (CPOs) and, where applicable, end-beneficiaries. The CIFQ contains items about three categories of impact on CPOs, corresponding to a conceptual model developed by Snell & Lau (2022). These are: a) achieving project goals to further the CPO's mission; b) augmenting resources of the CPO; and c) acquiring knowledge, insights, ideas, and techniques. There are also items on impacts for end-beneficiaries, overall impact evaluations, and future engagement. The CIFQ was validated with the Delphi method by inviting 16 practitioner panelists, mainly from CPOs, with prior involvement in service-learning. Three Delphi survey rounds helped refine the CIFQ as a tool for capturing the community impacts on CPOs and end beneficiaries arising from service-learning. Possible reasons for controversy and non-retention are discussed.

Keywords: service-learning, community impact, questionnaire development, community partner organization (CPOs), the delphi method

Introduction

Service-learning is an experiential pedagogy that can greatly impact the community through the collaboration between different stakeholders, including students, instructors, educational institutions, community partner organizations (CPOs), and community members (Wade, 1997). Given that service-learning is “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development” (Jacoby, 1996, p. 5), its success also relies on the involvement of the community and CPOs. While a large body of research studies has accumulated to document the student developmental outcomes of service-learning (see Snell & Lau, 2020), investigating its community impact remains limited (Cruz & Giles, 2000; Farahmandpour & Shodjaee-Zrudlo, 2015; Sandy & Holland, 2006). This phenomenon can be attributed to several factors, including inattention among academia, diversity of and lack of consensus about definitions of community impact, operational difficulties regarding data collection, and the multiplicity of confounding variables. Yet, calls for assessing community impacts have persisted over decades (see Snell & Lau, 2022).

Previous Models of Community Impact Arising from Service-Learning

Other authors have proposed conceptual frameworks for assessing community impacts arising from service learning. We shall discuss three of them. The first was developed by Driscoll et al. (1996), which assesses community impact in relation to a number of factors. These include the university-CPO partnership and interaction; community involvement, social and economic benefits created; and capacity advancement and new insights arising for CPOs. The factors can be assessed through interviews, focus groups, and surveys.

Second, Clarke (2003) recommended a “3-I” model for evaluating community impact based on utilization-focused evaluation and a theory of change principles. The three Is include Initiators (usually universities and CPOs), Initiative (the community service), and Impacts (created by the service). Clarke (2003) proposed that Impacts should be examined from both the CPOs and the university’s (i.e., the initiators) perspectives and that salient indicators should include value and resources obtained, as well as the degree of community satisfaction. Clarke (2003) also recommended collecting data from multiple stakeholders using a mosaic of methods, including interviews, focus groups, on-site observation, data reviews, and surveys.

Third, Gelmon (2003) proposed a list of indicators for capturing community impacts. The chief ones comprised: social and economic benefits created; capacity advancement for the organization; community-university partnership and interaction, and satisfaction with that partnership.

Based on a review of those prior frameworks, Snell & Lau (2022) proposed a conceptual framework for accommodating the perspectives of CPOs and end-beneficiaries (the latter comprising those recipients receiving direct service from students and the CPO via a service-learning project) in assessing the impacts of service-learning on the community. From the CPO's perspective, three main types of community impacts can be summarized from the previous literature. These comprise: a) increased capacity, such as more resources available for service; b) furtherance of organizational goals and mission; and c) knowledge and insights gained. From the end beneficiary's perspective, community impacts are conceptualized as the extent to which a service-learning project can fulfil various needs. Such fulfilment will eventually lead to the enhancement of the quality of life for end-beneficiaries. Snell & Lau (2022) also envisaged that in terms of community impact there could be indirect effects for end-beneficiaries through the agency of the CPO.

A qualitative study was conducted by Lau et al. (2021) to collect accounts from partner organization representatives (PORs) from various CPOs about the community impacts that they had observed arising from service-learning projects in which they had previously collaborated. The findings largely confirmed Snell & Lau's (2022) conceptual framework, which construed that positive community impacts fell into three categories, comprising: a) achieving project goals to further the CPO's mission; b) augmenting the resources of the CPO; and c) gaining knowledge, insights, ideas, and techniques. These broadly matched the three types of impact for the CPO within the framework of Snell and Lau (2022). Furthermore, the PORs in the study by Lau et al. (2021) also indicated the possibility that service-learning could indirectly impact community members from service improvements by the CPO serving them. Moreover, the study revealed that service-learning might have adverse impacts on CPOs and end-beneficiaries, arising if the intended project outcomes are compromised or absent if the extra workload is created for CPOs with little perceived benefit, and/or if CPOs' manpower and resources are considered wasted.

