

Service-Learning and Clinical Nursing Education: A Delphi Inquiry

Thomas Dombrowsky, PhD, RN; Kevin Gustafson, PhD; and Denise Cauble, PhD, RN, CWOCN

ABSTRACT

Background: There is confusion about the similarities and differences between service-learning and clinical nursing education among nurse educators. **Method:** The Delphi method was used to survey nursing authors of articles on service-learning with the purpose of uncovering differences and similarities between the two methods, as well as the unique contributions of service-learning. **Results:** Both service-learning and clinical education further outcomes such as cultural competence, skill development, teamwork, leadership, and application of theory to practice. Service-learning also fosters student creativity and independence and is more focused on client or agency need. Clinical education is primarily focused on the student and is better understood by most nurse educators. Service-learning provides a broader perspective of health care and an increased sense of agency and self-confidence. **Conclusion:** Service-learning is a viable method to address gaps in nursing education, but it is not well understood by many nurse educators. [*J Nurs Educ.* 2019;58(7):381-391.]

When nurse educators hear about service-learning, many of them say, “We’re already doing that” (Peterson & Schaffer, 2001). The same thing probably happens with educators from other professions with a strong service component, such as social work. Service-learning and clinical education are both experiential learning modalities, and thus share some similarities, but there are important differences between them as well. Little has been written about the relationship between service-learning and clinical education in nursing. This lack of literature could be a factor impeding wider use of service-learning in nursing education. To fill this gap, a Delphi Inquiry was performed on the subject of similarities between service-learning and clinical education, differences between the two modalities, and the unique contributions of service-learning to nursing education. The participants were authors of journal articles about service-learning in nursing.

LITERATURE REVIEW

Service-learning is widely acknowledged as a high-impact pedagogy (Kuh, 2008). Although service-learning has been defined in a notoriously large number of ways, one commonly accepted description considers it to be a “course-based, credit bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility” (Bingle, Clayton, & Hatcher, 2013, p. 6). Service-learning foregrounds issues related to other forms of experiential pedagogies—notably the relation between theory and practice, and the use of written reflection to encourage recursive patterns of observation, analysis, and problem solving (Kolb, 1984). What distinguishes service-learning is its focus on civic awareness and social justice, as well as the reciprocity by which faculty and students collaborate with a community partner to define and address the object of study. Service-learning as pedagogy thus typically seeks to choreograph an educational experience that not only tests theories or develops skills in the real world, but also encourages students

Dr. Dombrowsky is Clinical Assistant Professor, Dr. Cauble is Clinical Assistant Professor, College of Nursing and Health Innovation, University of Texas at Arlington, Arlington, Texas; and Dr. Gustafson is Dean of Honors College, Northern Arizona University, Flagstaff, Arizona.

© 2019 Dombrowsky, Gustafson, & Cauble; licensee SLACK Incorporated. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (<https://creativecommons.org/licenses/by-nc/4.0>). This license allows users to copy and distribute, to remix, transform, and build upon the article non-commercially, provided the authors are attributed and the new work is non-commercial.

The authors have disclosed no potential conflicts of interest, financial or otherwise.

Address correspondence to Thomas Dombrowsky, PhD, RN, Clinical Assistant Professor, College of Nursing and Health Innovation, University of Texas at Arlington, 411 S. Nedderman Dr., Arlington, TX 76010; e-mail: adthomas@uta.edu.

Received: January 21, 2019; Accepted: April 9, 2019
doi:10.3928/01484834-20190614-02

and faculty to reflect on the institutional place of the university and the relation between academic and nonacademic ways of making knowledge and solving problems. The benefits of such work are manifold. One is to increase student engagement by showing how academic skills and methods can be applied to real-world problems (Eyler & Giles, 1999). Another benefit—for the faculty, as well as the student—is to recognize that there is expertise outside the classroom. A third derives from reflective activity: there are many models for critical reflection, but most emphasize “what,” “how,” and “why” to encourage students to look for the social significance of work and to chart personal, academic, and civic growth (Eyler & Giles, 1999).

Service-learning can and has been used in most academic disciplines (Zlotkowski, 1997-2002). And as one might expect, service-learning takes on many different forms because it is a localized pedagogy and because disciplines vary so greatly. Some of the most dramatic success stories about service-learning come from disciplines in which there is not necessarily a strong tradition of experiential education—for example, literary study (Grobman & Rosenberg, 2015). Service-learning is perhaps a more obvious fit with fields that already are geared toward service and already have an experiential dimension, including nursing. It is therefore no surprise that the past 20 years have seen a strong growth in interest in and scholarship on service-learning in nursing education. An important milestone in scholarship on service nursing education was *Caring and Community: Concepts and Models for Service-Learning in Nursing*, which appeared as part of a series sponsored by the American Association of Higher Education (Norbeck, Connolly, & Koerner, 1998). As with most disciplines, scholarship on service-learning in nursing has been largely divided between general studies (Adonis, Julie, & Daniels, 2005; Callister & Hobbins-Garbett, 2000; Champagne, 2006) and accounts of specific courses or programs (Bassi, Cray, & Caldrello, 2008; Bittle, Duggleby, & Ellison, 2002). Some work has been devoted to the value of service-learning in meeting basic curricular goals in nursing education—for example, research methods (Balakas & Sparks, 2010). But a significant number of studies consider ways in which service-learning can help nursing students develop soft skills, including leadership (Foli, Braswell, Kirkpatrick, & Lim, 2014; Groh, Stallwood, & Daniels, 2011), and what might be broadly considered cultural or emotional competence, including how to understand and work with diverse or at-risk populations (Amerson, 2010; Bell & Buelow, 2014; Gillis & Mac Lellan, 2010; Harrison & Fopma-Loy, 2010; Hunt & Swiggum, 2007; Jarosinski & Heinrich, 2010; Jarrell et al., 2014; Lashley, 2007; Sensenig, 2007) or do nursing in an international setting (Bentley & Ellison, 2005; Wittmann-Price, Anselmi, & Espinal, 2010).

