Effect of Service-Learning on the Multicultural Competence of Teacher Candidates: From a Doing With Community Framework

Insoon Han

Nedra A Hazareesingh

Peihong Cao

Effect of Service-Learning on the Multicultural Competence of Teacher Candidates: From a *Doing With Community* Framework

Insoon Han
Nedra A Hazareesingh
Peihong Cao
University of Minnesota Duluth

This article details the findings of a study investigating the effect of service-learning with a *Doing With Community* framework on teacher candidates' multicultural attitudes and competence. Fifty-one teacher candidates participated in the research: 27 in an experimental condition and 24 in a comparison classroom. In order to transform the conventional service-learning experience into one incorporating the *Doing With* framework, a *Dialogue with Diverse Families* component was included in the experimental condition. A mixed-methods design was employed; specifically, a quasi-experimental design was utilized to obtain quantitative data from measures on multicultural attitudes and competence, and a phenomenological method was used to collect qualitative data from the students' reflections on project experiences. The service-learning project with the *Dialogue With Diverse Families* component had a significant effect on teacher candidates' multicultural competence but not on their multicultural attitudes. This article argues that the *Doing With* framework of service-learning contributes to teacher candidates' multicultural competence and civic responsibility.

Keywords: service-learning, diversity, community

Given that the vast majority of teachers in U.S. public school classrooms are White, monolingual, and female, and that half of the students are from minority or diverse backgrounds, an important question arises: How can today's teacher education programs prepare teacher candidates to help an increasingly diversified student body to achieve its full potential? In particular, what is the best strategy for teacher education programs to use in preparing White, monolingual, and female teachers to work effectively with a diverse student body? Furthermore, what if the teacher education programs are located in less diverse communities where most residents are White and monolingual? These questions are critical to educators who are exploring how to fulfill civic and educational missions in increasingly diversified classrooms. One effective strategy in this case is to situate teacher candidates in diverse communities where they interact actively with community members and reflect on their experiences engaging with diversity and multiculturalism (Baldwin, Buchanan, & Rudisill, 2007).

In combining classroom instruction with meaningful community service, service-learning has high potential for helping teachers meet diversity and multicultural education goals (Holsapple, 2012). Service-learning stresses critical thinking and personal reflection, and aims to heighten students' civic engagement and responsibility, as well as strengthen their sense of community (Astin, Vogelgesang, Ikeda, & Yee, 2000; Melchior et al., 1999). Researchers and educators in the field of service-learning have long promoted this pedagogy as a way to address diversity and multiculturalism. They have argued that service-learning provides rich opportunities for students to interact with the members of diverse populations while they engage in service experiences (e.g., Soukup, 1996; Zlotkowski, 1996).

Much of the existing literature on service-learning evidences strong support for the impact of service-learning on student diversity and multicultural outcomes. For instance, Eyler, Giles, Stenson, and Gary (2001) summarized the positive effects of service-learning projects conducted between 1993 and 2000 on

college students, faculty, institutions, and communities. Specifically, they reviewed 32 studies that related to diversity and multicultural outcomes, and found that service-learning programs had positive impacts on reducing stereotypes and facilitating racial and cultural understanding. Holsapple (2012) also reviewed 55 empirical studies published between 1998 and 2010, and found "consistent support for the potential of service-learning to encourage several diversity outcomes" (p. 12) categorized as follows: students' confrontation with and reduction of stereotypes about diverse populations; the development of knowledge about the served international or immigrant populations; belief in the value of diversity; growth in the development of tolerance and respect for differences; the development of relationships and interactions with diverse populations; and the recognition of universality.

Despite the consistent findings regarding positive outcomes in diversity and multiculturalism, service-learning programs have been criticized for their perceived lack of a theoretical framework in their design and evaluation (Bringle & Hatcher, 2000; Giles & Eyler, 1994; Steinberg, Bringle, & McGuire, 2013). Specifically, proponents of service-learning (e.g., Garcia & Longo, 2015; Means, 2014; Robinson, 2000) have asserted that democratic and social-justice goals must be addressed as the central role and theoretical framework of service-learning programs and other civic engagement initiatives. Indeed, initiating service-learning programs that possess no defined justice goal may strengthen students' preexisting biases and attitudes toward members of disadvantaged populations (Butin, 2007; Doerr, 2015; Means, 2014), and this is more likely to occur in the case of a privileged student body (Gaztambide-Fernandez & Howard, 2010; Howard, 2008). Moreover, Kliewer (2013) claimed provocatively that the civic engagement field has failed to achieve clearly defined democratic and justice aims, despite the great degree to which the field has been institutionalized in higher education. If the projected outcomes of participating in a service-learning program are democratic citizenship and social justice, the democratic and justice framework should be explicitly incorporated into service-learning programs. Adhering to these assertions, what are the fundamental shortcomings of existing service-learning programs that lack a democratic and justice framework? How could a theoretical framework be incorporated in the design and evaluation of a service-learning program?

It has been noted that many of the existing ideological forces in schools—located within our broader social and economic contexts—simply reinforce students' deficit notions, which blame individual members of marginalized and disadvantaged populations for the situation they are in. This results in the reproduction of unjust outcomes rather than the intended promotion of democratic educational aims (Bringle, Clayton, & Bringle, 2015; Means, 2014). These ideological forces can thus be considered part of the "relatively inflexible, pre-existing socio-cultural structure" (Means, 2014, p. 41) of higher education institutions implementing service-learning. This argument is consistent with Ward and Wolf-Wendel's (2000) observation that:

> higher education institutions traditionally operate [service-learning] under an orientation of *Doing For* communities rather than *Doing With*; the *Doing For* is typically aligned with a *Charity* perspective and emphasize the position of privilege of campuses in relation to their local communities, whereas a *Doing With* perspective of service emphasizes collaboration and mutuality. (p. 767)

According to a *Doing For* perspective, it is expected that the participants of service-learning programs unintentionally perpetuate their hegemony through a continued and comfortable focus on traditional ideas and activities—from dominant European-American origins—which may not be meaningful or relevant to children in multicultural settings (Baldwin, Buchanan, & Rudisill, 2007; Garcia & Longo, 2015). Similarly, the concern over unintended negative outcomes of service-learning has been addressed in international service-learning contexts. For instance, Crabtree (2008) asserted that international service-learning has the potential of reinforcing the perception of developing countries as needy beneficiaries. Sharpe and Dear (2013) echoed this argument by stating that service-learning fits within the ongoing colonialist project.