Review of Previous Instruments

Despite there being plenty of measurement scales assessing satisfaction levels from the community's or service client's perspective in the social welfare area and community research (see Fraser & Wu, 2016; Ohmer et al., 2019), similar tools for the service-learning context are scarce (Shek et al., 2020). There are some sample survey and questionnaire items provided by previous researchers (e.g., Clarke, 2003; Gelmon et al., 2001) and some survey questions for in-house evaluation (e.g., Barrientos, 2010). However, we have thus far only been able to identify one complete tool, namely the Community Impact Scale (CIS) by Srinivas et al. (2015). The CIS aims to systematically assess community impacts arising from service-learning from the CPO's perspective, based on rigorous scale development and validation. It measures service-learning impacts for CPOs by means of 46 items under eight major domains, namely: overall experience;

social capital; skills and competencies; motivations and commitments; personal growth and self-concept; knowledge; organizational operations (including fundraising); and organizational resources. Initial themes within the CIS were based on content analysis of in-depth interviews with members of eight PORs of CPOs. This was followed by scale validation with Cronbach's alpha values obtained from a sample of members of around 30 PORs.

One potential limitation of the CIS is that although its items were systematically generated and validated, it was developed based on responses from CPOs partnering with a single university in the U.S., which may limit its applicability to other service-learning environments. A second limitation is that most of its 46 items are about the benefits specifically for the CPO's POR, while less than ten are about benefits for the CPO as a whole and may not capture a comprehensive picture of the latter. Third, the 46-item scale may be lengthy, particularly when administered alongside other measures, and respondents may find it difficult to complete the whole scale. Fourth, we consider that the CIS does not appear to tap into the experiences of the end beneficiaries of service-learning. Snell & Lau (2022) argued that PORs are likely to have insights into their clients' experiences, i.e., end-beneficiaries in service-learning, and that, therefore, a feedback tool about community impacts could seek to obtain such information via the CPO as a proxy. Considering the above factors, we argue that a relatively concise feedback tool was needed to obtain information from CPOs about the community impacts of service-learning.

The Current Study

The current study sought to establish an instrument based on the conceptual framework of Snell & Lau (2022) and the findings of Lau et al. (2021). The resulting instrument is called the Community Impact Feedback Questionnaire (CIFQ), which, although mainly designed to engage the CPO's perspective, also seeks to capture information about impacts for end-beneficiaries. In the remainder of this article, we shall report how the CIFQ was developed and validated using the Delphi method.

Methods

The Proposed Instrument

The initially proposed version of the CIFQ, which was subsequently refined through the research reported in the findings section, consisted of two sections. The first section contained 24 items designed to be rated by PORs on behalf of their CPOs on a 10-point Likert scale. The first five items assessed the extent to which the service-learning project has helped to achieve project goals to further the CPO's mission. The following six items assessed the extent to which the service-learning project has augmented the resources of the CPO. The following five items asked

about the CPO's acquisition of knowledge, insights, ideas, and techniques through the service-learning project. There were then two items about the perceived impacts of the service-learning project on end-beneficiaries. The last six rated items asked for overall assessments, including the inclination to continue collaboration and to recommend collaboration in service-learning to others. The first 18 items in section one were designed to be rated from 1 “very little” through 5/6 with an optional mid-way label of “to some extent” to 10 “very much.” The last six items in section one were designed to be rated from 1 “strongly disagree” to 10 “strongly agree.” The second section of the CIFQ invited the POR to write down any other comments, if any, as auxiliary data to researchers.

The Delphi Method

The current study aimed to validate the CIFQ by adopting the Delphi method. The Delphi method has been used in many disciplines, especially for topics with limited prior research and lack of clarity or where there has been controversy and debate. It involves collating ideas generated by a knowledgeable participant pool (known as “panelists”) and typically involves two to three rounds of instrument completion and idea consolidation (Iqbal & Pison-Young, 2009). The Delphi method has been commonly employed to build consensus, articulate frameworks, and develop measurement scales. It has been used in many disciplines, including medical research, business studies, public opinion surveys, and information technology (e.g., Hepworth & Rowe, 2017; Mengual-Andrés et al., 2016; Skulmoski et al., 2007; Okoli & Pawlowski, 2004). It has also been employed in prior research studies on service-learning. For example, Shumer (1993) conducted a Delphi study to portray and understand the nature of service-learning by inviting a group of experts, including practitioners and researchers, to describe existing service-learning models and the characteristics differentiating service-learning from other types of programs. It appears that the Delphi method has not previously been used for instrument development in service-learning.

Service-Learning in Hong Kong

Since the CIFQ development and validation were conducted in the Hong Kong service-learning context, we shall, therefore, briefly introduce the current situation of Hong Kong service-learning [see also Snell and Lau (2020) and Lau & Snell (2021)]. Hong Kong can be regarded as a pioneer of service-learning in Asia, where it is a relatively new pedagogy compared to the U.S., where service-learning originated. Since its introduction to Hong Kong at the dawn of the 21st century, service-learning has been substantially developed over the last two decades. Nowadays, all Hong Kong public universities, as well as some private universities, have adopted service-learning. Some universities in Hong Kong have even made service-learning mandatory as an undergraduate graduation requirement. While retaining the essential pedagogical aspects of its western counterpart, Hong Kong service-learning has evolved several local emphases. First, it

tends to be more oriented toward vocational preparation. Second, greatly influenced by Confucianism, it tends to seek to enhance students' sense of moral values and social responsibility rather than deepening their engagement in participatory democracy and furtherance of social justice, which are major emphases in the west, especially the U.S. Third, there tends to be less emphasis on student self-initiation and choice-making, and more emphasis on operating within frameworks set up by instructors and CPOs, reflecting cultural assumptions about the need for top-down classroom management.