Implicit in much of this research is that service-learning offers added value to students in training that already includes a significant experiential component in the form of clinical education. Much less understood is the perceived relation between service-learning and clinical training in nursing education—and more specifically, the attitudes among nursing educators toward that relation. In other words, if nursing already has a tradition of experiential pedagogy in the form of clinical education, then what is the value of service-learning in relation to clinical education?

Kendle and Zoeller (2007) pointed to the potential success of incorporating service-learning into clinical training for nursing students (Kendle & Zoeller, 2007). But like many such studies—and indeed much research on the effectiveness of service-learning in nursing or other disciplines—their study and conclusions are firmly rooted in one particular place and setting, in this case respite services provided by students at St. Mary’s College of Nursing. The current study offers a reconsideration of the relation between service-learning and clinical education in nursing and seeks to do so by using a research method—Delphi Inquiry—that incorporates, yet goes beyond, the accounts of individual nurse educators and effectively seeks to put different voices in dialogue to reach some general sense of why nurse educators might decide to adopt service-learning and what they might expect students to gain from such an educational experience.

METHOD

The Delphi technique is a method for achieving consensus among a group of experts (Hsu & Sandford, 2007). It was developed in the 1950s by the Rand Corporation and was initially used in the area of national defense (Guzys, Dickson-Swift, Kenny, & Threlkeld, 2015) but has since been used in a variety of disciplines, including health care and education.

The basic structure of the Delphi technique consists of an initial round where an open-ended question is posed to a panel of experts, followed by further rounds of questionnaires based on the responses to the initial round (Hsu & Sandford, 2007). Participants are blinded to each other’s identities. This precludes undue influence from higher status participants and reduces pressure on participants to conform to majority opinion. Purposive sampling is used (Brady, 2015), with participants being chosen for their expertise on the topic of inquiry. The classic version of the technique consists of three or more iterations. The researchers provide controlled feedback on the results to the participants following each iteration, and that feedback serves as the basis for the next iteration. The first questionnaire may be open-ended questions or may consist of items developed by the researcher from literature relevant to the topic of interest. The results are summarized and used to construct a questionnaire for the second round. Feedback from the second round is used to create the third-round questionnaire. Often, there is convergence on a consensus after three rounds. If this is not the case, rounds may continue until there is convergence.

The theoretical basis for the Delphi method is a matter of dispute. Although some have linked it to the philosophical traditions of Locke, Kant, Hegel, and Dewey (Brady, 2015), Guzys et al. (2015) argued that the method developed when there was less appreciation for the importance of theory than there is today. They used a scoping review process to identify a best-fitting philosophical rationale for the method and concluded that Gadamer’s hermeneutic theory is a possible source of philosophical support for the method. In any case, one of the implicit assumptions of the method is that group opinion has greater validity than individual opinion. The iterative process and the anonymity of the method are believed to facilitate reconsideration of individual judgments. Dialogue among experts thus fa-

cilitates knowledge generation. Guzy et al. (2015) identified several aspects of Gadamer's theory, such as the hermeneutic circle and the fusion of horizons as being salient to the Delphi method. The hermeneutic circle involves understanding the whole in terms of its components and understanding the components in terms of the whole. In a similar way, group consensus can be understood in terms of individual opinion, and individual opinions can be understood in terms of consensus. Gadamer also provided the metaphor of the fusion of horizons to explain the formation of shared understandings. Individual perspectives are never identical, but they can be close to each other. They can become closer and approach convergence through the process of dialogue (Guzy et al., 2015).

Depending on the topic of inquiry, the process of data analysis may proceed in different ways. The initial questionnaire can consist of open-ended questions, which are then thematically analyzed (Toronto, 2017), or, alternatively, the initial questionnaire can be derived by the researchers from a literature review (Hsu & Sandford, 2007). Thematic analysis is conducted for responses to open-ended questions (Brady, 2015). Quantitative data is analyzed using measures of central tendency and measures of dispersal (Hsu & Sandford, 2007).

Key methodological issues for the Delphi method include identifying the purpose of the study, keeping an audit trail of methodological decisions (Humphrey-Murto, Varpio, Gonsalves, & Wood, 2017), defining membership qualifications for the expert panel, and choosing criteria for consensus (Hsu & Sandford, 2007). In the current study, the purpose was to identify similarities and differences between service-learning and traditional clinical education in nursing education, as well as to identify the unique contributions of service-learning to nursing education. It was decided to do a Delphi Inquiry using three rounds beginning with three open-ended questions:

- What are the similarities between clinical education and service-learning in nursing?
- What are the differences between clinical education and service-learning in nursing?
- What does service-learning uniquely add to nursing education?

Consensus was predefined as a standard deviation of less than 1 for the responses on an item. This implied that 68% or more of the responses would be within 1 point of the mean score.

RESULTS

For this study, experts were defined as lead authors of at least one published article on the topic of service-learning in nursing. The panel was selected by conducting a literature search of the Cumulative Index of Nursing and Allied Health Literature (CINAHL®) database using the keywords *service learning* and *nursing education*. The initial search returned 433 articles. The lead author was identified for each article, and if an e-mail address could be found, an e-mail was sent inviting experts to participate in the study. Approval for this study was obtained from the Institutional Review Board of the University of Texas at Arlington. The nature and risks of the study were disclosed in the e-mail invitation, and participants were informed that their

participation constituted consent. Two hundred four e-mails were sent. There were two responses declining to participate and 14 participants who participated in round one of the study.