Therefore, the asymmetry between the server (i.e., higher education institutions) and the served (i.e., disadvantaged communities) in service-learning programs is likely to continue if the programs do not adopt explicit theoretical frameworks, such as moving from *Doing For* to *Doing With* (Liberman, 2014; Tinkler, Tinkler, Hausman, & Strouse, 2014; Ward & Wolf-Wendel, 2000) or from *Charity* to *Justice* (Boyle-Baise & Langford, 2004; Butin, 2007; Marullo & Edwards, 2000; Robinson, 2000). Ward and Wolf-Wendel (2000) analyzed representations of service and community in the service-learning literature from the *Doing For* perspective, and provided suggestions about more community-centered service-learning—that is, from the *Doing With* perspective. The *Doing With* perspective views the community as an equal partner in identifying problems and devising solutions. Marullo and Edwards (2000) and Robinson (2000) also argued for institutional transformation from *Charity* to *Justice* in order to effect social change. Though this democratic and justice framework has been actively advocated, little empirical research has been conducted around it.

Additionally, methodological deficits have been noted in the service-learning literature. Holsapple (2012) reviewed literature focusing on diversity outcomes; of 55 empirical studies, the author identified 33 that adopted qualitative methods, 11 that used quantitative methods, and 11 that utilized mixed-methods; the data calls for more studies using quantitative or mixed-method approaches. Holsapple also addressed five issues and limitations of the literature: lack of theoretical foundations or models; selection bias with no experimental design; limited external validity, with little differentiation of specific aspects of the programs; lack of detail about the programs; and trustworthiness of qualitative data collected from students' reflection journals and other course assignments, due to the assumption that students were more concerned about receiving high grades on the reflections than providing honest feedback. Furco (2002), Simons and Cleary (2006), and Hirschinger-Blank, Simons, and Kenyon (2009) also called for employing more comprehensive and methodologically rigorous research designs, including a mixed methods, in research on the impact of service-learning.

Recognizing the lack of service-learning research that has employed an explicit theoretical framework and a sound methodology, this current study sought to extend the theoretical and methodological horizons. First, theoretically, we adapted the democratic and justice framework by applying the *Doing With* perspective (Ward & Wolf-Wendel, 2000) and *Justice* motives (Marullo & Edwards, 2000). Specifically, this research included a new project component called *Dialogue with Diverse Families* (Billig & Welch, 2004; Moll, Amanti, Neff, & Gonzalez, 1992; Ward & Wolf-Wendel, 2000) to underscore the significance of communities as equally contributing members of the project. To achieve the civic, democratic, and social-justice mission goals of service-learning, the practitioners of service-learning programs should acknowledge children and families as contributing community members and recognize the significance of children's home and communities as educational resources and assets (e.g., Benenson & Stagg, 2015; Moll et al., 1992), and invite them to engage in collaborative decision making about meaningful activities (Billig & Welch, 2004). Specifically, Ward and Wolf-Wendel (2000) proposed that in order to empower the community as an equal partner, service-learning must blur boundaries between campus and community, and consider the position and power of all involved in service relationships.

Methodologically, the mixed-methods design of this research attempted to strengthen the quantitative aspects of the research and to validate the qualitative elements, as Furco (2002), Holsapple (2012), and Simons and Cleary (2006) suggested. To reduce selection bias—inherent in quasi-experimental quantitative design with initial non-equivalence between the experimental group and the comparison group—this research assessed the baseline differences between two groups and adjusted outcomes for the initial differences. Further, to increase external validity or generalization, we provided detailed information about the nature and components of our service-learning project. Additionally, to build trustworthiness of the qualitative data gathered from student reflections about their lived experience, the researchers conveyed to the participating students that their reflections would not affect their course grades in any way.

The purpose of this research was to investigate the effects of a service-learning project with the *Doing With* democratic and justice framework on multicultural attitudes and competence of teacher candidates. The primary research question was assessed by gathering quantitative data to determine the degree of

effect on multicultural attitudes and competence. The secondary research question was evaluated by capturing qualitative data to describe the essence of teacher candidates' lived experiences as they related to diversity and justice during the project.

Research Questions

Quantitative Research Question

The following quantitative research questions guided the study:

- To what extent does a service-learning project with the *Doing With* framework impact teacher candidates' multicultural attitudes?
- To what extent does a service-learning project with the *Doing With* framework impact teacher candidates' multicultural competence?

The study hypothesized that teacher candidates who experienced a service-learning project with the *Doing With* framework would have higher multicultural attitudes and competence than those who experienced a service-learning project without the framework.

Qualitative Research Question

In addition, the following qualitative research question informed the study:

- What do the teacher candidates participating in a service-learning project with the *Doing With* framework experience regarding diversity and justice during the project?

Methods

Participants

Fifty-one teacher candidates enrolled in the Integrated Elementary and Special Education (IESE) program at a public university in a Midwestern state in the fall of 2013 participated in the research. The IESE program is a four-and-a-half-year program that qualifies students to apply for state licensure to teach K-6 elementary education and K-12 special education (academic behavioral strategist); thus, it is a dual-licensure, or a merged teacher education, program. The program consists of two-year pre-block courses and two-and-a half-year (or five-semester) block courses and field experiences.

This research consisted of two groups of students: an experimental group (n = 27) and a comparison group (n = 24). In the experimental group, 34 students participated in the research either at pretest or posttest, and 27 students (79%) completed both. In the control group, 29 students participated either at pretest or posttest, and 24 students (83%) completed both.

The two groups did not differ in their demographic characteristics such as age, gender, and ethnicity or race (see Table 1). The sample size of each group (i.e., 27 and 24) was acceptable based on the criterion for educational research—that is, "approximately 15 participants in each group in an experiment" (Creswell, 2015, p. 145). In terms of gender and ethnicity, the achieved sample was slightly less diverse (100% White, non-Hispanic, and 82.4% female) than the target population for generalization—teacher candidates in the research state (95.3% White, non-Hispanic, and 70.4% female)—and quite less diverse than the nationwide population in 2011-12 (81.9% White, non-Hispanic, and 76.3% female) (U.S. Department of Education [US DOE], 2013). To avoid any perception of coercion, the first author, who was not the instructor of the courses, conducted the consent process. Additionally, this research was approved by the university's institutional review board.

Table 1. Participant Characteristics

Variable	Experimental Group (n = 27)		Comparison Group (n = 24)		Total (n = 51)	
	M	**SD**	**M**	**SD**	**M**	**SD**
Age	21.1	2.9	22.2	0.8	21.6	2.3
Gender	**n**	**%**	**n**	**%**	**n**	**%**
Male	6	22.2	3	12.5	9	17.6
Female	21	77.8	21	87.5	42	82.4
Ethnicity						
White, non-Hispanic	27	100.0	24	100.0	51	100.0
Semester in the Program	Pre-block[a]		Block 2[b]			
Diversity Courses Taking	100% during the research semester		100% during pre-block (1-2 yrs ago)			
Service Learning Participation	100% during the research semester		63% during pre-block (1-2 yrs ago)			

Note. [a] Pre-block = 4 semesters to meet admission requirements for the IESE program; [b] Block 2 = the second semester of the 5 semester blocks in the IESE program.