Procedure

A Delphi method comprising three rounds was employed for the current study. In the first round, we sought four types of responses from 16 Practitioner Panellists (P.P.s). To start the process, we sent an online survey invitation email to each P.P. for data collection. Apart from the online survey link, the email also contained an overview of the current study and the expected tasks for the P.P.s. The online survey directed the P.P.s who accepted the invitation to evaluate the CIFQ.

First, we asked them to answer a survey about the perceived relevance to community stakeholders of the proposed items for the CIFQ on a rating scale with four options (not relevant at all, somewhat irrelevant, somewhat relevant, very relevant). Second, we asked the P.P.s for additional comments about each proposed item, such as suggested rewordings. Third, we invited them to suggest new items. Fourth, we asked them to rate on a scale with four options (strongly disagree, somewhat disagree, somewhat agree, strongly agree) as to whether we should retain an open-ended section at the end of the tool to invite respondents to express additional opinions.

After collecting the first-round responses from the P.P.s, we met with another panel, which we shall refer to as the Questionnaire Development Panel (QDP). The QDP comprised a group of experienced service-learning practitioners and researchers employed by four local universities (Lingnan University, Hong Kong Baptist University, The Hong Kong Polytechnic University, and The Education University of Hong Kong). The QDP helped design the proposed CIFQ, analyze the data from the first round of the Delphi study, and revise it based on the responses of the P.P.s. The revisions to the CIFQ involved removing items deemed irrelevant or redundant, revising item wordings, and adding new items. Standards for item retention and removal were explicitly set out in advance and are described later.

The modified CIFQ was then presented to the P.P.s in the second round of the Delphi study, adopting a similar approach in the first round. The data collected from the second round were then discussed by the QDP, who helped to make any further modifications deemed appropriate. In cases where an item remained controversial among the P.P.s in the second round, the QDP arrived at its judgment on whether to keep, drop, or modify it, resulting in a revised version of the CIFQ.

Three items, which remained controversial after the second round and had been modified by the QDP, were presented to the P.P.s in a third supplementary round of the Delphi study.

Membership of the Practitioner Panel

Since the Delphi method strongly relies on the knowledge and judgment of the participants, i.e., the panelists, the quality of their recruitment process is pivotal to its success (Iqbal & Pipon-Young, 2009). The recruitment of the P.P.s was conducted in accordance with four criteria recommended by Adler and Ziglio (1996). In our study, these criteria were applied as a) having knowledge of and experience with service-learning as a POR, service-learning instructor, or service-learning coordinator; b) being willing to participate; c) sufficiently available to participate; and d) being able to communicate effectively in the language medium of the study, which was English. Altogether, 16 P.P.s were recruited, slightly outside the range of 10 and 15 recommended by Turoff (2002).

The 16 P.P.s were obtained through nominations by the QDP from among the PORs of CPOs that had long collaboration history with the QDP's universities in service-learning. They were from various organizations, including educational institutions, non-profit organizations, and social enterprises, with services covering elderly care, youth service, education, and training (see Table 1). We believe they represented the CPOs typically partnering in Hong Kong-based service-learning.

TABLE 1. The list of panelists and their profile

Code	Type of Organization	Type of Main Service	Position	Role in Service Learning	Gender	Nominated by*
C1	University	Tertiary education	Associate Professor	Service-learning instructor	Female	LU
C2	CPO	NGO: Social service	Chief Supervisor	Former Service-learning instructor, community partner	Female	LU
C3	CPO	NGO: Elderly service	Manager	Former Service-learning coordinator, community partner	Female	LU
C4	CPO	Social enterprise in start-up incubation and job matching	Impact Catalyst	Community partner	Male	LU
C5	CPO	NGO: Youth service	Person in Charge	Community partner	Male	LU

C6	CPO	NGO: Inclusive education	Person in Charge	Community partner	Male	HKBU
C7	CPO	NGO: Hunger & poverty relief	Person in Charge	Community partner	Male	HKBU
C8	CPO	Elderly service	Person in Charge	Community partner	Male	HKBU
C9	CPO	Primary education	Teacher	Community partner	Male	HKPU
C10	University	Tertiary education	Teaching Fellow	Service-learning instructor	Female	HKPU
C11	CPO	Primary education	Teacher	Community partner	Female	HKPU
C12	University	Tertiary education	Associate Professor	Service-learning Instructor	Female	HKPU
C13	CPO	Children & youth service	Office-in-charge	Community partner	Male	EDUHK
C14	CPO	Children service	Office-in-charge	Community partner	Male	EDUHK
C15	CPO	Youth service	Unit-in-Charge	Community partner	Male	EDUHK
C16	CPO	Youth service	Youth Work Officer	Community partner	Male	EDUHK