The research team extracted themes from the responses to the open-ended questions of round one. A total of 61 items were identified and were used to construct Likert-type items asking the participants to rate their agreement or disagreement with the item on a 5-point scale. There was also a provision for participants to comment on each item. This second-round questionnaire was then sent out to the participants who responded to round one. There were 10 responses for round two, but only nine of them were received before round three began. Forty-nine of the responses met the predetermined criteria for consensus (standard deviation of responses < 1), but 12 did not. These 12 items formed the core of the round three questionnaire. Because the researchers still hoped to receive up to five more round two responses, they decided to include some items with a standard deviation between 0.9 and 1. It was noted that many of the items in this category had at least one participant who expressed disagreement or strong disagreement regarding the item. Those items were added to the round three questionnaire. This resulted in a round three questionnaire comprising 17 items. In round three, participants were told that consensus had been reached on most items but that there were still a few items on which there was disagreement. They were invited to revisit their opinion about the items using the same Likert scale that was used in round two. They were strongly encouraged to comment, especially on items with which they disagreed. One additional researcher-generated question was included: "Did your participation in this project cause you to rethink your own pedagogy in any way?"

Nine participants responded to the round three questionnaire, one of whom had not responded in round two. Some changed their opinions on certain items. The correlation between round two responses and the same participant's round three responses was $r = 0.62$. A late response for round two changed the standard deviation for one item to where it would have been included in the items for which there was consensus. Eight items did not converge to a consensus in round three.

Overall results for this study are illustrated in **Figure 1**. Items concerning similarities between service-learning and clinical education for which the participants achieved consensus on round two are summarized in **Table 1**. Broadly speaking, the participants were in agreement that both service-learning and clinical education promote skill development, cultural competence, leadership, teamwork, empathy, and the application of theoretical knowledge to practical situations. Both modalities emphasize learning through practice through the delivery of some type of service. Both should be designed with course objectives and Quality and Safety Education for Nurses competencies in mind, and both should include time for reflection.

The differences between service-learning and clinical education on which the participants converged in round two are summarized in **Table 2**. The participants thought that service-learning offers students a more internally motivated learning experience, more independence, and a better understanding of the context of health care. The range of activities is broader in service-learning, and it is designed to meet a genuine com-

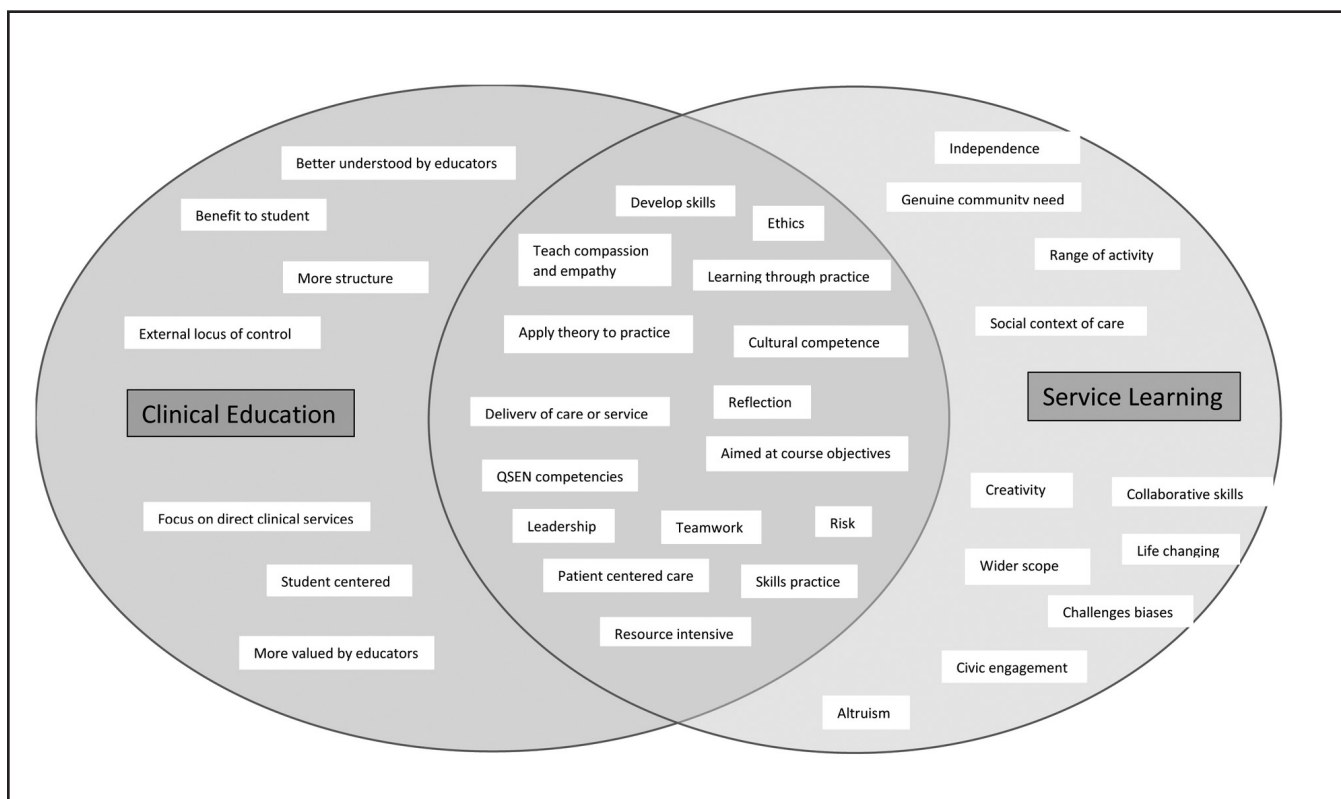


Figure 1. Similarities, differences, and unique features.

munity or individual need. Participants believed that service-learning promotes civic engagement and social responsibility. The participants thought that their colleagues understood and valued clinical education more than service-learning. They saw clinical education as being focused on direct services to individuals without exploring the context and as primarily benefiting the student.