Measures

The instrument of the study was a structured survey questionnaire with closed questions for the quantitative part and open-ended questions for the qualitative portion.

Quantitative measures

The quantitative measures included two measures on participants' multicultural attitudes and competence: the Teacher Multicultural Attitude Survey (TMAS), and the Teacher Multicultural Competence Scale (TMCS). These two quantitative measures were administered twice in class—once as a pre-test early in the semester and once as a post-test after the project. We created the survey using Qualtrics, an online survey tool.

Teacher Multicultural Attitude Survey. The TMAS measures teachers' multicultural awareness and sensitivity. The measure, developed by Ponterotto, Baluch, Greig, and Rivera (1998), consists of 20 items on a 5-point rating scale (i.e., 1 = Strongly Disagree; 2 = Disagree; 3 = Neither Disagree Nor Agree; 4 = Agree; and 5 = Strongly Agree). The reliability and validity evidence was reported by the developers; internal consistency reliability of Cronbach alpha was $r = .86$, and test-retest stability was $r = .80$. Content validity by expert judgment, construct validity evidence by factor analysis, and criterion-related convergent validity evidence with some outcome variables were established (Ponterotto et al., 1998).

Teacher Multicultural Competence Scale. The TMCS measures teacher's perception of their level of knowledge and skills relevant to the provision of quality services to diverse student populations. The measure was originally developed by the Minnesota Department of Education (1992) as the Practitioner Diversity Awareness Scale with 12 items on a 3-point scale. In the original scale, the choice statements were "1 = High Training Need, 2 = Moderate Training Need, and 3 = Low Training Need" for each of the 12 items. To measure competence in the present study, the choice statements were modified to "1 =

Limited, 2 = Moderate, and 3 = Satisfied," and the specific direction for responding was, "Please rate your current knowledge and skills based on the following three criteria." Internal consistency reliability of Cronbach alpha was $r = .82$, $p < .01$ (Han, 2013), and test-retest reliability was $r = .87$, $p < .01$ in the pilot study of the present research (n = 28). The criterion-related convergent validity with the Cultural Intelligence (CQ) Scale (Ang et al., 2007) was $r = .23$, $p < .01$ for metacognitive CQ factor; $r = .54$, $p < .01$ for cognitive/knowledge CQ; $r = .15$, $p < .05$ for motivational CQ; $r = .25$, $p < .01$ for behavioral CQ, and $r = .41$, $p < .01$ for total CQS (Han, 2013).

Qualitative measures

The qualitative measure included eight open-ended survey questions. The researchers created the questions to explore the students' lived experience of the service-learning project. Only students in the experimental group were asked to respond to the questions, and the text responses from 27 students in the project were used as the qualitative data. The eight questions consisted of four questions about the Family Night event and four questions about the *Dialogue with Diverse Families.* The reflection questions about the Family Night event included: "What did you like most about the Family Night event?"; "What did you learn from the Family Night event about working with families and the community?"; "What did you learn from the Family Night event about service-learning and the connections to the curriculum?"; and, "If you had to pick an 'Aha' moment during the Family Night event, what would it be?" The reflection questions about the *Dialogue with Diverse Families* included: "What did you learn about … the families and their lives / building relationships and connecting with the families / diversity and social justice … from talking with the families?" and "If you had to pick an 'Aha' moment during the dialogue with the families, what would it be?"

Research Design

A convergent (or parallel or concurrent) mixed-methods design (Creswell, 2015) was employed for this study, with both qualitative and quantitative parts being of equal weight. The specific design for the quantitative data was quasi-experimental. Two intact diversity-related courses participated in the semester-long service-learning project as a course requirement. The titles of the courses were "Diversity and Educational Implications" and "Interacting with Diverse Families." The student participants were in their second year in college and enrolled in the pre-block sequence of the IESE program. Because the service-learning project was a course requirement, random assignment to experimental and control groups was impossible. Thus, one intact classroom was selected as the comparison group, based on its similarity to the experimental group in terms of student experience in diversity courses and service-learning project experience. The students in the comparison condition were enrolled in block 2 of the IESE program, and the course title was "Assessment in the General and Special Education Classroom." All students (100%) in the comparison condition completed one or more diversity-related courses—one of the two courses mentioned above and/or a human diversity course during their pre-block sequence. Additionally, 63% (15 out of 24) of the comparison group participated in a service-learning project in the last two years during their pre-block experiences. Participant diversity-related experience is summarized in the lower section of Table 1.

The specific quasi-experimental design used was nonequivalent control group design (Gall, Gall & Borg, 2007; Trochim, 2006). With regard to the similarity of the intervention and comparison groups in all quasi-experimental designs, the US DOE's National Center for Education Evaluation and Regional Assistance, within the Institute of Education Sciences (2014), indicated that:

> equivalence of the intervention and comparison groups on observable characteristics at *baseline* (i.e., prior to the period of study) must be established for the *analytic sample* … If differences in baseline characteristics are shown to be within the range that requires statistical adjustment (between 0.05 and 0.25 standard deviations), a number of different techniques can be used, including regression adjustment and analysis of covariance (ANCOVA). (p. 15)

Following this recommendation, this study reported the initial non-equivalence at baseline (pretest scores), and used ANCOVA on outcome (posttest scores) to adjust statistically for the initial non-equivalence.

For the qualitative data, social constructivism was used as a theoretical paradigm and perspective, and phenomenology was employed as a research strategy to describe the essence of a particular phenomenon (Creswell, 2013), in this case the teacher candidates' shared experience with diverse families during the project. The teacher candidates' textual responses to eight open-ended questions were analyzed for significant statements, meanings of statements, themes of meanings, and description of the essence by using Creswell's simplified version of Moustakas' (1994) psychological phenomenology approach. This highly structured approach is "focused less on the interpretations of [the] researcher and more on a description of the experiences of participants" (Creswell, 2013, p. 80) and "provide[s] a clearly articulated procedure for organizing [data and] a report" (p. 226). Generally, such an approach increases the quality and validation of a phenomenological study.