Note: LU: Lingnan University; HKBU: Hong Kong Baptist University; HKPU: The Hong Kong Polytechnic University; EDUHK: The Education University of Hong Kong

Standards for Item Retention and Removal

Consensus for retention was defined as there is 70% or more of the P.P.s rating an item as “relevant” (choosing the option of “somewhat relevant” or “very relevant”) or, in the case of the open-ended section of the proposed CIFQ consensus for retention was defined as there is 70% or more of the P.P.s choosing the option of “somewhat agree” or “strongly agree.” Consensus for removal was defined as there is 70% or more of the P.P.s rating an item as “not relevant” (options of “somewhat irrelevant” and “not relevant at all”) or similar patterns for the level of agreement options as mentioned above. Non-consensus was deemed to have occurred in cases where other scoring patterns were obtained from the P.P.s. Where items remained in the category of non-consensus after the two rounds, the QDP arrived at decisions to either keep or remove items, taking into consideration the comments and suggestions from the P.P.s as well as the patterns of their ratings.

Results

The Results of the First Round

All 16 P.P.s responded to the first round of the Delphi survey. Table 2 displays the results in terms of relevancy rates (options of “somewhat relevant” and “very relevant”; or “somewhat agree” and “strongly agree”) derived from the P.P.s’ responses to each item in the CIFQ.

In the first round, 15 of 24 proposed items achieved a relevancy rate above 70%, indicating that consensus for retention was achieved for those items. These items comprised: four out of five in the category of “achieving project goals to further the CPO’s mission,” two out of six in the category of “augmenting resources of the CPO,” three out of five in the category of “acquiring knowledge, insights, ideas and techniques,” both items in the category of “impact on the end-beneficiaries,” and four out of six in the category of “overall assessment.”

TABLE 2. The results of the three rounds of the Delphi survey

		Round 1 (N = 16)		Round 2 (N = 15)		Round 3 (N=13)	
		Relevancy Rate/ Level of Agreement		Relevancy Rate/ Level of Agreement		Relevancy Rate/ Level of Agreement	
No.	Draft Item	Answer Dist*	Revised Item	Answer Dist*	Finalized Item	Answer Dist*	
P01	The service-learning project furthered my organization's mission	94% NR(0); SI(1); SR(8); VR(7)	The service-learning project advanced my organization's mission	93% NR(1); SI(0); SR(12); VR(2)	No Change	N/A	N/A
P02	The service-learning project provided tangible outputs (e.g. books, curriculum, new service, etc.) to help my organization	88% NR(1); SI(1); SR(8); VR(6)	The service-learning project provided helpful outputs (e.g., books, curriculum, new service, etc.) for my organization	100% NR(0); SI(0); SR(7); VR(8)	No Change	N/A	N/A
P03	The service-learning project enhanced the service quality of my organization	88% NR(1); SI(1); SR(10); VR(4)	No Change	93% NR(0); SI(1); SR(10); VR(4)	No Change	N/A	N/A
P04	The service-learning project promoted the image of my organization	81% NR(0); SI(3); SR(6); VR(7)	The service-learning project helped promote the image of my organization	100% NR(0); SI(0); SR(7); VR(8)	No Change	N/A	N/A
P05	The service-learning project increased the	69% NR(0); SI(5);	No Change	73% NR(1); SI(3);	The service-learning project enabled my	N/A	N/A

No.	Round 1 (N = 16)			Round 2 (N = 15)			Round 3 (N=13)		
	Draft Item	Relevancy Rate/ Level of Agreement	Answer Dist*	Revised Item	Relevancy Rate/ Level of Agreement	Answer Dist*	Finalized Item	Relevancy Rate/ Level of Agreement	Answer Dist*
	number of clients that my organization could serve		SR(6); VR(5)			SR(8); VR(3)	organization to serve more clients		
P06	The service-learning project obtained financial resources for my organization	50%	NR(5); SI(3); SR(7); VR(1)	The service-learning project provided extra financial resources for my organization	53%	NR(2); SI(5); SR(7); VR(1)	The service-learning project created economic benefits (e.g., savings, extra revenue) for my organization	77%	NR(0); SI(3); SR(6); VR(4)
P07	The service-learning project provided extra manpower for my organization	75%	NR(2); SI(2); SR(5); VR(7)	The service-learning project provided extra human resources for my organization	100%	NR(0); SI(0); SR(11); VR(4)	No Change	N/A	N/A
P08	The service-learning project reduced the workload of regular employees or volunteers in my organization	50%	NR(2); SI(6); SR(3); VR(5)	The service-learning project increased the workload of employees in my organization	80%	NR(0); SI(3); SR(10); VR(2)	The service-learning project was worth the effort that my organization put into it	92%	NR(0); SI(1); SR(8); VR(4)
P09	The service-learning project helped create a positive work environment	63%	NR(2); SI(4); SR(5); VR(5)	The service-learning project helped create a positive work culture in my organization	93%	NR(1); SI(0); SR(12); VR(2)	The service-learning project helped promote a positive work culture in my organization	N/A	N/A