The unique contributions of service-learning identified by the participants are summarized in **Table 3**. The participants thought that service-learning gives students a chance to engage more with the client and is generally a more rewarding experience for students. Students receive a broader view of health care issues and are more engaged. Service-learning promotes altruism and cultural competence, as well as civic engagement, which may become political engagement as well. The client agency also receives genuine service. Students' creativity, independence, and self-confidence are enhanced. They develop networking skills. Students emerge more aware of community needs, and many continue to volunteer even after the experience is over. Service-learning pushes students outside of their comfort zones and enhances their self-knowledge by encouraging them to reflect on their biases and prejudices.

Several items related to similarities between service-learning and clinical education, for which the participants did not achieve initial consensus. The items are as follows, with summaries of the participants' comments:

- Service-learning and clinical education are both supervised by experienced faculty. Several participants noted that al-

though in clinical education the faculty are typically on site, in service-learning the faculty may not be, and the actual supervision is done by content experts from the agency where the service is taking place. Moreover, both in service-learning and in clinical education the faculty may not always be very experienced. Arguably, a service-learning experience could be new ground for the faculty member, as well as for the students. Service-learning faculty may or may not be trained in service-learning modalities themselves.

- Both service-learning and clinical education acculturate students to nursing roles. Service-learning often takes place at locations that do not traditionally use nurses. Depending on the experience, the roles developed in service-learning can veer more toward advocacy, heightened awareness of public policy issues, and independent decision making.
- Both service-learning and clinical education are student centered. In service-learning, the needs of the client or agency take precedence over the educational needs of the student. In clinical education, the opposite is usually the case. Students typically have more independence in service-learning and more scope to identify their own learning goals, as opposed to the clinical setting, where there are usually specific identified competencies to be mastered.
- Both service-learning and clinical education involve a required number of hours large enough to do a useful project. Clinical education hours are generally set by regulating boards and do not focus on the usefulness of the service being rendered. Service-learning programs may require a fixed

TABLE 1
Similarities Between Service-Learning and Clinical Education (N = 10)^a

No.	Question	SD	Mean	Min ^b	Max
a1	Both service-learning and clinical education seek to apply theoretical knowledge to practical situations.	0.53	1.5	1	2
a2	Service-learning and clinical education both involve skill development.	0.52	1.6	1	2
a3	Service-learning and clinical education are both supervised by experienced faculty.	1.20	0.9	-1	2
a4	Both service-learning and clinical education acculturate students to nursing roles.	1.03	0.8	-1	2
a5	Both service-learning and clinical education promote cultural competence.	0.79	1.2	0	2
a6	Service-learning and clinical education both involve learning through practice.	0.71	1.5	0	2
a7	Service-learning and clinical education both involve the delivery of some kind of care or service to an individual, group, or community.	0.42	1.8	1	2
a8	Both service-learning and clinical education should be designed to meet key course objectives.	0.32	1.9	1	2
a9	Service-learning and clinical education both promote compassion and empathy.	0.88	1.1	0	2
a10	Service-learning and clinical education both advance Quality and Safety Education for Nurses competencies.	0.87	1	0	2
a11	Service-learning and clinical education both enhance leadership, teamwork, patient-centered care, and collaboration.	0.79	1.2	0	2
a12	Both service-learning and clinical education are student centered.	1.48	0.2	-2	2
a13	Both service-learning and clinical education involve a required number of hours large enough to do a useful project.	1.35	0.5	-2	2
a14	Both service-learning and clinical education involve an opportunity for rich reflection by students.	0.71	1.5	0	2
a15	Both service-learning and clinical education help identify social justice issues, inequities, and disparities.	1.35	0.6	-1	2
a16	Both service-learning and clinical education clarify political and policy implications of nursing work.	1.37	-0.1	-2	2
a17	Both clinical education and service-learning require students to develop coping mechanisms to cope with stress.	1.14	0.8	-1	2
a18	Both service-learning and clinical education require a great deal of university resources (e.g., faculty time, supervision).	0.97	0.6	-1	2
a19	Both service-learning and clinical education have a greater element of risk for the university.	0.95	0.3	-1	2
a20	Both service-learning and clinical education provide real world opportunities for practice of nursing skills.	0.71	1.5	0	2
a21	Both service-learning and clinical education allow students to practice skills within ethical and legal boundaries.	0.67	1.3	0	2
a22	Service-learning and clinical education are fundamentally similar.	0.97	-0.6	-2	1

Note. a = similarities; SD = standard deviation of responses; Mean = mean of responses; Min = minimum response for an item; Max = maximum response for an item.

^a Shaded rows indicate items where consensus was not achieved.

^b -2 = strongly disagree; -1 = disagree; 0 = neutral; 1 = agree; 2 = strongly agree.

number of hours or a range. The number of hours could be set with a view toward the usefulness of the project, but this is not always the case. In any event, useful projects can sometimes be completed in a surprisingly small number of hours.

- Both service-learning and clinical education help identify

social justice issues, inequities, and disparities. In many cases, clinical education does not help students identify social justice issues or disparities. Much depends on the specific clinical site and the skill of the responsible faculty. Service-learning is frequently targeted toward underserved populations.