Service-Learning Project with a *Doing With* Framework

At the time of this study, the researchers had had a decade-long history of partnerships with the elementary school in which the service-learning project was held, with all of the partners recognizing each other as valuable teaching and scholarship resources (Javanovic, Congdon, Miller, & Richardson, 2015; Tinkler, Tinkler, Hausman, & Strouse, 2014). Specifically, the partnership had been established to provide teacher candidates with hands-on, authentic service-learning experiences in a diverse school setting. The school was chosen because it was one of the most culturally diverse schools in the community, which has limited diversity; the proportion of racial and ethnic minorities in the city is approximately 10% compared to 15% in the state and 22% nationwide. As expected, over 95% of the teacher candidates at this university are White/Caucasian. Fortunately, the partner elementary school provided an ideal setting for the teacher candidates to interact with diverse students and families: 52% of the student body consisted of students of color, 15% of the students were considered homeless, 85% of the students were on free and reduced-price lunch, and 17% of students received special education services in the school.

The service-learning project has been a core element of the diversity courses in the IESE program at the university. The project culminates in a Family Night event at the partner school which is held in early April for spring courses and early November for fall courses. Approximately 150 to 250 families attend the two-hour event, where teacher candidates provide students and families with dinner. They also present about 10 learning stations with Earth Day environmental themes in the spring and Literacy/Fall Fest themes in the fall. Teacher candidates prepare for the project in small groups of three to five members early in the semester and create lesson plans for their learning stations during class time. The teacher candidates, in collaboration with the course instructors, the education department student organization, and the partner school principal, develop specific themes and activities for the event. The mayor of the city and department faculty from the research university have routinely attended this event over the years as parents of children in the school. Yet, little to no input from the parents and the community had been collected about the project prior to the research semester. Faculty had observed that service-learning impacted teacher candidates, students in the partner school, families and community members in meaningful ways, but systematic investigation of the impact of the project had not been conducted previously.

This research semester's service-learning project, titled "Family Night Fall Fest" included the *Dialogue With Diverse Families* component for the first time in order to transform the project into a *Doing With Community* framework or *Justice* perspective. While the service-learning experienced by the experimental group during the semester included the *Dialogue With Diverse Families* component, the service-learning that the comparison group participated in during previous semesters did not included this component. This *Dialogue* component was intended to empower parents and the community, lending them a strong voice. Two weeks before the Family Night event and during the event, families were

recruited to participate in the *Dialogue* in one of the research university's classrooms. The selection criteria were (1) families with ethnically diverse backgrounds; and (2) families who participated in the Family Night service-learning event. The potential themes of the *Dialogue* were introduced to the families as follows: (1) "Where were you born? Tell us about your hometown or country"; (2) "How and when did you come to this city?" (the actual name of the city was used in the recruitment letter); (3) "How would you describe your life in this community? (For example, your job, your children's schooling, your neighbors, etc.)"; (4) "How much do you feel you belong to this city and the school community?"; (5) "What did you think about the Family Night service-learning project? What did you like about it? What would you change? What would you have the college students (who host the event) improve on in future projects?"; (6) "Anything else you want to talk about in terms of you and your family?" Six families volunteered to be part of the *Dialogue With Diverse Families,* which lasted for two hours. The families shared their experiences and opinions (to the extent that they were comfortable sharing) about the six suggested topics.

Results

Quantitative Results

Baseline differences
The baseline data from the pretest scores were compared for the experimental and the comparison groups to determine whether the degree of absolute baseline difference required statistical adjustment. Table 2 displays the baseline differences: Absolute difference between group means at baseline = (Experimental Group Mean – Control Group Mean) / Pooled Standard Deviation (US DOE, 2014). The baseline differences, d, were 0.63 and 0.18 in TMAS and TMCS, respectively, and both were larger than 0.05, which is the critical value for which statistical adjustment is required to satisfy baseline equivalence (US DOE, 2014). Due to these baseline differences, the pretest scores were used as covariates to adjust the posttest scores of TMAS and TMCS.

Table 2. Baseline Differences and Analysis of Covariance for Posttest of TMAS and TMCS

Variable	Pretest M (SD)	Baseline d	Posttest M (SD)	Adjusted M	F (1,48)	p	Effect Size d
TMAS[a]		0.63			1.39	0.25	0.32
Experiment[c]	4.10		4.16	4.10			
	(0.32)		(0.44)				
Comparison[d]	3.85		3.91	3.98			
	(0.46)		(0.31)				
TMCS[b]		0.18			4.14	0.05	0.58
Experiment[c]	1.82		2.31	2.32			
	(0.34)		(0.49)				
Comparison[d]	1.88		2.09	2.08			
	(0.34)		(0.33)				

Note. [a] The scores are on a 5-point scale; [b] The scores are on a 3-point scale; [c] n = 27; [d] n = 24

Outcome in TMAS

To answer the first research question, the outcome of the project was measured with group mean differences in posttest scores of TMAS. As shown in the upper section of Table 2, the result of ANCOVA for TMAS adjusted posttest score averaged for 20 items was not significant, $F(1, 48) = 1.39$, $p = 0.25$. Both groups showed positive attitudes of 3 or higher scores on a 5-point rating scale at the outset of the study with 4.10 and 3.85, and stayed at the same level at posttest with 4.16 and 3.91, which resulted in adjusted posttest scores with 4.10 and 3.98. Because students in the comparison group were heterogeneous in terms of their experiences with service-learning, an ancillary analysis was conducted within the comparison group to explore the differences between students who had experienced service-learning ($n = 15$, or 63%) and those who had not ($n = 9$, or 37%). Table 3 presents the results of TMAS adjusted posttest scores for these two subgroups which were not different, $F(1, 21) = 0.91$, $p = 0.35$. The ANCOVA results for 20 individual items' adjusted posttest means are presented in Table 4.

Table 3. Ancillary Analysis within Comparison Group: TMAS and TMCS

| Variable | Pretest | Posttest | | $F(1,21)$ | p |
	M (SD)	M (SD)	Adjusted		
TMAS[a]				0.91	0.35
Comparison 1[c]	3.88	3.96	3.88		
	(0.55)	(0.32)			
Comparison 2[d]	3.81	3.83	3.82		
	(0.27)	(0.29)			
TMCS[b]				0.39	0.54
Comparison 1[c]	1.91	2.13	2.12		
	(0.35)	(0.39)			
Comparison 2[d]	1.83	2.02	2.05		
	(0.35)	(0.24)			

Note. [a] The scores are on a 5-point scale; [b] The scores are on a 3-point scale; [c] Comparison 1 = Comparison subgroup having service learning experience, $n = 15$; [d] Comparison 2 = Comparison subgroup having no service learning experience, $n = 9$

