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Building Preservice Teachers' Connections with Communities through Inquiry

Trula Morehead Nicholas, Jacquelyn Baker-Sennett, Lauren McClanahan, and Angela Harwood
Western Washington University

This study describes how a community-based interprofessional education approach designed to engage preservice teachers with community members and human services professionals contributes to preservice teachers' inquiry skills and their understanding of interprofessional collaboration. Preservice teachers were enrolled in a research methods course where they conducted inquiry projects in collaboration with a non-profit organization and neighborhood associations. They reported learning about the process of doing inquiry, gaining an understanding of collaboration, and increasing their understanding of community issues, as well as how the context of communities might shape their future students' needs. The authors consider how these outcomes contribute to helping preservice teachers develop skills and knowledge indicated by professional teaching standards.

Increasingly, schools are taking on the goal of being at the heart of local communities. For some schools this is as basic as providing after-school enrichment programs or engaging more frequently and effectively with parents and community members, while for other schools this means a more systematic effort at integrated and comprehensive service delivery (referred to as "full-service" or "community-based" schools) that provides health and human services for students, their families, and other community members in school-based settings (Dryfoos, Quinn, & Barkin, 2005; Kronick, 2005; Walsh, Kenny, Wieneke, & Harrington, 2008). The line of reasoning and general research finding is that when families, local communities, and services are more intentionally integrated there is an associated positive impact on student achievement and behavioral and social outcomes (Henderson & Mapp, 2002; Mapp, Johnson, Strickland, & Meza, 2008).

While much of the published research on community-based schools and integrated services has emphasized the role of educational leaders in bringing services to the schools, very little research has examined how practicing and preservice teachers come to understand and to engage with other professionals and members of the local communities where they work. McMahon, Ward, Kune, Pruett, and Griffith (2000) notes the following:

> Moving services into the schools will also raise questions about how to directly involve classroom teachers as more than just referral agents. As with school principals, the success of any school-based project will depend on the support of classroom teachers who are accustomed to working in relative isolation with a great deal of autonomy. (p. 80)

The research described in this paper examines efforts to engage preservice teachers with community members and human services professionals in community-based projects. Specifically, we examine how participating in interprofessional community-based learning contributes to preservice teachers' understanding of community and interprofessional collaboration.

Theoretical Background

Community-Based Learning

Community-based learning provides unique opportunities for students to link theory with practice and to situate learning in meaningful contexts (Burant & Kirby, 2002; Carter, Cadge, Rivero, & Curran, 2002; Cooper, 2007; Sleeter, 2001). By considering real-world issues from multidisciplinary perspectives, preservice professionals learn skills that may encourage interprofessional work with families, community members, and human services professionals (e.g., counselors, law enforcement, child welfare, nonprofit agency representatives) throughout their careers.

Community-based learning is grounded in educational and psychological research and is used as a pedagogical tool by college and university faculty (Burant & Kirby, 2002; Carter et al., 2002; Cooper, 2007; Sleeter, 2001). It comprises many forms including "field trips, observational projects, service learning projects, [and] community-based internships" (Carter et al., 2002, p. 158). After reviewing the vast literature related to community-based learning, Owens and Wang (1996) concluded that "intelligence and expertise are built out of interaction with environment, not in isolation from it" (p. 6). Additionally, "effective learning engages both head and hand and requires both knowing and doing . . . [and] decontextualized learning fails to enable students to examine the ideas they bring to the learning situation, to learn from their errors, or to look for patterns" (Owens & Wang, 1996, p. 6). The

project described here provided an opportunity for preservice teachers to collectively engage their head, hands, and hearts while expanding their knowledge of collaborative inquiry.

For teachers, understanding students' lives outside of school can provide insights about ways to help students connect with the academic material covered in their classrooms. Knowing where students "come from" may also strengthen the bond between teacher and student and thus enhance learning (Cooper, 2007). Despite theoretical and empirical contributions that point to the mismatch between classroom learning and skills needed for success in workplace and everyday activities (Engestrom, Miettinen, & Punamaki, 1999; Greeno, 2006; Lave & Wenger, 1991; Rogoff, 2003), relatively few pre-professional programs provide intentional opportunities for future teachers to situate learning within communities and to learn about the role communities and human services professionals play in the work of teachers and schools.