		Round 1 (N = 16)		Round 2 (N = 15)		Round 3 (N=13)			
		Relevancy Rate/ Level of Agreement		Relevancy Rate/ Level of Agreement		Relevancy Rate/ Level of Agreement			
No.	Draft Item	Answer Dist*	Revised Item	Answer Dist*	Finalized Item	Answer Dist*	Revised Item	Answer Dist*	
P10	The service-learning project served as a channel for recruiting talent for my organization	50%; NR(2); SI(6); SR(4); VR(4)	No Change	60%; NR(4); SI(2); SR(6); VR(3)	Dropped				N/A
P11	The service-learning project expanded my organization's network	94%; NR(0); SI(1); SR(8); VR(7)	No Change	93%; NR(0); SI(1); SR(5); VR(9)	No Change				N/A
P12	The service-learning project inspired us with new ideas and insights	100%; NR(0); SI(0); SR(8); VR(8)	The service-learning project inspired us with new ideas, insights and/or strategies	93%; NR(0); SI(1); SR(5); VR(9)	No Change				N/A
P13	The service-learning project challenged the usual work practices in my organization	63%; NR(2); SI(4); SR(8); VR(2)	The service-learning project stimulated us to review the usual work practices in my organization	100%; NR(0); SI(0); SR(11); VR(4)	The service-learning project stimulated my organization to review our usual work practices				N/A
P14	The service-learning project transferred new knowledge from university to my organization	94%; NR(0); SI(1); SR(7); VR(8)	No Change	100%; NR(0); SI(0); SR(9); VR(6)	No Change				N/A

Round 1 (N = 16)			Round 2 (N = 15)			Round 3 (N=13)		
No. Draft Item	Relevancy Rate/ Level of Agreement	Answer Dist*	Revised Item	Relevancy Rate/ Level of Agreement	Answer Dist*	Finalized Item	Relevancy Rate/ Level of Agreement	Answer Dist*
	P15	The service-learning project enabled us to gain new experience		100% NR(0); SI(0); SR(5); VR(11)	No Change		100% NR(0); SI(0); SR(6); VR(9)	No Change
P16	The service-learning project enhanced our work techniques	63% NR(0); SI(6); SR(9); VR(1)	The service-learning project helped enhance our work techniques	80% NR(0); SI(3); SR(10); VR(2)	No Change	N/A	N/A	
B01	Overall, the service-learning project brought benefits to the recipients of the service	100% NR(0); SI(0); SR(5); VR(11)	Overall, the service-learning project brought benefits to service recipients	100% NR(0); SI(0); SR(3); VR(12)	No Change	N/A	N/A	
B02	Overall, the service-learning project improved the quality of life of the recipients of the service	100% NR(0); SI(0); SR(10); VR(6)	Overall, the service-learning project improved the well-being of service-recipients	100% NR(0); SI(0); SR(6); VR(9)	No Change	N/A	N/A	
O01	Overall, the service-learning project was a waste of time for my organization	25% NR(10); SI(2); SR(1); VR(3)	Overall, the service-learning project was not useful for my organization	40% NR(5); SI(4); SR(2); VR(4)	Dropped, and created in the open-ended section the question: "What changes could be made, if any, to	77%	StD(0); SD(3); SA(7); StA(3)	

No.	Draft Item	Round 1 (N = 16)		Revised Item	Round 2 (N = 15)		Finalized Item	Round 3 (N=13)	
		Relevancy Rate/ Level of Agreement	Answer Dist*		Relevancy Rate/ Level of Agreement	Answer Dist*		Relevancy Rate/ Level of Agreement	Answer Dist*
							make the service-learning project more useful in the future?"		
002	Overall, the service-learning project was a waste of resources for my organization	25%	NR(10); SI(2); SR(1); VR(3)	Ditto	N/A		Ditto	N/A	N/A
003	Overall, the service-learning project created positive impact for my organization	100%	NR(0); SI(0); SR(7); VR(9)	No Change	100%	NR(0); SI(0); SR(7); VR(8)	No Change	N/A	N/A
004	Overall, I am satisfied with the service-learning project	100%	NR(0); SI(0); SR(6); VR(10)	Dropped	N/A	N/A	Dropped	N/A	N/A
005	The project increased the likelihood that my organization will collaborate in service-learning in the future	100%	NR(0); SI(0); SR(7); VR(9)	The project made us want to continue partnering in service-learning in the future	100%	NR(0); SI(0); SR(5); VR(10)	No Change	N/A	N/A