Table 4. Means and ANCOVA Results for the Teacher Multicultural Attitude Survey

Item		Exp[b] (SD)	Comp[c] (SD)	F (1.48)	p
1	I find the idea of teaching a culturally diverse group rewarding.	4.66 (0.48)	4.39 (0.58)	3.30	0.08
2	Teaching methods need to be adapted to meet the needs of a culturally diverse student group.	4.56 (0.57)	4.17 (0.58)	6.50	0.01
3[R]	Sometimes I think there is too much emphasis placed on multicultural awareness and training for teachers.	3.54 (1.05)	3.60 (0.72)	0.05	0.83
4	Teachers have the responsibility to be aware of their students' cultural backgrounds.	4.64 (0.48)	4.36 (0.76)	3.56	0.07
5	It is the teacher's responsibility to invite extended family members (e.g., cousins, grandparents, godparents, etc.) to attend parent-teacher conferences.	4.13 (0.85)	3.23 (0.99)	13.68	0.00

Item		Exp[b] (SD)	Comp[c] (SD)	F (1.48)	p
6[R]	It is not the teacher's responsibility to encourage pride in one's culture.	3.60 (1.26)	3.87 (0.81)	0.79	0.38
7	As classrooms become more culturally diverse, the teacher's job becomes increasingly challenging.	3.94 (1.10)	3.40 (0.77)	4.06	0.05
8	I believe the teacher's role needs to be redefined to address the needs of students from culturally different backgrounds.	4.13 (0.91)	3.44 (0.72)	9.63	0.00
9	When dealing with bilingual students, some teachers may misinterpret different communication styles as behavior problems.	3.97 (0.85)	4.04 (0.55)	0.13	0.72
10	As classrooms become more culturally diverse, the teacher's job becomes increasingly rewarding.	4.50 (0.70)	3.98 (0.65)	7.35	0.01
11	I can learn a great deal from students with culturally different backgrounds.	4.48 (0.58)	4.50 (0.59)	0.02	0.90
12[R]	Multicultural training for teachers is not necessary.	4.17 (1.17)	4.06 (0.93)	0.14	0.71
13	To be an effective teacher, one needs to be aware of cultural differences present in the classroom.	4.51 (0.51)	4.19 (0.82)	3.52	0.07
14	Multicultural awareness training can help me work more effectively with a diverse student population.	4.45 (0.51)	4.41 (0.57)	0.08	0.78
15[R]	Students should learn to communicate in English only.	3.99 (1.04)	3.81 (0.78)	0.51	0.48
16[R]	Today's curriculum gives undue importance to multiculturalism and diversity.	2.69 (0.95)	3.09 (0.65)	2.74	0.10
17	I am aware of the diversity of cultural backgrounds of students I am/or will be working with.	3.86 (0.77)	3.74 (0.68)	0.34	0.57
18	Regardless of the racial and ethnic makeup of a classroom class, it is important for all students to be aware of multicultural diversity.	4.34 (0.49)	4.37 (0.70)	0.03	0.86
19[R]	Being multiculturally aware is not relevant for students.	4.21 (0.96)	4.26 (0.74)	0.05	0.83
20[R]	Teaching students about cultural diversity will only create conflict in the classroom.	4.00 (1.19)	4.21 (0.76)	0.49	0.49

Note. [R] Scored in reverse for negative statements; [a] Adjusted for pretest scores; [b] n = 27; [c] n = 24

Outcome in TMCS

To answer the second research question, TMCS scores were compared for the two groups. As shown in the lower section of Table 2, the result of ANCOVA for TMCS adjusted posttest score averaged for 12 items was significant, $F(1, 48) = 4.14$, $p = 0.05$; both groups perceived their multicultural competence at the moderate level, but the experimental group reported significantly higher competence than the comparison group (2.32 vs. 2.08 on a 3-point scale; Cohen's *d* effect size = 0.58). Again, because students in the comparison group were heterogeneous in terms of their experiences with service-learning, an ancillary analysis was conducted within the comparison group to explore the difference between students who had experienced service-learning (n = 15) and those who had not (n = 9). The lower section of Table

3 presents the results of TMCS adjusted posttest scores; these two subgroups were not different, $F(1, 21)$ = 0.39, $p = 0.54$. The ANCOVA results for 12 individual items' adjusted posttest means are displayed in Table 5.

Table 5. Means and ANCOVA Results for the Teacher Multicultural Competence Scale

Item		**Exp[b]** (SD)	**Comp[c]** (SD)	**F** (1.48)	**p**
1	Awareness of research about how one's own cultural background can often impact professional practice.	2.43 (0.76)	2.12 (0.34)	3.39	0.07
2	The racial, cultural, socioeconomic and linguistic background of the students that I serve.	2.28 (0.60)	2.24 (0.44)	0.09	0.77
3	The manner in which ethnicity, culture and communication impact learning and behavior.	2.50 (0.51)	2.33 (0.57)	1.16	0.29
4	The structure and roles of family members in the student's culture.	2.44 (0.71)	2.23 (0.59)	1.45	0.24
5	The indigenous beliefs and practices of the cultures of the wider community of my school.	2.08 (0.63)	1.83 (0.57)	2.21	0.14
6	The process of cultural change and adaptation in general.	2.21 (0.71)	2.11 (0.58)	0.78	0.54
7	How individual students are experiencing cultural change (such as knowledge of the traditional culture, involvement with the traditional culture, and degree of acculturation or assimilation).	2.20 (0.63)	1.83 (0.48)	5.13	0.03
8	The language(s) preferred by the student and his/her family.	2.10 (0.77)	2.18 (0.64)	0.19	0.66
9	Ways of enhancing communication with diverse students and families.	2.37 (0.63)	1.98 (0.59)	4.99	0.03
10	The impact of race and culture, socioeconomic status, and communication differences on school success.	2.58 (0.64)	2.12 (0.45)	8.22	0.01
11	The impact of race and culture, socioeconomic status, and communication background on the special education referral and assessment process.	2.31 (0.74)	2.04 (0.46)	3.24	0.08
12	Ways of incorporating consideration of student's race and culture, socioeconomic status, and communication background into special education assessment and eligibility determination.	2.19 (0.80)	2.09 (0.41)	0.30	0.59

Note. [a] Adjusted for pretest scores; [b] n = 27; [c] n = 24

Qualitative Results

To answer the third research question, the teacher candidates' thought processes were explored by capturing their reflections on two major events of the project: the Family Night event and the *Dialogue With Families* from ethnically diverse backgrounds. Their reflections were analyzed for significant

statements, meanings of statements, themes of meanings, and description of the essence (Moustakas, 1994), and summarized in Tables 6 and 7. As shown in Table 6, the three outstanding themes of meanings that emerged from teacher candidates' reflections on their lived experience during the Family Nights were: enjoying interactions with students and families; learning about the importance of incorporating families in student learning; and building relevant and meaningful curricula for students. Table 7 summarizes the three outstanding themes of meanings that emerged from student reflections on their phenomenological experience during the *Dialogue with Families* from ethnically diverse backgrounds as follows: recognizing the diversity of the community, discrimination, and racism; learning about the importance of building relationships with families; and becoming aware of discrimination and the need for promoting social justice. The essence of the teacher candidates' lived experience during the service-learning project with the *Doing With Community* perspective was threefold: first, teacher candidates acknowledged the benefits of community service-learning for everyone involved, namely, pre-service teachers and community partners; second, they gained awareness of misunderstandings about and discrimination toward diverse families in the community; and third, they recognized teachers' responsibility in promoting diversity and social justice to better serve their students.