There is evidence to support the need for teachers to learn how to work effectively within communities. Research finds that teacher qualifications and characteristics are no more important than student, family, and community factors in predicting student achievement (Benson, Scales, & Mannes, 2004; Darling-Hammond, 2000; Porfeli, Chuang, Audette, McColl, & Algozzine, 2009; Smith, 2008). As one example, after analyzing California Department of Education data Smith (2008) concluded that 69% of the variance associated with language arts achievement is accounted for by student and community variables (e.g., percent of students receiving free meals), while only 3% of the variance is explained by teacher-level variables. Given findings such as this, it becomes all the more imperative for preservice teachers to consider the importance of nonacademic barriers to learning and have opportunities to engage with community members and the human services profession during early phases of professional preparation.

Despite rationale supporting interprofessional and community-based learning in preservice teacher education, knowledge about students' lives, their neighborhoods, and the community-based agencies that connect with schools receives little mention in most teacher preparation programs (Darling & Ward, 1995; Koerner & Abdul-Tawwab, 2006). One notable exception is a study conducted by Cooper (2007). Cooper engaged 42 preservice teachers in community-based activities that examined community-based strengths and assets through the creation of photo essays, attendance at worship services, and the consideration of issues of privilege and marginalization through scenarios related to homelessness, immigration, and public assistance. Cooper (2007) found that these activities conjured student feelings of fear, resistance, marginalization, and surprise, as well as a sense of personal and professional transformation, all emotions and processes associated with the complexities of becoming an effective teacher. Cooper concludes, "If institutions of teacher education want preservice teachers to teach all children, they should consider incorporating community-based learning into the formal preparation process" (Cooper, 2007, p. 254).

Challenging preservice teachers to learn about the communities in which they will eventually work is recognized by major teacher education professional standards, notably those developed by the Interstate New Teacher Assessment and Support Consortium (INTASC) and the National Council for the Accreditation of Teacher Education (NCATE) (Interstate New Teacher Assessment and Support Consortium, 1992; National Council for the Accreditation of Teacher Education, 2002). INTASC (1992) standard number 10 states that "the teacher fosters relationships with school colleagues, parents, and agencies in the larger community" (p. 33). According to INTASC (1992), a teacher who demonstrates knowledge of involvement with the wider community "understands schools as organizations within the larger community context and understands the operations of the relevant aspects of the system(s) within which she/he works" (p. 33). Additionally, a teacher who "understands how societal systems factors in the students' environment outside of school (e.g., family circumstances, community environments, health and economic conditions) may influence students' life and learning" (INTASC, 1992, p. 33).

Collaborative Inquiry

The recent focus on using data to drive decision-making in school curriculum, policies and procedures is reflected in a spate of research on how action research and collaborative inquiry can contribute to school improvement. According to Bradbury and Reason (2003), "action research is grounded in lived experience, developed in partnership, addresses significant problems, works with (rather than simply studies) people, develops new ways of seeing/interpreting the world (i.e., theory), and leaves infrastructure in its wake" (p. 156). Collaborative inquiry is, according to Deppeler (2006) "one of several cyclical action research-based approaches that emphasize participation and democracy in the process of improving practice" (p. 1). In reviewing this research, Love (2009) concludes that when schools use data systematically through on-going inquiry to improve instruction, results for all students are improved. Love (2009) further contends that given the focus on accountability in schools and the immense amount of data schools have available, a culture of

collaborative inquiry is necessary to help teachers and administrators manage the data deluge in ways that will improve teaching and learning. Slavin (2007) concurs, noting that research plays a central role in "the evidence-based education movement" (p. 2), which is a central feature of the accountability focus of No Child Left Behind.

The success of the data-driven approach to teaching and learning relies on teachers possessing the skills of both inquiry and collaboration. Involving preservice teachers in inquiry-based learning projects, communities of inquiry, or action research may be ways to build such skills (Marvin, 2007; Price, 2001; Shultz & Mandzuk, 2005). These approaches prepare teacher candidates to engage in future action research (Martin-Kniep, 2000) and help to establish skills they will need to become reflective practitioners who can identify important questions, gather and analyze data, and make decisions about their teaching.

