Developing College Students' Civic-Mindedness Through Service-Learning Experiences: A Mixed-Methods Study

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Abstract

In the current study, we applied a mixed-methods approach to examining civic-mindedness of undergraduate students in a service-learning course. A quantitative self-report measure of civic-mindedness was administered pre- and post-course. During the second half of the course, a subset of students participated in focus groups, responding to questions directly aligned with the quantitative measure. Quantitative and qualitative data were integrated via a mixed method convergent parallel design. Quantitatively, civic-mindedness increased pre-post. Qualitative findings both supported and contradicted quantitative results. Mixed-methods analyses provided a more complete understanding of the relationship between service-learning and civic-mindedness than quantitative or qualitative analysis alone. Future research for student affairs and assessment professionals are discussed.

Amidst increasing calls for demonstrating the worth of a college education (e.g., Arum & Roksa, 2011) is the issue of equity. Colleges increasingly serve students with diverse backgrounds and needs, yet since 1990 the net cost of college, as a percentage of family income, has markedly increased for students from the lowest-income families (Cahalan & Perna, 2015).

This increase places unique challenges on low-income students who attend college, creating a barrier their higher socio-economic peers do not face. The need to address equity of access to higher education is both a social justice issue and a "national imperative" (Cahalan & Perna, 2015, p. 43). Moreover, once students enroll in college, they should participate in experiences that promote their understanding of social equity issues, as well as engage in activities that allow them to promote general equity on their campuses and in their communities. In short, graduates of institutions of higher education should ideally be equipped with the skills necessary to recognize and address issues of equity within their communities. Experiential learning programs, such as service-learning, are one example of an equity-promoting experience within higher education (Kolb & Kolb, 2005).

In service learning programs, community service is typically embedded within a course that includes focused reflections about the service experience. Reflection is a key aspect of the service-learning experience that facilitates student growth (Cone & Harris, 1996; Jacoby, 1996, 2003). Specifically, focused reflection through service-learning encourages students to think critically about their service as "continuous, connected, challenging, and contextualized" (Eyler, Giles, & Schmiede, 1996, p. 16). The use of a reflective framework, such as the "what, so what, now what," framework, aids in deepening students' connections to the experience.

Another key component of service-learning programs is the intentional creation of a reciprocal relationship, in which both community partners and universities identify mutually-beneficial outcomes (Stanton, Giles, & Cruz, 1999). The development and fulfillment of mutually-beneficial outcomes helps ensure students provide a necessary service for the community, thus creating a beneficial learning environment for students (Jacoby, 1996, 2003).

The merging of course-work, structured reflection, and reciprocity elevates service-learning beyond volunteerism, seeks to enrich students' experiences, and fosters increased growth and learning.

Benefits of Service-learning

In addition to the acquisition of knowledge related to their academic discipline, students' soft-skill development – such as written and oral communication, teamwork, ethical reasoning, and critical thinking – is particularly important in today's occupational climate (Hart Research Associates, 2015). However, employers report that many students have not met these outcomes upon graduation. Service-learning is one avenue for strengthening the soft skills that supplement the typical disciplinary knowledge obtained in higher education (Zlotkowski, 1996). For example, the structured reflection in service-learning aids in the development of communication, critical thinking, and ethical reasoning (Jacoby, 1996), which are necessary skills for effective equity-building.

The Association of American Colleges and Universities (AAC&U) refers to service-learning as one of several high-impact practices believed to result in favorable learning, retention, and engagement for students of many backgrounds (Kuh, 2008). There is evidence that students' involvement with service-learning is related to improved cultural knowledge, awareness, and competence (Boyle-Baise & Kilbane, 2000; Giles & Eyler, 1994), as well as increased ability to address social justice issues related to equality, race, and empathy (Einfeld & Collins, 2008). For example, students participating in service-learning were less likely to have stereotypical perceptions of a person struggling with poverty and crime (Boyle-Baise & Kilbane, 2000), and were less likely to hold stereotypical perceptions of specific groups of individuals (Giles & Eyler, 1994). Findings such as these suggest that, through service learning, students can gain key insight into the experiences of others.