Table 6. Significant Statements, Meanings, Themes of the Family Night Event Experience

Significant Statements	Meanings of Statements	Themes
Q1. What did you like most about the Family Night event?		
"What I liked most was seeing all the kids having fun and learning!"; "I enjoyed the fact that it gave families the chance to interact with each other in a school setting"; "I liked that we got to interact with a more diverse student body population."	Enjoyed being together with students and parents, and seeing the kids having fun and learning	Enjoying interaction with students and families
Q2. What did you learn about working with families and the community?		
"I learned that it is extremely important for the school to connect with the families and community because some kids don't have the greatest opportunity to learn"; "How very diverse the community actually is"; "I learned that it is important to incorporate families in student learning."	Learned the importance of connecting with families and the community, the diversity of the community, and incorporating families in student learning	Learning the importance of incorporating families in student learning
Q 3. What did you learn about Service-Learning and the connections to the curriculum?		
"I learned how much you can gain from connecting course information to the community"; "When we come together as a community we can learn from one another"; "I learned that service-learning needs to be relevant to the students and their families, otherwise they won't get anything useful out of it."	Learned that commmunity service-learning is an effective way to learn, and service learing is meaningful when it is relevant to the students and families	Building relevant and meaningful curriculum for students
Q4. If you had to pick an "AHA" moment during the event, what would it be?		

"I think just working with the children and seeing their excitement for learning in different ways! Too often we think that learning can only happen in the classroom and that is so wrong"; "Seeing how physical activity gets the students in the right mindset to learn"; "Teaching is what I am meant to do."	Experienced the success and joy of authentic learning and teaching	Experiencing success and joy of teaching and learning

Table 7. Significant Statements, Meanings, Themes of the Dialogue with Diverse Families Experience

Significant Statements	Meanings of Statements	Themes
Q1. What did you learn about the families and their lives from talking with the families?		
"I learned that the families come from very diverse backgrounds, and that they are very invested in their child's education"; "I learned that most of them are lower class and they feel discriminated against"; "How there is still racism and indifference towards people of color."	Learned the diversity of the community, parents' strong desire for their children's education, and existence of discrimination and racism against people of color	Recognizing the diversity of the community, discrimination and racism
Q2. What did you learn about building relationships and connecting with the families?		
"I learned that it is very important to build relationships with each family right away because it provides a trusting relationship between the teacher, parent, and student"; "I learned that the teacher needs to step out and make the effort in connecting with the students and their families."	Learned the importance of building relationships with each family, and teachers' responsibility to initiate the relationships.	Learning the importance of building relationships with families
Q 3. What did you learn about diversity and social justice?		
"I learned that students are still bullied quite a lot in schools, and that a majority of the bully takes places due to differences in the appearance of children"; "I learned that they all go through discrimination every day"; "Our system in general have made progress in terms of diversity and social justice, but there is still a lot of work that needs to be done"; "I learned that we need to really get everyone involved in trying to stop people from discrimanating against people."	Learned that people of color are still facing discrimination on a daily basis, and we need to take actions to stop this problem	Becoming aware of discrimination and the need of promoting social justice
Q4. If you had to pick an "AHA" moment during the dialogue, what would it be?		
"It would be when the parents said that they had a great desire to be involved in the education of their students, because as a future teacher, that helps me to understand the importance of communicating and connecting with parents"; "Realizing that I cannot know these things about the families I will be teaching just by looking at them, I have to get to know them and go the extra mile."	Realized the parents' devotion to their children's education, the importance of teachers' communicating and connecting with parents	Realizing parents' devotion to their children's education and the importance of connecting with parents

Discussion

The findings of this study suggest that the *Doing With* framework of the service-learning project increases teacher candidates' multicultural competence. We concluded that the *Doing With* framework or *Justice* perspective caused the increase in the multicultural competence; more specifically, the newly added *Dialogue With Diverse Families* component caused this increased competence.

To infer the causality with confidence, we took two additional steps to address threats to internal validity. First, due to the initial non-equivalence between experimental and comparison groups (which is inherent in the quasi-experimental design we adopted), we established statistical equivalence by using the baseline score as a covariate. Second, because one third of students in the comparison group had not participated in a service-learning project at all, we were not able to infer whether the effect was caused by either service-learning or the *Doing With* component in the experimental condition; thus, the causality was inferred with reservation, and one might insist that service-learning itself brought about the multicultural competence, regardless of incorporating the *Doing With* component. To clarify the causality, we conducted ancillary analyses within the comparison group to compare those who had experienced service-learning (without the *Doing With* framework) and those who had not. Results demonstrated that there were no differences between the two subgroups. We safely concluded, therefore, that the *Doing With* framework of service-learning was a cause of the significant increase in multicultural competence.

In contrast, there was no difference in multicultural attitudes between the experimental and comparison groups. We inferred that the reason there was no difference was because all participants in both groups had taken or were currently taking diversity course(s), which led them to have very positive multicultural attitudes at the outset of the research. Additionally, the very nature of the IESE program, in which all the participants were enrolled, could have been another potential reason for the positive feelings toward diversity and multiculturalism. The program is a merged program in which candidates pursue dual licensure for special education and elementary education. This commitment to becoming a special education teacher might predispose them to teaching diverse students at the time of entering the program. This result is consistent with other positive findings of service-learning related to quantitative measures of multicultural competence but not to multicultural attitudes. Leon (2014), for example, found that service-learning had a positive effect on intercultural competence but not on intercultural knowledge, motivation, or sensitivity. Still, despite the fact that the experimental group's average score on the 20-item Teacher Multicultural Attitude Scale was not significantly higher than the comparison group's, they scored significantly higher on five individual items related to teacher responsibility or role than the comparison group. This suggests that the teacher candidates' participation in the service-learning project with a *Doing With* framework influenced some, if not all, aspects of candidates' diversity attitudes.