		Round 1 (N = 16)		Round 2 (N = 15)		Round 3 (N=13)			
		Relevancy Rate/ Level of Agreement		Relevancy Rate/ Level of Agreement		Relevancy Rate/ Level of Agreement			
No.	Draft Item	Answer Dist*	Revised Item	Answer Dist*	Finalized Item	Answer Dist*	Revised Item	Answer Dist*	Finalized Item
006	I will recommend collaboration in service-learning to other community organizations	100% NR(0); SI(0); SR(6); VR(10)	I will recommend collaboration in service-learning to other community organizations	100% NR(0); SI(0); SR(5); VR(10)	No Change				N/A
OE	The necessity of including an open-ended section	94% StD(0); SD(1); SA(9); StA(6)	No Change	100% StD(0); SD(0); SA(10); StA(5)	No Change				N/A
NA	N/A	N/A	Added an option of "N/A" for each item	87% StD(0); SD(2); SA(7); StA(6)	Added the option of "N/A" for each item				N/A
DK	N/A	N/A	Added an option of "Don't Know" for each item	73% StD(2); SD(2); SA(8); StA(3)	Dropped the option of "Don't Know"				77% StD(1); SD(2); SA(6); StA(4)

Note: nr: not relevant at all; si: somewhat irrelevant; sr: somewhat relevant; vr: very relevant; std: strongly disagree; sd: somewhat disagree; sa: somewhat agree; sta: strongly agree.

Original Research

Some items were deemed controversial because there was non-consensus among the P.P.s. This was observed for items about finance (e.g., the service-learning project obtained financial resources for my organization; 50% relevancy rate), manpower (e.g., the service-learning project served as a channel for recruiting talent for my organization, 50% relevancy rate), and work practices (e.g., the service-learning project challenged the usual work practices in my organization, 63% relevancy rate).

Two “negative” items in the overall assessment category, namely “overall, the service-learning project was a waste of time for my organization” and “overall, the service-learning project was a waste of resources for my organization,” achieved consensus for removal with a 25% relevancy rate. The P.P.s indicated with 100% agreement that the section collecting open-ended comments at the end of the CIFQ was necessary,

The QDP reviewed the quantitative results for each item, together with other comments made by the P.P.s. Discussion with the QDP led to several modifications to the proposed CIFQ before the second round. The wording of 15 items was changed. We shall provide some illustrations.

Some items were changed to convey their meaning more clearly. Thus, for proposed item P01, “the service-learning project furthered my organization's mission,” the wording was changed to “the service-learning project advanced my organization's mission,” For proposed item P09, “The service-learning project helped create a positive work environment” the wording was changed to “The service-learning project helped create a positive work culture in my organization.”

Some items were changed to widen their coverage of potential impacts. Thus, proposed item P12, “the service-learning project inspired us with new ideas and insights,” was modified to “the service-learning project inspired us with new ideas, insights and/or strategies.”

Some items with a relevancy rate lower than 70% but above 30% were modified to increase their relevancy rate. For example, proposed item P08, “the service-learning project reduced the workload of regular employees or volunteers in my organization,” was transformed into “the service-learning project increased the workload of employees in my organization.”

Two items with a consensus for removal were combined. These comprised proposed item O01, “overall, the service-learning project was a waste of time for my organization,” and proposed item O02, “overall, the service-learning project was a waste of resources for my organization.”

They were combined into one proposed item: "overall, the service-learning project was not useful for my organization."

Finally, although the P.P.s indicated consensus for retention of item O04, "overall, I am satisfied with the service-learning project," the QDP decided to drop it because they deemed that satisfaction is not conceptually related to community impact.

The Results of the Second Round

The modified CIFQ was then presented to the P.P.s for the second round of the Delphi survey adopting the same procedure as in the first round. Among P.P.s, 15 out of 16 responded (response rate: 94%). Among the 22 proposed items, 19 reached a consensus for retention (see Table 2). Moreover, a consensus was reached for adding the "N/A" (87%) and "Don't Know" (73%) options for each item.

Three items (P06, P10, & O01) remained controversial despite improving their relevancy rates. Regarding these proposed items, the QDP arrived at the following decisions. First, proposed item P10, "the service-learning project served as a channel for recruiting talent for my organization," was dropped. Second, proposed item P06, "the service-learning project provided extra financial resources for my organization," was changed into "the service-learning project created economic benefits (e.g., savings, increased extra revenue) for my organization." Third, proposed item O01, "overall, the service-learning project was not useful for my organization," was dropped and replaced by a proposed open-ended question, "what changes could be made, if any, to make the service-learning project more useful in the future?"

Moreover, based on the comments provided by the P.P.s, the wordings of three items, namely P05, P08, and P09, were modified. Finally, despite the consensus for retention of the "don't know" response option (agreement rate: 73%), the QDP deemed that including only the "not applicable" option (agreement rate: 87%) would suffice.