The benefits of service-learning outlined above represent but a few desired outcomes in higher education. Specific outcomes are likely to vary based on how institutions tailor their

service-learning programs to their own needs and goals. The current study focuses on civic-mindedness as an outcome for service-learning.

Civic-Mindedness

Civic-mindedness is a subset of civic engagement. Though there are many definitions of civic engagement (Hatcher, 2011), the AAC&U has championed a definition that is used in coordination with their Civic Engagement Value Rubric:

> Civic engagement is working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes (p. 82).

Moreover, the AAC&U identified "personal and social responsibility, including civic knowledge and engagement – local and global…anchored through active involvement with diverse communities and real-world challenges" as an essential learning outcome for students in higher education (AAC&U, 2008).

Civic-mindedness is similar to civic engagement, but requires a commitment and sense of responsibility to a community. That is, being civically-minded is a necessary condition for being a civically-engaged individual, and involves qualities that are often developed through service-learning (Bringle & Hatcher, 2009; Bringle & Steinberg, 2010). Specifically, civic-mindedness encompasses students' knowledge, skills, dispositions, and behavioral intentions for being a civic member of society. Thus, civic-mindedness involves feeling a sense of responsibility for a community and commitment to involvement within that community (Bringle & Steinberg, 2010; Hatcher 2008).

To describe the civically-minded individual, seven key elements of civic-minded graduates are put forth in the literature (Bringle & Steinberg, 2010): 1) academic knowledge and training relevant to their discipline; 2) awareness of volunteer opportunities available within their communities; 3) understanding of complex societal issues (e.g., social justice and political issues); 4) communication skills necessary to effectively work with others; 5) understanding

of diversity and issues pertinent to diverse populations; 6) sense of self-efficacy and belief in their abilities to act in their communities to produce change; and 7) desire to explicitly state their behavioral intentions. Through these seven elements, students encompass civic-mindedness holistically – they have relevant knowledge and skills they can use to identify issues, the skills to engage with others to promote change, and the ability to take action and make changes. These qualities are facilitated through both curricular and co-curricular activities (AAC&U, 2008; Bringle & Steinberg, 2010).

In many studies, qualities related to civic-mindedness and civic engagement have been measured quantitatively (Giles & Eyler, 1994; Hatcher, 2008; Moely & Ilustre, 2013; Reed, Jernstedt, Hawley, Reber, & DuBois, 2005). However, given the qualities of civic-mindedness are complex and dynamic, one may wonder whether quantitative measures tell the full story, as nuances of experience may be masked. The value of qualitative methodology is that it enables deeper understanding of these nuances and helps reveal the developmental progression of civic-mindedness qualities. The integration of the two approaches via mixed-methods methodology (Creswell, 2014) may aid in understanding how service-learning influences students. Thus, mixed-methodologies can shed new light on high impact practices like service-learning.

Mixed-methods approach

Mixed-methods approaches do not merely combine qualitative and quantitative research, but *integrate* them to answer a research question that is not easily answered by either alone. That is, pure mixed-methods research includes a research question that requires the use of more than one method (Creswell, 2008, 2014; Creswell & Plano Clark, 2007). Without the mixed method research question, a research study would simply be a study with quantitative and qualitative components. Through mixed-methods, researchers benefit from the advantages of both quantitative and qualitative methods. Quantitative measures are advantageous because they allow quick and easy data collection. However, the scope is often narrow, and respondents do not have an opportunity to elaborate on responses. In contrast, the