TABLE 2
Differences Between Service-Learning and Clinical Education (N = 10)^a

No.	Question	SD	Mean	Min ^b	Max
b1	A main difference between service-learning and clinical education is the venue of practice.	1.42	-0.3	-2	2
b2	Service-learning differs from clinical education because it is designed to meet a genuine community need and encourage learning through a service activity, promoting civic engagement and social responsibility.	0.32	1.9	1	2
b3	Clinical education places primary emphasis on the benefit to the student.	0.82	1.3	0	2
b4	Service-learning places primary emphasis on the benefit to the community or client.	0.99	1.1	0	2
b5	Service-learning helps students better understand the context of health care needs in the community.	0.79	1.2	0	2
b6	Service-learning affords students more independence than traditional clinical education.	0.85	1.5	0	2
b7	The range of activities is broader in service-learning than in clinical practice at the bedside.	0.42	1.8	1	2
b8	The locus of control in service-learning is more internal than it is in traditional clinical education.	0.92	1.2	0	2
b9	In service-learning, the structure is less defined, giving students more autonomy.	0.95	1.3	0	2
b10	Students find service-learning to be less stressful than traditional clinical education.	0.99	0.1	-1	2
b11	Service-learning teaches students collaborative skills.	0.67	1.3	0	2
b12	Service-learning teaches students to listen better to community or client needs.	0.70	1.4	0	2
b13	My colleagues understand clinical education more than service-learning.	0.84	1.4	0	2
b14	My colleagues value clinical education more than service-learning.	0.79	1.2	0	2
b15	Clinical education is often focused on direct clinical services, without fully processing or understanding the community needs.	0.67	1.3	0	2
b16	All things being equal, the benefits of service-learning outweigh the potential time and effort lost from clinical.	0.79	1.2	0	2

Note. b = differences; SD = standard deviation of responses; Mean = mean of responses; Min = minimum response for an item; Max = maximum response for an item.

^a Shaded rows indicate items where consensus was not achieved.

^b -2 = strongly disagree; -1 = disagree; 0 = neutral; 1 = agree; 2 = strongly agree.

- Both service-learning and clinical education clarify political and policy implications of nursing work. Clinical education is sometimes too task based to address the political and policy implications of nursing work. Service-learning is often a better venue for examining these issues. Service-learning sometimes focuses on societal political and policy issues that extend beyond nursing. Traditional clinical education may largely ignore the political and policy implications of nursing work.
- Both clinical education and service-learning require students to develop coping mechanisms to cope with stress. There was little discussion on this item. Both service-learning and clinical education can be stressful. Coping mechanisms may not be much discussed in either.

The participants did not achieve initial consensus on several items pertaining to differences between service-learning and clinical education. Here are the items, with their comments:
- A main difference between service-learning and clinical education is the venue of practice. The venue of practice does not get at the essence of the difference. Service-learning does often occur in venues different from that of clinical education, but that is not necessarily the case. Rather, the differences are more a matter of fundamental focus.
- Service-learning is more difficult for students than traditional clinical. This depends on the specific experiences involved. Service-learning can be difficult for students who highly value individual effort and acquisition of technical skills. It can also be more difficult to develop deep reflection. Service-learning may take students out of their comfort zones. Both service-learning and clinical education can be difficult if students do not receive adequate guidance or support.
- Service-learning helps students learn to collaborate with the client in the plan of care. There was little discussion on this item. The participants pointed out that much depends on the specific service-learning project.

TABLE 3
Unique Contributions of Service-Learning to Nursing Education (N = 10)^a

No.	Question	SD	Mean	Min ^b	Max
c1	Service-learning affords students a view of health care issues beyond structured hospital care.	0.48	1.7	1	2
c2	Service-learning creates a sense of gratitude, pride, and satisfaction.	0.67	1.3	0	2
c3	Service-learning promotes more engagement with the client than does traditional clinical education.	0.70	0.4	0	2
c4	Service-learning helps students better understand society and the health care system.	0.53	1.5	1	2
c5	Service-learning provides more service to the client or agency than does traditional clinical education.	0.74	0.9	0	2
c6	Service-learning promotes altruism.	0.74	1.1	0	2
c7	Service-learning promotes civic engagement.	0.70	1.4	0	2
c8	Service-learning encourages students to become political activists.	0.95	0.7	0	2
c9	Service-learning promotes creativity.	0.79	1.2	0	2
c10	Service-learning encourages student independence.	0.70	1.4	0	2
c11	Service-learning is more difficult for students than traditional clinical.	1.34	0.3	-2	2
c12	Service-learning builds student self-confidence.	0.92	1.2	0	2
c13	Service-learning helps students to develop networking skills.	0.42	1.2	1	2
c14	Service-learning makes students more aware of community needs.	0.48	1.7	1	2
c15	Service-learning helps students learn to collaborate with the client in the plan of care.	1.03	0.8	-1	2
c16	Service-learning encourages students to continue to volunteer even after the experience is over.	0.67	1.3	0	2
c17	Service-learning helps students learn more about themselves.	0.70	1.4	0	2
c18	Service-learning builds cultural competency.	0.52	1.4	1	2
c19	Service-learning is life changing for students.	0.57	1.1	0	2
c20	Service-learning promotes inter-disciplinary collaboration.	1.05	1	-1	2
c21	Service-learning promotes a wellness perspective as opposed to a sick-care perspective.	1.05	1	-1	2
c22	Service-learning pushes students outside of their comfort zone, generally resulting in greater self-knowledge.	0.82	1.3	0	2
c23	Service-learning promotes critical reflection on students' own feelings, biases, and prejudices.	0.70	1.6	0	2

Note. c = unique features; SD = standard deviation of responses; Mean = mean of responses; Min = minimum response for an item; Max = maximum response for an item.

^a Shaded rows indicate items where consensus was not achieved.

^b -2 = strongly disagree; -1 = disagree; 0 = neutral; 1 = agree; 2 = strongly agree.

- Service-learning promotes interdisciplinary collaboration. Again, this depends on the specific experience, but it can be a strength of service-learning.
- Service-learning promotes a wellness perspective as opposed to a sick-care perspective. Only one participant commented, saying that it depends on the specific nature of the experience. The following questions were included in the round three survey but ultimately had standard deviations less than 1:
 - Both service-learning and clinical education require a great deal of university resources (faculty time, supervision). There were few comments on this item. One participant said that service-learning takes less of her time than do comparable clinical education experiences. There may be more time expended on the planning and preparation stages with service-learning. For both modalities, traditional ways of measuring faculty effort that are hours based or credit based may not fairly reflect this faculty effort.