Qualitative data from teacher candidates' reflections revealed that the essence of their lived experience throughout the service-learning project with a *Doing With* framework was threefold. First, the pre-service teacher candidates acknowledged the benefits of community service-learning for everyone involved, specifically the benefit to themselves in terms of teaching and learning, and the benefit to the community partners in terms of their participation in and engagement with the school and their children's learning. Second, they gained awareness of the misunderstandings about and discrimination toward diverse families in the community. For example, they realized and were impressed by the fact that diverse families value deeply their children's education, despite research findings that many teachers assume that low-income diverse families are uninvolved in their children's education (Patterson, Hale, & Stessman, 2008). Third and most importantly, teacher candidates realized their professional and moral responsibility to promote diversity and social justice in order to better serve their students, their community, and society as a whole. These qualitative findings are consistent with previous studies in which teacher candidates (Baldwin, Buchanan, & Rudisill, 2007) and college students enrolled in psychology courses (Simons & Cleary, 2006) were placed in diverse communities where they interacted actively with diverse children and community members; the students reflected on their preconceived negative notions about the diverse community and how the preconceived notions were changed, how much they learned about themselves, and their commitment to community engagement and civic responsibility.

The theoretical implication of the results is that the justice framework of service-learning yields ideological outcomes for teacher education programs and helps teacher candidates to redirect themselves to justice issues that strengthen their competence and commitment to promoting social justice. We adopted the *Doing With* framework (Garcia & Longo, 2015; Liberman, 2014; Tinkler et al., 2014; Ward & Wolf-Wendel, 2000) and *Justice* framework (Boyle-Baise & Langford, 2004; Butin, 2007; Marullo & Edwards, 2000; Robinson, 2000) in this study. If teacher education programs conduct service-learning with *Charity* motives or from a *Doing For Community* perspective, they will perpetuate higher education institutions' positions of privilege, "doing the right thing for the wrong reason." In a similar vein, international service-learning could become an ongoing colonialist project, in which charity-based exchanges and power asymmetry between the service provider and the host community are established, and the perception of the community as needy is reinforced (Garcia & Longo, 2015; Sharpe & Dear, 2013). In contrast, service-learning with a *Doing With* framework or *Justice* motives has significant potential to motivate social change through teacher candidates' construction of themselves as moral teachers who promote justice, and through diverse families' construction of themselves as equal educational partners who scrutinize injustice in educational environments. The changes made by teacher candidates and diverse families through a service-learning project might be small, but such small steps could be significant in terms of moving toward long-term goals and lifelong commitments to a more just world (Jackman, Chenault, & Winkler, 2015).

Practical consequences of the study results relate to informing higher education institutions how to embed service-learning into college courses in order to promote diversity and multicultural competence. This can be accomplished by creating community activities and events to empower teacher candidates and by encouraging diverse communities to be equal partners in these learning goals. The Family Night event and the *Dialogue With Diverse Families* in this research are collaborative activities. Common themes for the Family Night events have usually been Earth Day environmental events in the spring semesters and Children's Literacy/Fall Fest events in the fall semesters. Diversity and intercultural celebrations could be incorporated intentionally into the event themes. In fact, one unexpected but major outcome of the service-learning project with the *Doing With* framework reported in this research was that the local community and families were empowered to suggest multicultural-themed events for future service-learning activities. The teacher candidates were excited at this suggestion and have since successfully implemented two multicultural and diversity-focused service-learning events: "Diversity Celebration: It's a Small World" and "Multicultural Game Night." Multicultural storytelling and literature, food, music, art, dance, games, theatre, movies, clothing, and language learning through greetings and name writing are just a few examples of how to incorporate diversity-related themes into service-learning projects. As equal partners in creating and planning these activities, not only do diverse children and families develop and validate their cultural identity, but teacher candidates also benefit by developing their multicultural competence. This is what a service-learning project with a *Doing With* or *Justice* framework promotes.

Conclusion

Given the increasing diversity of the U.S. classroom and the continuing majority of White, monolingual, and female teacher candidates, teacher preparation programs have been forced to respond to increasing calls for greater diversity and accountability. It is imperative that educators explore multiple ideas and strategies that best support teacher candidates to teach with excellence in diverse classrooms. This study demonstrates that, service-learning, in order to be an effective tool for developing diversity and multicultural competence in teacher candidates, should be designed and implemented with a *Doing With Community* or *Justice* framework.

Author Note

Insoon Han, Department of Education, University of Minnesota Duluth; Nedra A Hazareesingh, Department of Education, University of Minnesota Duluth; Peihong Cao, Department of Education, University of Minnesota Duluth.

Correspondence

Correspondence regarding this article should be addressed to Insoon Han, Assistant Professor, College of Education and Human Service Professions, University of Minnesota Duluth, 174 EduE, 412 Library Drive, Duluth, MN 55812. Phone: (218) 726-8682. Email: hanxx093@umn.edu

References

Ang, S., Van Dyne, L., Koh, C. K. S., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation, and task performance. *Management and Organization Review*, *3*, 335-371.

Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., & Yee, J. A. (2000). *How service-learning affects students*. Los Angeles, CA: Higher Education Research Institute, University of California Los Angeles.

Baldwin, S. C., Buchanan, A. M., & Rudisill, M. E. (2007). What teacher candidates learned about diversity, social justice, and themselves from service-learning experiences. *Journal of Teacher Education*, *58*(4), 315-327.

Benenson, J., & Stagg, A. (2015). An asset-based approach to volunteering: Exploring benefits for low-income volunteers. *Nonprofit and Voluntary Sector Quarterly*, *45*(1), 1-19.

Billig, S. H., & Welch, M. (2004). Service-learning as civically engaged scholarship: Challenges and strategies in higher education and K-12 settings. In M. Welch & S. Billig (Eds.) *New perspectives in service-learning: Research to advance the field* (pp. 221-241). Greenwich, CT: Information Age.

Boyle-Baise, M., & Langford, J. (2004). There are children here: Service-learning for social justice. *Equity and Excellence in Education*, *37*(1)*,* 55-66.

Bringle, R. G., Clayton, P. H., & Bringle, K. E. (2015). From teaching democratic thinking to developing democratic civic identity. *Partnerships: A Journal of Service-Learning and Civic Engagement, 6*(1), 1-26.

Bringle, R., & Hatcher, J. (2000). Meaningful measurement of theory-based service-learning outcomes: Making the case with quantitative research. *Michigan Journal of Community Service Learning*, *[Special Issue]*, 68-75.

Butin, D. W. (2007). Justice-learning: Service-learning as justice-oriented education. *Equity and Excellence in Education, 40*, 177-183.

Crabtree, R. D. (2008). Theoretical foundations for international service-learning. *Michigan Journal of Community Service Learning, 15*(1), 18-36.

Creswell, J. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.