open-ended questions in qualitative research provide an opportunity for respondents to provide responses that are not pre-selected by the researcher, permitting "richer" and more nuanced interpretations to emerge. Specifically, qualitative questions allow respondents to share differing viewpoints that may be otherwise masked in aggregated quantitative data. The integration of quantitative and qualitative data through mixed-methods also has implications for conclusions drawn from the data. If findings from both quantitative and qualitative data agree when merged, there is a stronger case for the conclusions from the results than from either method alone. If findings from the two sources of data disagree, it does not mean that one method was incorrect. Instead, it may mean that one method may not capture the results fully and the disagreement is a point of interest and discussion. For purposes of illustration, consider an example investigating the relationship between prejudiced attitudes and facilitated conversations debunking stereotypes. Interpretation of quantitative analyses could suggest that discussion significantly predicted decreased scores on a prejudiced attitudes survey. However, through a qualitative focus group, it could emerge that the decrease in prejudiced attitudes was influenced by an additional unexpected variable – the students who reported decreased prejudiced attitudes were highly involved on campus and thus had frequent interactions with those of differing identities. These unexpected findings do not change the results (i.e., prejudiced attitudes still decreased with structured conversations debunking stereotypes), but instead illustrate that the relationship is more nuanced than previously thought.

Purpose of Current Study

Rationale

Because it is important to equip students with the tools necessary to address issues of equity in society (AAC&U, 2008), it is imperative for colleges and universities to offer experiences that promote students' abilities to navigate diverse environments and to develop attitudes such as civic mindedness. Although higher education has a long-standing commitment to developing the civic engagement of graduates (e.g., Altman, 1996; Giles & Eyler, 1994; Hatcher, 2011), published examples of civic engagement

programming are sparser than expected. The dearth of literature is likely not due to lack of programming, but rather the limited dissemination of assessment findings within the extant literature (Hatcher, 2011). One purpose of this paper is to provide an example of a service-learning program designed to increase students' civic-mindedness. Moreover, of the examples available in the literature, most assessment is primarily quantitative in nature. However, we question whether a quantitative measure of civic-mindedness fully captures the nuances of the service-learning experience. Thus, following a convergent parallel research design (Creswell, 2015), we explored both quantitative and qualitative findings and examined the conclusions drawn from each.

Research Questions

Our study has three components: a quantitative component (Civic-Mindedness Scale), a qualitative component (focus group), and a mixed-methods component (convergent parallel design).

Quantitative. Does students' self-reported civic-mindedness change during a service-learning course?

Qualitative. Do students who participate in a service-learning course express attitudes of civic-mindedness? Furthermore, do students who participate in a service-learning course provide examples of ways in which their service-learning experiences have influenced their civic-mindedness?

Mixed-methods. To what extent do the quantitative self-reported civic-mindedness results and the qualitative focus group findings tell the same or different stories?

Method

Participants

Data were obtained from undergraduate students enrolled in a service-learning course at a public university. Per IRB protocol 16-0406, all data were de-identified. The institution enrolls approximately 60% women and 40% men, who are primarily White (78%), with far fewer Hispanic (6%), Black (4%), and Asian

(4%) students.

Measures

Quantitative. The Civic-Mindedness Scale (Hatcher, 2008; Appendix A), adapted for college use, was administered via an electronic survey. The 25-item scale consists of five subscales: Voluntary Action, Identity and Calling, Citizenship, Social Trustee, and Consensus Building. Students responded to items on a scale of 1 (Strongly Disagree) to 7 (Strongly Agree). Table 1 includes pre-post subscale means, standard deviations, and Cronbach's alpha estimates of internal consistency.

Table 1: Descriptives, Reliability, and t-test Results for Pre-test and Post-test Civic-Mindedness Subscale Scores

	Pre-test			Post-test						
	M	SD	α	M	SD	α	t	df	p	d
Voluntary Action	5.5	0.81	0.81	5.89	0.82	0.87	8.628	317	<.001	0.48
Identity and Calling	5.87	0.86	0.85	6.09	0.83	0.88	4.807	317	<.001	0.27
Citizenship	4.9	1.16	0.78	5.37	1.16	0.82	8.112	317	<.001	0.4
Social Trustee	5.71	0.82	0.77	6.05	0.76	0.78	8.099	317	<.001	0.46
Consensus Building	5.84	0.78	0.75	6.13	0.68	0.79	6.857	317	<.001	0.39
N = 219										

Qualitative. Three focus groups were conducted, during which the facilitator asked participants seven questions developed to address four of the five civic-mindedness subscales. Focus group questions were intentionally neutral in an effort to minimize socially-desirable responding. For example, the quantitative items were written in the positive direction (e.g., Identity and Calling item "I am very passionate about my community-related activities."; see Appendix A), potentially eliciting socially-desirable responding. The corresponding focus group questions were open-ended and neutral without assuming students' responses would be positive (e.g., "Describe any challenges or successes that either ignited your passion or felt like an obligation").