TABLE 4
Round Three Results (N = 9)

No.	Question	SD	Mean	R2	Min ^b	Max
Similarities between service-learning and clinical education						
a3	Service-learning and clinical education are both supervised by experienced faculty.	0.93	0.89	0.9	-1	2
a4	Both service-learning and clinical education acculturate students to nursing roles.	0.83	0.78	0.8	-1	2
a12	Both service-learning and clinical education are student centered.	1.24	-0.44	0.2	-2	2
a13	Both service-learning and clinical education involve a required number of hours large enough to do a useful project.	1.12	0.67	0.5	-1	2
a15	Both service-learning and clinical education help identify social justice issues, inequities, and disparities.	1.00	0.33	0.6	-1	2
a16	Both service-learning and clinical education clarify political and policy implications of nursing work.	0.73	-0.44	-0.1	-1	1
a17	Both clinical education and service-learning require students to develop coping mechanisms to cope with stress.	0.71	1.33	0.8	1	2
a18	Both service-learning and clinical education require a great deal of university resources (e.g., faculty time, supervision).	1.05	1.11	0.6	0	2
a19	Both service-learning and clinical education have a greater element of risk for the university.	1.01	0.56	0.3	-1	2
a22	Service-learning and clinical education are fundamentally similar.	1.05	-0.11	-0.6	-2	1
Differences between service-learning and clinical education						
b1	A main difference between service-learning and clinical education is the venue of practice.	1.24	-0.44	-0.3	-2	2
b4	Service-learning places primary emphasis on the benefit to the community/client.	0.83	1.22	1.1	0	2
b10	Students find service-learning to be less stressful than traditional clinical education.	1.01	-0.44	0.1	-2	1
Unique contributions of service-learning to nursing education						
c11	Service-learning is more difficult for students than traditional clinical.	0.87	0.00	0.3	-1	1
c15	Service-learning helps students learn to collaborate with the client in the plan of care.	0.60	0.89	0.8	0	2
c20	Service-learning promotes interdisciplinary collaboration.	0.83	1.22	1	0	2
c21	Service-learning promotes a wellness perspective as opposed to a sick-care perspective.	0.87	1.00	1	0	2

Note. a = similarities; b = differences; c = unique features; SD = standard deviation of responses; Mean = mean of responses; R2 = round two mean; Min = minimum response for an item; Max = maximum response for an item.

^a Shaded rows indicate items where consensus was not achieved.

^b -2 = strongly disagree; -1 = disagree; 0 = neutral; 1 = agree; 2 = strongly agree.

- Both service-learning and clinical education have a greater element of risk for the university. Respondents generally agreed that there is more risk in service-learning and clinical than in a traditional academic course. Service-learning

students are supervised less and may be in environments that are less safe than traditional clinical. In both modalities, there is some risk of harm to the student, as well as harm to the client.

TABLE 5
Course-Based Suggestions

Course	Ideas for Service-Learning Projects
Introduction to Nursing	Volunteer in a community service agency for a specified number of hours. Develop goals for this experience in collaboration with faculty and submit a journal reflection on the experience in light of those goals.
Foundations of Nursing	Identify an unmet need of the population served in the clinical setting.
Health Assessment	Participate in community health screening projects.
Health Promotion	Develop a teaching project. The project could be taught during this course or in some other course.
Medical Surgical Nursing	Work on a project to meet the need identified in the foundations class. This project could include students from other courses or could be done at other points in the curriculum as well.
Psychiatric Nursing	Identify an unmet need in the population served. Future cohorts of psychiatric nursing students could take those unmet needs and develop projects to help meet them.
Critical Care Nursing	Identify a need common among family members of critical care patients. Plan a program to help with that need. Enlist available community resources in meeting this need.
Pediatric Nursing	Take the pediatric post conference to a homeless shelter that serves families with children.
Obstetric Nursing	Develop a project to facilitate access to prenatal care for high-risk pregnant women.
Nursing Research	Identify ways to facilitate access to research by hospital nurses.
Community Health Nursing	Design and implement a project to meet a specific need of the population served by the assigned agency.
Nursing Leadership	Question nurse leaders about unmet needs in their organizations. Identify possible resources. Ideas can be passed forward to future classes.

- Service-learning and clinical education are fundamentally similar. Service-learning is more focused on the service population, with student learning objectives being secondary. Service-learning is also more systems based, whereas clinical education may be task based. Service-learning requires greater autonomy, creativity, and self-direction from the student. Service-learning is more focused on social justice, but clinical education is focused on skill development and student learning. Both modalities are similar in that they provide experiential activities for the student.
- Service-learning places primary emphasis on the benefit to the community or client. There was little discussion on this item, but two participants thought that the service-learning environment provided an equal balance on client and student benefit. The implication would be that traditional clinical education skews heavily toward student benefit.
- Students find service-learning to be less stressful than traditional clinical education. This is not always the case. Sometimes students can be more stressed by service-learning. Not all service-learning experiences or all clinical experiences are equal. Specific stressors in clinical education relate to close scrutiny from the faculty and the focus on student errors. Service-learning students perceive their experiences to be less high risk but also face an increased demand for empathy and communication skills.

Round two results for all questions are summarized in **Tables 1-3**. **Table 4** presents the results from round three. In the final round, convergence of opinion occurred for nine items. Items that were still controversial after round three were:

- Both service-learning and clinical education are student centered.

- Both service-learning and clinical education involve a required number of hours large enough to do a useful project.
- Both service-learning and clinical education help identify social justice issues, inequities, and disparities.
- Both service-learning and clinical education require a great deal of university resources (e.g., faculty time, supervision).
- Both service-learning and clinical education have a greater element of risk for the university.
- Service-learning and clinical education are fundamentally similar.
- A main difference between service-learning and clinical education is the venue of practice.
- Students find service-learning to be less stressful than traditional clinical education.