As a result of the QDP's deliberations and decisions, the number of items for the CIFQ was reduced to 20 rated items plus two open-ended questions. Since the proposed items P06, P08 and O01 had undergone major modifications, the Delphi survey's third (supplementary) round was conducted, focusing only on these three items.

The Results of the Third Round

In the third round of the Delphi survey, 13 out of the 16 P.P.s (response rate: 81%) provided their responses. All items agreed on the relevancy rate or level of agreement for the proposed changes.

Specifically, the P.P.s indicated a high relevancy rating (77%) for item P06, "the service-learning project created economic benefits (e.g., savings, increased extra revenue) for my organization." For item P08 (92%), "the service-learning project was worth the effort that my organization put into it." The P.P.s also indicated high agreement (77%) to drop item O01, "overall, the service-learning project was not useful for my organization" and replace it with an open-ended question, "What changes could be made, if any, to make the service-learning project more useful in the future?"

In a final review session, the QDP made minor modifications to some items to further fine-tune the language. The finalized version of the CIFQ is given in Appendix A.

Discussion

The current study developed and validated the CIFQ from the CPO's perspective by employing the Delphi method through three survey rounds. Using the Delphi method distinguishes our study from previous instrument development studies, which have mainly adopted scale conceptualization based on literature reviews and mass validation through large samples. The Delphi method allowed us to establish satisfactory content validity for the scale from experts' perspectives as an alternative to seeking mass validation from a large sample of CPOs (i.e., the target respondents), which is not easily obtained. Compared with the CIS (Srinivas et al., 2015), the CIFQ is much more concise, with only 20 items. Yet, it provides comprehensive coverage of the community impact domains that interest service-learning practitioner-partners and researchers. The CIFQ is also easily administrated, and we consider that it is conducive both to a high response rate and to gathering rich information.

The validation results indicated consensus for the retention of most items about 1) achieving project goals to further the CPO's mission; 2) augmenting resources of the CPO; 3) acquiring knowledge, insights, ideas, and techniques for the CPO. There was also consensus for retaining two items about impacts for end-beneficiaries. These four sets of items closely match the conceptual framework proposed by Snell and Lau (2022). Also, the P.P.s indicated consensus for removal of the unfavorable overall assessment items, such as, in the second round, "overall the service-learning project was not useful for my organization." Furthermore, the P.P.s indicated consensus for retaining favorable overall assessment items such as "the service-learning project created positive impacts for my organization."

The above results support previous studies indicating that service-learning benefits CPOs by transferring new knowledge, insights, and ideas (e.g., Driscoll et al., 1996) and advancing the CPOs' mission (e.g., Gelmon, 2003). The validation results also dovetailed with two of the measurement domains in the framework for community research proposed by Ohmer et al. (2019). Thus, the domain of community amenities and resources and that of community well-

being in the Ohmer et al. (2019) framework appear cognate to the CIFQ theme of augmenting resources for the CPO and the CIFQ item of well-being for end-beneficiaries (referred to as “service recipients” in the CIFQ). Moreover, although the CIFQ items about the impact on end-beneficiaries were not designed to capture any particular impact area, the high relevancy rates for these items suggest that PORs are not only aware of the favorable direct impacts that service-learning has for end-beneficiaries but are also aware of the indirect path of impacts from service-learning, via CPOs as the mediator, for end-beneficiaries. This finding offers further support for the conceptual framework proposed by Snell & Lau (2022) and findings obtained from interviews with CPOs (Lau et al., 2021).

However, there was some controversy regarding the three types of items. These concerns: are 1) impacts on organizational operations, such as work practices and techniques; 2) impacts relating to organizational resources, such as finance, manpower, and client base; and 3) other impacts not easily altered within a short time, such as workload reduction.

Although the sufficient consensus among the P.P.s or the retention of these items was eventually achieved, the initial controversy may reflect three factors. First, most service-learning projects are short-lived, typically taking place in a single semester (Tyron et al., 2008), and may not be able to tackle the abovementioned aspects. Second, because of the short span of engagement, many service-learning projects are designed in a “supportive” way, through which extra manpower is provided to deliver the CPOs’ current services and initiatives rather than involving students as consultants in designing changes to organizational operations. Even with service-learning internship programs, which afford intensive interactions between interns and members of the CPOs, student interns may still find that as outsiders, but without “expert” status, it is not easy for them to initiate changes in work practices and organizational culture. Third, although prior literature (e.g., Barrientos, 2010) has reported that service-learning can have long-term impacts on the community, such as obtaining grant funding and increased quality and quantity of services, it is not easy to attribute such impacts to any particular service-learning projects. Such impacts may be cumulative, reflecting in a series of service-learning projects combined with other initiatives by the university and/or CPOs across many years.