Procedure

Quantitative. A group of 219 undergraduate students were enrolled in a semester-long course during which they completed

20 - 60 hours of local community service. Students completed the adapted Civic-Mindedness Scale (Hatcher, 2008) at the beginning and end of the semester.

Qualitative. Near the end of the same semester, three one-hour focus groups (4 to 6 students per group) were facilitated by one of the authors. Audiotapes of the sessions were transcribed verbatim, and because data were de-identified, transcripts of the discussions were simply noted as "facilitator" and "participant."

In preparation for group coding, three coders reviewed printed copies of the focus group transcripts. Coders used a consensus coding method (Fonteyn, Vettese, Lancaster, & Bauer-Wu, 2008; Glaser, 1965), and group coding was conducted on three afternoons. Coders conversed and engaged in memo-ing throughout the coding process. During the initial coding phase, each transcribed statement was read aloud and coders color-coded individual participant responses that 1) aligned with civic-mindedness (green), 2) countered civic-mindedness (red), 3) were poignant (gold), and 4) embodied another theme (purple). As additional themes emerged, previously-coded passages were revisited and coding was updated (Glaser, 1965). Following the first round of coding, codes and memos were entered into a spreadsheet and reviewed by all three coders.
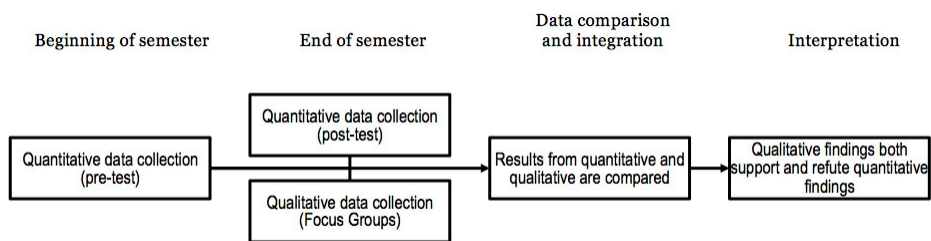
Figure 1

Mixed methods convergent parallel design

Mixed. A convergent parallel research design (Creswell, 2015) was employed (see Figure 1). In this design, qualitative and quantitative methods both measure the same outcome, analyses are conducted for each method independently, and then results are integrated to draw inferences about the phenomena under

study (Creswell & Plano Clark, 2007; Creswell, 2015). The current study included a quantitative survey pre-test, followed by both a quantitative survey post-test and a qualitative focus group. Pre-post-test and focus group data were analyzed independently, and results were compared using a joint-display table (see Table 2). Quantitative and qualitative results were then integrated to determine whether they led to similar or different conclusions.

Joint Display Table: Civic-Mindedness Subscales

*Note: No focus group questions written for this subscale

Quantitative Data	Qualitative Data	
	Alignment with subscale	Misalignment with subscale
	"I think it's the cognitive awareness of things that need to be done."	Uncertainty about what "service" or "social justice" means. "Is obesity a social justice issue?"
Voluntary Action: increased pre-post	"Just like opening your mind to new experiences and different backgrounds of people, breaking down stereotypes."	International students expressed frustration over logistics of transportation, communication and understanding societal norms.
	"I think you can't do things like this alone, and you need people with you."	
Identity and Calling: increased pre-post	"Being a role model for children."	Community service can feel like an obligation. "I felt very obligated to go there…."
	"I feel it's something contagious."	"I just did it for the credits."
	Themes of reciprocity emerged here.	
Citizenship: increased pre-post	"I learned so much knowledge about the world that I wouldn't have gotten. And, I learned it more first hand."	The experience did not break through stereotypes or objectification of senior citizens. "So there are some good places where you can put elderly people."
	"It makes me more mature and step out of my comfort zone….and makes you realize that in order to get you also have to give back."	
	"I want to do something that helps someone."	"Maybe a question to ask in the future is 'how many people will continue volunteering after this class.' Honestly, I don't intend to."
Social Trustee: increased pre-post*	"It helped me see that I want to be involved in the community."	Maintained paternalistic attitudes or classism. "It helped me learn the grunt work… and I can empathize with people who are doing that work and are below [me]."
	"People shouldn't be worried about their grade, and should be concerned with their service connected to a social issue."	
	"I'm not really making social change, but I've been able to talk to the city council and get more funding and make them more aware of the issues."	
Consensus Building: increased pre-post	"Most people at [the university] don't think [the local city] is very diverse, but it's very diverse when you leave [the university] – you can see it."	Language issues: "Some kids speak Spanish and I spoke none."
	"Even though we are completely different people, we had a good time and interacted."	Communication issues: "I was trying to help the guy who was running the event – [there were] a lot of communication issues."