DISCUSSION

Although service-learning shares some common features with clinical education, there are clear differences as well. Some of the similarities stem from the fact that both modalities are experiential learning methods. Thus, both service-learning and clinical education involve skill development and the application of theory to practical situations. Both modalities promote the acquisition of technical skills and nursing values such as caring, empathy, and cultural competence. Both promote leadership ability. Both modalities involve students going out and gaining experience and then reflecting on it.

The service-learning practitioners surveyed in this study widely agreed that service-learning differs from clinical education in that service-learning is focused on a genuine community need. Clinical education emphasizes the educational

benefit to the student. Service-learning does not ignore this goal, but the needs of the client or community take precedence. In spite of the seeming lack of emphasis on student benefit, side benefits exist for the student, including increased independence and an increased sense of accomplishment. The participants saw service-learning as incorporating a broader range of activities.

Some of the unique features of service-learning are its ability to afford students a broader view of health care issues and the context of care. Students are generally more engaged with the work and may even develop habits of volunteerism and civic engagement that last beyond the project. They also may develop greater self-confidence and collaborative skills. Service-learning is also notable for its ability to challenge students' biases and prejudices.

Important features of clinical education identified by our participants are that it is primarily student focused and that it is more structured than service-learning. The locus of control for the student is generally external, as opposed to service-learning where the student has more opportunity for independent decision making. Our participants thought that clinical education is better understood than service-learning by their peers and that it is also more valued by them.

There were several issues on which the participants did not achieve consensus. For example, although many of the participants thought that service-learning was less stressful for the student than traditional clinical education, others disagreed. The stresses of service-learning are likely to be different from those of clinical education and involve taking students out of their comfort zone and challenging their expectations.

Although many of the participants thought that service-learning and clinical education were both resource-intensive activities with higher risk for the university, all did not agree. Perhaps it depends on the specifics of the project or clinical site. There was also disagreement as to whether service-learning occurs in different venues from traditional clinical education. Although most service-learning projects are done in nontraditional venues, one could do a service-learning project in a traditional hospital setting.

One of the strengths of service-learning that is often mentioned is the ability to broaden students' knowledge of political and social issues. The participants in our study had mixed views on the statement that both service-learning and clinical education help identify social justice issues, inequities, and disparities. There was a little more agreement on the statement that both modalities clarify political and policy implications of nursing work. Service-learning has been used to teach a variety of components within the nursing curriculum, such as disaster preparedness (Adams, Canclini, & Frable, 2015), leadership (Foli et al., 2014), community engagement (Thomas & Smith, 2017), and cultural competence (Kohlbray, 2016; Long, 2014). In principle, service-learning could be used in any of the classes of the nursing curriculum, but in practice some courses are more amenable to this pedagogy than others. Course-specific factors that enter into the decision whether to use service-learning include the objectives of the course and the availability of suitable service venues (Whitley & Walsh, 2014). Other course-specific factors include the number of

students and the length of the course. Even though service-learning is used in courses from a wide variety of disciplines, it is more often used in human sciences disciplines (as opposed to hard science) and in applied courses (Butin, 2010).

Service-learning requires that the participant be able to perform a genuine service. Students do not necessarily need a high level of knowledge, but they do need some background knowledge, and at beginning levels they need a greater amount of direction and supervision. This does not mean that service-learning cannot be done in beginning-level classes, but it does mean that the scope of the service offered would likely be more limited and that the need for supervision would be greater.

Service-learning can be done as stand-alone projects or as a specific requirement for a course. For example, an Introduction to Nursing course might require students to perform a volunteer experience at an approved community agency and then reflect on the experience, but the same experience could also be offered to students at multiple levels through a student organization and then be accepted by various courses for partial credit. **Table 5** provides similar ideas specific to individual courses. Some of the suggestions might not result in full service-learning projects for the specific course concerned but might feed into service-learning projects at other levels.

One barrier to the wider use of service-learning is time constraint. Faculty feel pressure to deliver a specified amount of content to prepare students for the NCLEX. Service-learning in nursing education offers a better understanding of the context of care and improved cultural competence, both of which could help students frame their knowledge and better retain content because it is more meaningful. Furthermore, by enhancing students' critical thinking, service-learning may help prepare students for higher level NCLEX questions.

The research reported here reflects the perspectives of nurse educators who practice and write about service-learning. More research is needed to determine whether these findings are congruent with the viewpoints of students and service recipients, as well as with learning outcome measurements. Nurse educators who are concerned about lack of student engagement in the experiential component of nursing education might want to consider service-learning. In addition, nurse education leaders might want to consider the findings of this study in deciding whether to promote the use of service-learning in their institutions.

The contributors in the current study identified that one of the contributions of service-learning is to foster creativity. This does not discount the possibility that creativity can emerge in clinical education and other areas of nursing education, but perhaps the greater independence afforded to students in the service-learning venue allows student creativity to emerge more easily than in other educational contexts.

REFERENCES

- Adams, L.M., Canclini, S.B., & Frable, P.J. (2015). "Skip the infection, get the injection": A case study in emergency preparedness education. *Nurse Education in Practice, 15*, 58-62.
- Adonis, T.A., Julie, H., & Daniels, P. (2005). Service-learning in nursing: Integrating student learning and community-based service experience