Creswell, J. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston, MA: Pearson.

Doerr, N. M. (2015). Volunteering as othering: Understanding a paradox of social distance, obligation and reciprocity. *Partnerships: A Journal of Service-Learning and Civic Engagement, 6*(2), 36-57.

Eyler, J. S, Giles, D. E., Stenson, C. M., & Gary, C. J. (2001). *At a glance: What we know about the effects of service-learning on college students, faculty, institutions and communities, 1993- 2000* (3rd ed.). Nashville, TN: Vanderbilt University.

Furco, A. (2002). Is service-learning really better than community service? A study of high school service program outcomes. In A. Furco & S. Billig (Eds.), *Service-learning: The essence of the pedagogy*. Greenwich, CT: IAP.

Gall, M. D., Gall. J. P, & Borg, W. R. (2007). *Educational research: An introduction.* New York: Pearson.

Garcia, N. A., & Longo, N. V. (2015). Community voices: Integrating local and international partnerships through storytelling. *Partnerships: A Journal of Service-Learning & Civic Engagement, 6*(2), 1-18.

Gaztambide-Fernandez, R., & Howard, A. (2010). Conclusion: Outlining a research agenda on elites. In A. Howard & R Gaztambide-Fernandez (Eds.), *Educating elites: Class privilege and educational advantage*. New York: Rowman & Littlefield.

Giles, D. E. J., & Eyler, J. (1994). The theoretical roots of service-learning in John Dewey: Toward a theory of service-learning. *Michigan Journal of Community Service Learning, 1*, 77-85.

Han, I. (2013, April). *What and how to integrate diversity concepts into special education curriculum*. Paper presented at the Council for Exceptional Children (CEC) 2013 Convention and Expo, San Antonio, TX.

Hirschinger-Blank, N. B., Simons, L., & Kenyon, A. (2009). An evaluation of a service-learning model for criminal justice undergraduate students. *Journal of Experiental Education, 32*(1), 61-78.

Holsapple, M. A. (2012). Service-learning and student diversity outcomes: Existing evidence and directions for future research. *Michigan Journal of Community Service Learning, 18*(2), 5-18.

Howard, A. (2008). *Learning privilege: Lessons of power and identity in affluent schooling.* New York: Routledge.

Jackman, J., Chenault, T. G., & Winkler, J. (2015). Brining organizations back in: Perspectives on service-learning, community partnership and democratic thinking in a voter engagement project. *Partnerships: A Journal of Service-Learning and Civic Engagement, 6*(1), 77-99.

Javanovic, S., Congdon, M., Miller, C., & Richardson, G. (2015). Rooting the study of communication activism in an attempted book ban. *Partnerships: A Journal of Service-Learning and Civic Engagement, 6*(1), 115-135.

Kliewer. B. W. (2013). Why the civic engagement movement cannot achieve democratic and justice aims. *Michigan Journal of Community Service Learning, 19*(2), 72-79.

Leon, N. D. (2014). Developing intercultural competence by participating in intensive intercultural service-learning. *Michigan Journal of Community Service Learning, 21*(1), 17-30.

Liberman, D. (2014). The ABCDs of service-learning: Who is serving whom? *Journal of Higher Education Outreach and Engagement, 18*(4), 7-15.

Marullo, S., & Edwards, B. (2000). From charity to justice: The potential of university-community collaboration for social change. *American Behavioral Scientist*, *43*(5), 895-912.

Means, D. E. (2014). Democratic and social justice goals in service-learning evaluation: Contemporary challenges and conceptual resources. *Michigan Journal of Community Service Learning, 21*(1), 41-54.

Melchior, A., Frees, J., LaCava, L., Kingsley, C., Nahas, J., Power, J., Baker, G., Blomquist, J., St. George, A., Hebert, S., Jastrzab, J., Helfer, C., & Potter, L. (1999). *Summary report: National evaluation of learn and serve America. Evaluation/Reflection. Paper 36*. Retrieved from http://digitalcommons.unomaha.edu/slceeval/36

Minnesota Department of Education. (1992). *Reducing bias in special education assessment for American Indian and African American students*. Minnesota Department of Education, MN.

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, *31*(2), 132-141.

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, CA: Sage.

Patterson, J., Hale, D., & Stessman, M. (2008). Cultural contradictions and school leaving: A case study of an urban high school. *High School Journal, 91*, 1-15.

Ponterotto, J. G., Baluch, S., Greig, T., & Rivera, L. (1998). Development of the initial score validation of the teacher multicultural attitude survey. *Educational and Psychological Measurement, 58*(6), 1002–1016.

Robinson, T. (2000). Dare the school build a new school order? *Michigan Journal of Community Service Learning, 7*(1), 142-157.

Sharpe, E. K., & Dear, S. (2013). Points of discomfort: Reflections on power and partnerships in international service-learning. *Michigan Journal of Community Service Learning, 19*(2), 49-57.

Simons, L., & Cleary, B. (2006). The influence of service learning on students' personal and social development. *College Teaching, 54*(4), 307-319.

Soukup, P. A. (1996, November). *Inviting others to take the helm: Service-learning and the marginated community.* Paper presented at the annual meeting of the Speech Communication Association, San Diego, CA.

Steinberg, K., Bringle, R. G., & McGuire, L. E. (2013). Attributes of quality research in service learning. In P. Clayton, R. Bringle, & J. Hatcher (Eds.). *Research on service learning: Conceptual frameworks and assessment* (pp. 27-53). Arlington, VA: Stylus.

Tinkler, A., Tinkler, B., Hausman, E., & Strouse, G. T. (2014). Key elements of effective service-learning partnerships from the perspective of community partners. *Partnerships: A Journal of Service-Learning and Civic Engagement, 5*(2), 137-152.

Trochim, W. M. K. (2006). *The research methods knowledge base* (2nd ed.). Retrieved from http://www.socialresearchmethods.net/kb/index.php

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. (2013). *Public school teacher data file, 2011–12*. Retrieved from http://nces.ed.gov/surveys/sass/tables/sass1112_2013314_t1s_001.asp

U.S. Department of Education, National Center for Education Evaluation and Regional Assistance, within the Institute of Education Sciences. (2014). *What works clearinghouse procedure and standards handbook, version 3.0.* Retrieved from https://ies.ed.gov/ncee/wwc/pdf/reference_resources/wwc_procedures_v3_0_standards_handbook.pdf

Ward, K., & Wolf-Wendel, L. (2000). Community-centered service-learning: Moving from doing for to doing with. *American Behavioral Scientist*, *43*, 767-780.

Zlotkowski, E. (1996). Linking service-learning and the academy. *Change*, *28*(1), 21-27.