Results

Quantitative

A series of five repeated measures *t*-tests were conducted to determine if there were significant differences between the pre-test and post-test civic-mindedness scores. Because multiple analyses were conducted, an alpha < .001 was used. All subscale scores increased significantly ($p < .001$). Moreover, all Cohen's *d* values were greater than 0.40, with the exception of the effect for Identity and Calling ($d = 0.27$), indicating moderate effect size differences pre- to post-test for four of the five subscales. Table 1 includes *t*-test results and Cohen's *d* for each subscale.

Qualitative

Voluntary Action. Participants responded to two questions: "*What does it mean to take action to improve a community?*" and "*What are some examples of ways you can improve the community?*" The questions elicited responses, such as "…it's not just knowing, but doing something" and "Spreading this growing awareness is important." Another student expressed uncertainty about what constitutes "service," saying,

> if there's a farmer's market going on downtown, instead of going to Walmart or somewhere, you could buy local. I don't know if that's exactly what you're meaning by service, but you're still serving the community by helping the farmers by buying the produce and the little knick-knacks they have down there that they make.

Identity and Calling. Participants responded to the two questions: 1) *What do you gain from your community service related activities?,* and 2) *Describe any challenges or success that either ignited your passion or felt like an obligation.* Students credited their service-learning experience with gains in "overall responsibility," "patience," knowledge of "local culture," "communication [skills]," "accountability – overcoming barriers," "self-discipline," and "[soft] skill sets." More than one student credited the experience with gains in patience and responsibility. Students also attributed "being a leader and growing" and their ability to be "more mature and step out of [their] comfort zone" to the service-learning experience.

However, students also described challenges, many of which were related to the logistics of managing the service-learning experience. For example, some students mentioned the logistics of getting to the community agency. Others mentioned the challenge of meeting the hour requirements. One student self-identified as an international student and described communication struggles, saying, "…the communication really makes me frustrated." We were not surprised by the challenges, and consider them an integral part of the experience for the students, developmentally. One student's response specifically epitomized the antithesis of Identity and Calling, saying,

> Maybe a question to ask in the future is how many people will continue volunteering after this class. Honestly, I don't intend to. For me, I volunteered for the purpose of the credits. In terms of civic engagement, I just did it for the credits.

Citizenship. There were also mixed responses to the Citizenship focus group questions, which were 1) *Describe the ways in which your community service experience relates to a current social justice issue*, and 2) *From this experience, what will you take forward into your future career?* Students described awareness of social justice issues relating to their service-learning placement; examples included "elderly being mistreated," "spaying and neutering," "animal abuse," "…patients have to wait four or five hours to be seen," "…taking care of [children] after school is important," and "…social stigma and stereotyping that athletes get." However, students were not confident in their responses to this question, and several students prefaced their response with "I'm not sure whether this is a social justice issue…"

Moreover, these questions elicited responses that alluded to stereotypes or ageist attitudes. Some comments exemplified the antithesis of the Citizenship subscale. For example, one student described the qualities of the retirement agency in which he/she worked, saying, "So there are some good places where you can *put elderly people* [emphasis added]." Or, in response to an earlier question "…I can empathize with people who are doing that work *and are below* [emphasis added]." Another student's response suggested over-estimation of his/her own contributions, saying, "It's sad to see what could happen to these kids once done

with the program and don't have our influence anymore."