- through reflective practice. *Health SA Gesondheid*, 10(4), 41-54.
- Amerson, R. (2010). The impact of service-learning on cultural competence. *Nursing Education Perspectives*, 31, 18-22.
- Balakas, K., & Sparks, L. (2010). Teaching research and evidence-based practice using a service-learning approach. *Journal of Nursing Education*, 49, 691-695.
- Bassi, S., Cray, J., & Caldrello, L. (2008). A tobacco-free service-learning pilot project. *Journal of Nursing Education*, 47, 174-178.
- Bell, M.L., & Buelow, J.R. (2014). Teaching students to work with vulnerable populations through a patient advocacy course. *Nurse Educator*, 39, 236-240.
- Bentley, R., & Ellison, K.J. (2005). Impact of a service-learning project on nursing students. *Nursing Education Perspectives*, 26, 287-290.
- Bittle, M., Duggleby, W., & Ellison, P. (2002). Implementation of the essential elements of service learning in three nursing courses. *Journal of Nursing Education*, 41, 129-132.
- Brady, S.R. (2015). Utilizing and adapting the Delphi method for use in qualitative research. *International Journal of Qualitative Methods*, 14, 1609406915621381.
- Bringle, R.G., Clayton, P.H., & Hatcher, J.A. (2013). Research on service-learning: An introduction. In P.H. Clayton, R.G. Bringle, & J.A. Hatcher (Eds.), *Research on service learning: Conceptual frameworks and assessment. Volume 2A: Students and faculty* (pp. 3-26). Sterling, VA: Stylus.
- Butin, D.W. (2010). *Service-learning in theory and practice: The future of community engagement in higher education*. New York, NY: Macmillan.
- Callister, L.C., & Hobbins-Garbett, D. (2000). "Enter to learn, go forth to serve": Service learning in nursing education. *Journal of Professional Nursing*, 16, 177-183.
- Champagne, N. (2006). Service learning: Its origin, evolution, and connection to health education. *American Journal of Health Education*, 37, 97-102.
- Eyler, J., & Giles, D.E., Jr. (1999). *Where's the learning in service-learning?* San Francisco, CA: Jossey-Bass.
- Foli, K.J., Braswell, M., Kirkpatrick, J., & Lim, E. (2014). Development of leadership behaviors in undergraduate nursing students: A service-learning approach. *Nursing Education Perspectives*, 35, 76-82.
- Gillis, & Mac Lellan, M. (2010). Service learning with vulnerable populations: Review of the literature. *International Journal of Nursing Education Scholarship*, 7(1).
- Grobman, L., & Rosenberg, R. (Eds.). (2015). *Service learning and literary studies in English*. New York, NY: Modern Language Association of America.
- Groh, C.J., Stallwood, L.G., & Daniels, J.J. (2011). Service-learning in nursing education: Its impact on leadership and social justice. *Nursing Education Perspectives*, 32, 400-405.
- Guzys, D., Dickson-Swift, V., Kenny, A., & Threlkeld, G. (2015). Gadamerian philosophical hermeneutics as a useful methodological framework for the Delphi technique. *International Journal of Qualitative Studies on Health & Well-Being*, 10, 26291.
- Harrison, P.A., & Fopma-Loy, J.L. (2010). Reflective journaling prompts: A vehicle for stimulating emotional competence in nursing. *Journal of Nursing Education*, 49, 645-652.
- Hsu, C.C., & Sandford, B.A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research & Evaluation*, 12(10), 1-8.
- Humphrey-Murto, S., Varpio, L., Gonsalves, C., & Wood, T.J. (2017). Using consensus group methods such as Delphi and Nominal Group in medical education research. *Medical Teacher*, 39, 14-19.
- Hunt, R.J., & Swiggum, P. (2007). Being in another world: Transcultural student experiences using service learning with families who are homeless. *Journal of Transcultural Nursing*, 18, 167-174.
- Jarosinski, J.M., & Heinrich, C. (2010). Standing in their shoes: Student immersion in the community using service-learning with at-risk teens. *Issues in Mental Health Nursing*, 31, 288-297.
- Jarrell, K., Ozmy, J., Gallagher, J., Hagler, D., Corral, C., & Hagler, A. (2014). Constructing the foundations for compassionate care: How service-learning affects nursing students' attitudes towards the poor. *Nurse Education in Practice*, 14, 299-303.
- Kendle, J., & Zoeller, L.H. (2007). Providing time out: A unique service learning clinical experience. *Annual Review of Nursing Education*, 5, 53.
- Kohlbray, P.W. (2016). The impact of international service-learning on nursing students' cultural competency. *Journal of Nursing Scholarship*, 48, 303-311.
- Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Upper Saddle River, NJ: Prentice Hall.
- Kuh, G.D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Lashley, M. (2007). Nurses on a mission: A professional service learning experience with inner-city homeless. *Nursing Education Perspectives*, 28, 24-26.
- Long, T. (2014). Influence of international service-learning on nursing student self-efficacy toward cultural competence. *Journal of Nursing Education*, 53, 474-478.
- Norbeck, J.S., Connolly, C., & Koerner, J. (Eds.). (1998). *Caring and community: Concepts and models for service-learning in nursing*. Sterling, VA: Stylus.
- Peterson, S.J., & Schaffer, M.A. (2001). Service-learning: Isn't that what nursing education has always been? *Journal of Nursing Education*, 40, 51-52.
- Sensenig, J.A. (2007). Learning through teaching: Empowering students and culturally diverse patients at a community-based nursing care center. *Journal of Nursing Education*, 46, 373-379.
- Thomas, M.H., & Smith, R.S. (2017). Building community engagement: Incorporation of service learning in a nursing curriculum. *Nurse Education Today*, 52, 63-65.
- Toronto, C. (2017). Considerations when conducting e-Delphi research: A case study. *Nurse Researcher*, 25, 10-15.
- Whitley, M.A., & Walsh, D.S. (2014). A framework for the design and implementation of service-learning courses. *Journal of Physical Education, Recreation & Dance*, 85(4), 34-39.
- Wittmann-Price, R.A., Anselmi, K.K., & Espinal, F. (2010). Creating opportunities for successful international student service-learning experiences. *Holistic Nursing Practice*, 24, 89-98.
- Zlotkowski, E. (Ed.). (1997-2002). *AAHE series on service learning in the disciplines*. Washington, DC: American Association for Higher Education.