This study also found that among the P.P.s, there was a consensus for removing the two items referring to unfavorable impacts, namely wasting time and resources. This does not match the findings of previous research, which has indicated that service learning can negatively impact CPOs and the wider community, especially if the associated project management processes and arrangements are inadequate (e.g., Lau et al., 2021; Tryon et al., 2015). Two factors may account for the P.P.s’ consensus for removing the unfavorable item. First, past studies have indicated that community impacts of service-learning tend to be positive. For example, in the interview study by Lau et al. (2021), unfavorable mentions concerning impacts comprised around one-sixth of the total number of comments provided by CPOs, and some referred to the absence of positive

impacts than negative impacts per se. Second, the consensus for removing unfavorable items may reflect sampling bias if there had been some tendency for PORs with negative experiences of service-learning not to be nominated by the QDP or for only those with unfavorable perceptions of service-learning to agree to be nominated.

Limitations and Further Studies

The current study employed the Delphi method instead of seeking to obtain a large sample of CPOs in Hong Kong. The method was used with three rounds required to refine the CIFQ to achieve consensus by the P.P.s regarding the relevance of its constituent items to their experience and observations of the impacts of service-learning. The next step in the validation of the CIFQ would involve its actual administration to collect feedback from PORs regarding the impacts of particular service-learning projects conducted with a larger sample of a variety of types of CPOs in terms of industry, size, mission, and ownership, and in conjunction with a variety of types of service-learning project.

Widespread administration of the CIFQ, on the lines suggested above, could feed the establishment of a centralized database, making possible “big data” analysis and identification of underlying impact factors. We suggest that in Chinese-speaking communities such as Hong Kong, the Chinese version of the CIFQ (see Lau & Snell, 2021) may be more accessible to PORs, and should be validated with empirical data.

Moreover, further studies could be conducted involving triangulating the community impact perceptions obtained from the CIFQ with data obtained from other stakeholders in service-learning, such as self-perceived student development outcomes and the opinions of end-beneficiaries in the community, to cast further light on the mutual benefits for, and mutual contributions by the various stakeholders in service-learning projects.

Author Note

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Appendix A

The Finalized Version of the Community Impact Feedback Questionnaire

Please choose the appropriate scores (1 = very little; 10= very much) to indicate the extent to which you think the service-learning project has created the impact described in the following statements. Please choose the option "N/A" if the impact described in the statement did not apply to the service-learning project.

Domain 1: Achieving project goals to further the CPO's mission

To what extent has the service-learning project...	Very little			To some extent						Very much		N/A
CV6_P01 advanced my organization's mission	<input type="checkbox"/>											
CV6_P02 provided helpful outputs (e.g., books, curriculum, new service, etc.) for my organization	<input type="checkbox"/>											
CV6_P03 enhanced the service quality of my organization	<input type="checkbox"/>											
CV6_P04 helped promote the image of my organization	<input type="checkbox"/>											
CV6_P05 enabled my organization to serve more clients	<input type="checkbox"/>											

Domain 2: Augmenting resources of the CPO

To what extent has the service-learning project...	Very little			To some extent						Very much		N/A
CV6_P06 created economic benefits (e.g., savings, extra revenue) for my organization	<input type="checkbox"/>											
CV6_P07 provided extra human resources for my organization	<input type="checkbox"/>											
CV6_P08 been worth the effort that my organization put into it	<input type="checkbox"/>											
CV6_P09 helped promote a positive work culture in my organization	<input type="checkbox"/>											
CV6_P11 expanded my organization's network	<input type="checkbox"/>											

Domain 3: Acquiring knowledge, insights, ideas and techniques for the CPO

To what extent has the service-learning project...	Very little			To some extent						Very much		N/A
CV6_P12 inspired us with new ideas, insights and/or strategies	<input type="checkbox"/>											
CV6_P13 stimulated my organization to review our usual work practices	<input type="checkbox"/>											
CV6_P14 transferred new knowledge from	<input type="checkbox"/>											

To what extent has the service-learning project... university to my organization	Very little	To some extent								Very much	N/A
CV6_P15 enabled us to gain new experience	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10	<input type="checkbox"/> 88
CV6_P16 helped enhance our work techniques	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10	<input type="checkbox"/> 88

Impact for service recipients (if the service-learning project had not involved any service recipients, please skip this part)

To what extent has the service-learning project...	Very little	To some extent								Very much	N/A
CV6_B01 brought benefits to service recipients	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10	<input type="checkbox"/> 88
CV6_B02 improved the well-being of service recipients	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10	<input type="checkbox"/> 88

Overall Assessment (1= strongly disagree; 10=strongly agree)

	Strongly disagree									Strongly agree
CV6_O03 Overall, the service-learning project created positive impact for my organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
CV6_O05 Overall, the service-learning project made us want to continue partnering in service-learning in the future	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
CV6_O06 I will recommend collaboration in service-learning to other community organizations	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10

What changes could be made, if any, to make the service-learning project more useful in the future?

Any other comments, please specify:

~ End of the Questionnaire ~