In contrast, students provided many examples of positive things they will take forward into their future career. For example, one student said:

> OK, so after I graduate I want to go to law school. This [experience] kind of changed my perception, because now I'm an intern for a bankruptcy lawyer, and I know that's not what I want to do. There's all kinds of law and now I'm considering humanitarian issues. This has given me awareness of things that need to be changed.

Consensus Building. Students also responded to the question "*What are examples of ways in which you were required to connect with people who are different from yourself?*" The major theme was that students communicated across age levels, across cultures, and with people in the community rather than with other students within the university bubble. For example, one student stated, "Getting across the barrier of trying to communicate with children who speak a different language. Connecting." Another student stated,

> I volunteered with [women's shelter] a few times. You do cleaning and stuff, which is humbling in and of itself. But, you interact with the homeless and start to see things from a different perspective afterward. Wow, these people did not have [the same] advantages that I was blessed with. So, it is a humbling experience.

Other themes. In addition to codes aligning with subscales, other themes emerged that aligned with broad service-learning theory, such as reflection and reciprocity. *Reflection* was coded when it was clear that a student attributed some personal change through reflecting on their service-learning experience. For example, one student stated, "At my experience at [community organization] you can interact with people you wouldn't think you could interact with. Just like opening your mind to new experiences and different backgrounds of people. Breaking down stereotypes." Another student stated:

> I think it's the cognitive awareness of the things that need to be done…opening your mind to people who are in need. If you are more cognitively aware of the issues and things that are going on in the community, you can more successfully take action.

Participant responses were coded as *reciprocity* when their statements clearly articulated that they gained something from the experience. For example,

> I worked at the refugee center downtown…I was teaching them about us and the norms, but they taught me so much and so many things about the Middle East and Congo and about what they did. They would tell me about what the rules were there and the different things between women and men. I learned so much knowledge about the world that I wouldn't have gotten, and I learned it more first hand.

Moreover, this statement was coded a "golden nugget," given that it exemplified both reciprocity and lack of paternalistic attitudes. Another student stated, "It makes me more mature and step out of my comfort zone and realize that there's more to the world than just you, and makes you realize that in order to get you also have to give back."

Other themes that emerged were those that related to students' development of practical and problem-solving skills. For example, one student stated:

> My kid gets bullied, but I didn't realize that until about the fourth or fifth time [at the service-learning placement]. He said "I want to learn karate." I thought "Sweet, he wants to do something athletic." But, he said he wants to learn so that he could take care of the bullies at school. As a mentor, I wondered if I should actually give him advice or if that's the wrong way to think about it. Is it my place or not to tell him that?

Mixed-methods

Voluntary Action. Quantitatively, Voluntary Action scores increased from pre-test to post-test, which was generally supported by qualitative focus-group responses. For example, subscale items address whether individuals are aware of volunteer opportunities, know how their skills and abilities might fit with those volunteer opportunities, and if they are willing to engage in those opportunities. One student noted that taking action to improve a community means "[having] the cognitive awareness of things that need to be done." This quote suggests that students grasp the critical first step of identifying community needs.

However, other qualitative results suggested that students were not entirely sure what "service" or "social justice" meant. It seems

that being aware of the meaning of service and social justice are imperative for meaningful community service, so these results do not support the quantitative increase in scores from pre- to post-test. This does not negate the quantitative findings, but instead suggests that the survey may not capture the nuances of civic-mindedness. For example, the discrepancy between the quantitative and qualitative findings may be a product of the many definitions and opinions surrounding the meaning of "service" and "social justice" or could be due to socially-desirable responding or masking of nuances on the survey.

Identity and Calling. Identity and Calling quantitative subscale scores also increased, suggesting that students embody community service as a passion and part of their identity. This finding was mirrored by the qualitative measure, with one participant saying, "it's something contagious." Another participant described the experience as "being a role model for children," suggesting that participation in such activities is in alignment with his/her values and beliefs.