Interprofessional Education

In addition to engaging perservice teachers in community-based learning, the project described here works to strengthen teacher candidates' understanding of human services during the pre-professional learning experience. Interprofessional Education (IPE) is commonly defined as a learning process that prepares professionals through interdisciplinary or multidisciplinary education and diverse field experiences (Centre for the Advancement of Interprofessional Education, 2007; Interprofessional Education Consortium, 2001). Movement towards IPE is tied to efforts to improve quality in professions where collaboration, communication, and cooperation are critical to student, client, and/or program outcomes (Clark, 2004). Demonstration projects related to IPE have been conducted since the 1970s, with much of the work focusing on health care in British Commonwealth countries such as Great Britain, Canada, and Australia. Extensive reviews of the effectiveness of IPE indicate that these programs have resulted in varying degrees of success (Barker, Bosco, & Oandasan, 2005; Barr, 2005; Barr, Hammick, Koppel, & Reeves, 1999; Corrigan, 2000; Tourse, Mooney, Klein, & Davoren, 2005). Hammick, Freeth, Koppel, Reeves, and Barr (2007) reviewed nearly 10,500 journal abstracts and 884 complete papers on the topic of IPE, primarily in the health and human services profession. The researchers conclude that IPE in health and social services provides pre-professionals with knowledge and skills necessary for learning how to work collaboratively, a skill critical for professional success (Hammick et al., 2007). However, it is less beneficial in positively influencing attitudes and perceptions towards members of other professions in the service delivery team.

In practice, it is common for school personnel to engage in interprofessional collaborations for the purpose of providing comprehensive community-based services to children and families (Anderson-Butcher & Ashton, 2004). However, most preservice teacher education programs do not prepare students for interprofessional practice or collaborative engagement with community-based agencies and organizations (Oandason & Reeves, 2005; Tourse et al., 2005). While the political and educational implications of IPE for teachers and human services professionals have been widely discussed (e.g., Lawson & Hooper-Briar, 1994; IEC, 2001), evaluations of student learning outcomes when preservice teachers engage in IPE with human services professionals have not been systematically conducted. The research described here examines the process of engaging preservice teachers and human service professionals together in an interprofessional community-based learning experience during the period of time when professional identities are being formed and/or transformed.

Three research questions were explored in this study: (1) How does participating in interprofessional community inquiry projects contribute to preservice teachers' inquiry skills?

(2) How might interprofessional development at the preservice phase help teachers understand how to collaborate with colleagues in the community? and (3) How does participation in interprofessional community inquiry activities with human services professionals and community leaders shape preservice teachers' understanding of community? In addition, how such participation enables emerging educators to develop skills and knowledge related to professional teaching standards was considered.

Method

Program and Project Descriptions

The Master's in Teaching (MIT) and Human Services program are co-located in the College of Education at Western Washington University, a northwest regional comprehensive institution. Students enrolled in the MIT program earn both a master's degree and an initial state teaching certification in secondary education.

The MIT students collaborated on community inquiry projects with human services professionals from the Whatcom Family & Community Network (WFCN) and leaders from local neighborhood associations. WFCN is a local nonprofit organization that "focuses on community organizing at both the neighborhood and county-wide level. . . . [They] bring together residents and key leaders to solve problems and build on existing community strengths using the principles of asset-based

community development" (Whatcom Family & Community Network, n.d., para. 1).

The partnership between the faculty from the university and staff from the WFCN began during the summer months that preceded student involvement. During the initial phase of this project one faculty member from Secondary Education Department and one faculty member from the Human Services Program were involved. The summer meetings were used to outline the goals and objectives to be met by the MIT students and the WFCN executive director, who worked closely with each of the neighborhood leaders and outlined the goals and objectives of the three different communities where the students would be working. Based on the goals and objectives of all involved, three separate projects were developed; MIT students participated in these projects as part of course-based assignments. The Secondary Education faculty member served as the instructor for the Research Methods course and worked closely with the community partners throughout the project. The Human Service faculty member, in collaboration with the Secondary Education faculty, designed the survey, developed the focus group questions, and also worked closely with the community partners throughout this project.

In all three projects preservice teachers, community members, and WCFN worked together to design, conduct, and analyze surveys and interviews. One group of preservice teachers worked with the Ryson Neighborhood Association in a low-income densely populated neighborhood located near the university. This group surveyed area businesses, with the goal of contributing to the neighborhood's business development plan. In Freeville, a primarily agricultural community located 10 miles from campus, a second group of students designed a survey and interview protocol to ascertain community members' interest in building a local community center. A third group of students collaborated with residents of Kandale, a rural and isolated geographical area in the foothills of the Cascade mountain range and home to a large percentage of recent immigrants from Eastern Europe. In this location preservice teachers worked with community members and WFCN to interview residents, county administrators, and teachers, students, and the principal of the local elementary school about the potential need for a community center.