One participant, however, noted that he/she felt obligated to participate in community service. Another indicated that the student's primary reason for participation was course credits. These findings are contrary to the quantitative results that demonstrated a meaningful increase in scores. It is unrealistic to expect that all students complete the course with a greater sense of passion for community service. Moreover, these findings provided information above and beyond what would be obtained if we had administered only the quantitative measure. Thus, as in voluntary action, it is clear that the quantitative method did not seem to fully capture the impact of service-learning on civic-mindedness.

Citizenship. Quantitatively, Citizenship subscale scores increased from pre- to post-test. Most qualitative results strongly supported the quantitative increase in subscale scores. One student said, "I learned so much knowledge about the world that I wouldn't have gotten. And, I learned it more first hand." This quote embodies an increase in knowledge and also attributes that knowledge to a service-learning activity, thus providing support for the quantitative results as well as the effectiveness of service-learning

in general. Another student discussed the reciprocal nature of society, recognizing that giving to others is essential to receive benefits in society. This same student also indicated personal growth, in that the service-learning experience "[made the student] more mature and step out of [his/her] comfort zone." This growth extends beyond citizenship into the holistic development of becoming a civically-minded individual. Although many students seemed to have a greater awareness of social justice issues after volunteering, one student appeared to maintain stereotypical views of senior citizens after volunteering, providing evidence contrary to the aggregate quantitative results. As with the previous subscales, the qualitative results were more nuanced than the quantitative results and provided evidence that both supported and contradicted the quantitative results.

Consensus Building. Quantitatively, Consensus Building subscale scores also increased from pre- to post-test. Qualitatively, one student recognized the diversity that exists in the city surrounding the university. Other students recognized differences between themselves and others, and described positive interactions with them. These examples portrayed students' new view of diversity in the surrounding town and the skills necessary to connect with those different from them, two characteristics imperative for consensus building. In contrast, one student described an event for which he/she was volunteering and discussed communication issues with the individual running the event. This discussion contradicted the quantitative results and indicated a lack of skill in effective communication with those different from him/her.

Social Trustee. No focus group questions were developed to align with the Social Trustee subscale. However, there were qualitative themes in support of the quantitative pre-post increase. The Social Trustee subscale addresses perceived responsibility to actively work to improve society. One student said, "People shouldn't be worried about their grade [in service-learning class], and should be concerned with their service connected to a social issue." This quote directly supported the quantitative results. Through service-learning, other students recognized they want to be involved in something that helps others and emphasized they want to be more involved in the community. Antithetical to the Social Trustee subscale results, one individual said he/she did not

intend to continue to volunteer after the service-learning class and did not view community service as worthwhile. The additional nuances provided by the qualitative analysis were also clear for this subscale.

Merging of the quantitative and qualitative results suggests that, across all subscales, the qualitative results provided a more rounded measure of civic-mindedness than had we simply administered the quantitative survey alone. Again, this does not negate the quantitative results, but points to a more nuanced interpretation of the students' civic-mindedness in relation to their service-learning experience.

Discussion

The current study addressed three research questions: 1) Does students' self-reported civic-mindedness change during a service-learning course (quantitative)? 2) Do students who participate in a service-learning course express attitudes of civic-mindedness? And, do they provide examples of such (qualitative)? 3) To what extent do the quantitative self-reported civic-mindedness results and the qualitative focus group findings tell the same or different stories (mixed-methods)?

In response to the first research question (quantitative), yes, students' self-reported civic-mindedness increased throughout a service-learning course. This finding supports service-learning as a high impact practice, and demonstrates the positive impact of service-learning on shaping students' attitudes and perceptions. In response to the second research question (qualitative), there were mixed expressions of civic-mindedness attitudes. In general, it seemed that most students were positively impacted by their service-learning experience. However, some students' responses suggested that they did not undergo attitudinal changes in their civic-mindedness. This result is realistic to our service-learning programs – many, but certainly not all, students express civically-minded attitudes.

Thus, in response to the third research question (mixed-methods), the mixed-method methodology was integral to fully understand the nuances of students' civic-mindedness, as well as students'

service-learning experiences. Mixed-methods provided an enhanced perspective of student experiences and development beyond what would have been provided by purely quantitative or qualitative research questions alone.

The misalignment between quantitative and qualitative results is not completely unexpected. There are several practical explanations for the misalignment. The questions on the quantitative civic-mindedness scale were positively-phrased. However, the qualitative questions were specifically written to elicit both positive and negative experiences. Moreover, the quantitative analyses provided results for the aggregate group, not individuals. It is reasonable to expect that a subset of students may not have changed in civic-mindedness or had a negative service-learning experience. These individual differences would not be evident in the aggregate quantitative results because the effect was masked by the majority of students who indicated increased civic mindedness. However, individual differences were evident in the focus groups, which consisted of a small convenience sample, less than 5% of the class. It is possible that a few strong personalities participated in the focus group, who may not have reflected the majority of students. Finally, students may respond favorably to the quantitative measure without fully embodying traits the questions were written to measure. For example, the quantitative Voluntary Action scores increased statistically significantly from pre- to post-test. However, this change may not be practically meaningful, as qualitative results suggested some students are still unsure about the meaning of "social justice" or "service."

From a program improvement perspective, mixed-methods has the utility to glean information needed for programmatic change. For example, students hesitantly answered focus group questions about social justice issues. This finding allows practitioners to make intentional, programmatic changes that facilitate student learning and development around social justice. Increasing students' comfort with discussion surrounding social justice issues may facilitate additional in-depth discussions. These conversations may in turn raise awareness of societal issues and strengthen students' senses of responsibility and commitment to their communities, which is a key trait of both civic-mindedness

and equity-building. By implementing interventions intentionally designed to promote civic-mindedness, students may become more committed to their communities and in turn take action to improve their communities. This striving for community improvement is important in social equity work. By increasing students' civic-mindedness, higher education institutions may also educate students to participate in social equity work in meaningful ways.

Although some qualitative responses contradicted the quantitative results, many were supportive. For most students, the service-learning experience seemed beneficial for developing civic-mindedness. As such, our findings provide support for the incorporation of service-learning into higher education curricula.

Future research

Future research can tease out possible effects of students' socially-desirable responding. Specifically, it is possible that students responded favorably to the quantitative questions not because they had high levels of civic-mindedness, but because they felt that they should respond favorably for social reasons (i.e., social desirability). Consequently, the results may reflect students' social desirability in addition to civic-mindedness, representing a threat to the construct validity of inferences from the scores (Shadish, Cook, & Campbell, 2002). This could also be addressed by developing a more neutral quantitative survey, so that respondents feel less pressure to respond positively.

Additionally, future research may further identify ways in which qualitative data and mixed-methods approaches provide validity evidence for the Civic-Mindedness Scale. Continuing to bolster validity evidence for the Civic-Mindedness Scale is important, as practitioners draw inferences about students' development and changes in civic-mindedness from the results. Furthermore, practitioners may make inferences about the effectiveness of their programming from the Civic-Mindedness scale scores, further necessitating validity evidence to support that the scale is measuring civic-mindedness.

In the current study, we speculate about the reason for

discrepancies between quantitative and qualitative results, but future research is needed to examine causes for these discrepancies. In the present study, we did not attempt to compare qualitative and quantitative responses within individuals, but presented aggregate quantitative findings. A design that permitted direct comparison of students' quantitative and qualitative responses could help to further clarify these differences. Additionally, future research studies could focus on measuring practical changes in behavior rather than self-reported cognitive changes.

Conclusions

In the current study, we investigated students' civic-mindedness over the course of an academic service-learning experience using mixed-methods methodology. In aggregate, the quantitative scores increased across the semester. Although one focus group member was resistant to the experience, most students enthusiastically described their new passion for service, their increased appreciation for diversity, and readily described their personal growth associated with the experience. These findings support that service-learning may promote students' civic-mindedness, which is a quality necessary for promoting equity within society. In addition, these findings support the ongoing implementation of service-learning as a high impact practice in higher education curricula.

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Figures, Tables, and Supplementary Materials

Appendix A

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