Participants

MIT students who participated in this study were concurrently enrolled in an educational research methods course. This course is offered during the first quarter of the program, allowing the skills learned to inform the remainder of their coursework and field experiences. During the fall quarter of the academic year, a total of 22 MIT students enrolled in a research methods course engaged in the community-based learning project. Additional participants included university faculty (one from teacher education and one from the Human Services Program), the Executive Director of the WFCN, and neighborhood members/leaders from the three local communities.

Learning Activities

During the first week of class, 22 MIT students received an overview that described how the three projects related to course objectives. The second class session was held at the offices of the human services agency (WFCN), and all students were introduced to the concepts of *asset-based community development* and *community mapping*. All of the projects were explained in depth by the community leaders, and students self-selected the project they wanted to work on for the quarter.

One of the first activities the students engaged in was a "walkabout." The students participated in the walkabout with neighborhood members/leaders guiding the tour while explaining their experiences living in the community. The purpose of the walkabout was for students to get a feel for the community and to listen to it being described by a community member who used an asset-based approach to community development. Following the walkabout, students spent time debriefing with the WFCN director and staff.

Next, each group worked individually on their respective projects. Groups met several times with community members/leaders, parceled out assignments to each group member, stayed in contact via email, attended community meetings, visited local businesses, and conducted surveys. In addition to meeting outside of class, community members also came to class sessions at the university to work with their respective student groups. Finally, MIT students presented their work to an audience of community members, staff from the WFCN, and a group of Human Services pre-professionals who would be continuing the work with the three communities the following quarter.

Data Sets and Collection

Data sets used to answer the aforementioned research questions consisted of a mid-quarter reflection, focus groups, a post-project instructor-generated survey, a post-project survey generated by the community partner, and a follow-up survey that was conducted approximately five months after project completion. The surveys created, distributed and compiled by the student groups for their community partners are not part of the data set used for this paper.

The mid-quarter reflection asked preservice

teachers to respond to four questions in narrative form. The purpose of the narratives was to allow the preservice teachers to reflect on their experiences thus far and to connect the experiences with what they were learning. Students were asked to provide short answers to the following question: "What has happened?"; "Who was involved?"; "Why are we doing the things we are doing?"; and, "What did you learn?" Responses to the survey also allowed the community partners and university faculty to obtain an understanding of the students' experiences and knowledge gained at this point in the project.

During week eight of the eleven-week quarter, preservice teachers participated in a one-hour focus group session. The focus group questions were designed to ascertain what students learned about research as a result of working on this project, how the project affected their understanding of community, and what they learned about working in teams.

The instructor-designed post-project survey was developed to gather information on student experiences and learning that occurred during two separate field-based projects that same quarter. For the purposes of this article the questions related to this specific project will be described. The survey was comprised of a total of 16 questions that included basic demographic information and questions that encouraged respondents to reflect on what they learned about themselves and the communities in which they were engaged. Additionally, respondents were asked a set of questions designed to gain an understanding of each respondent's perception of the importance of teacher involvement in the communities in which they live and work (for a complete set of the questions see Appendix A). The Executive Director of the WFCN developed and administered a survey to gather information on how to improve the project and relate the experience to professional work. Respondents were asked to provide short answers to the following questions: "How does this project apply to your present or future professional work?"; "Which elements of this process do you think worked the best and why?"; and, "Which elements of this process could be revised for a better result?"

The post follow-up survey consisted of two short answer questions designed to assess the respondents' perception of the project after several months had passed: "Please describe briefly the aspects of the community-inquiry project that most interested you"; and, "What aspects of community development concern you at this point in your career as a teacher?"

Data Analysis

Data were triangulated by examining results from instructor-generated surveys, community-generated surveys, focus groups, and student reflection essays. This enabled the research team to cross-check the accuracy of the data and to correct biases that might emerge from a single data collection method (Denzin, 1989; Goetz & LeCompte, 1984; Janesick, 1994).

To analyze the qualitative components of the study, two teacher-education faculty and one additional Human Service faculty were recruited. It should be noted that these teacher education faculty were not involved in the implementation phase of this project. During the analysis process at least one human services faculty and one teacher education faculty member initially coded sample passages. This allowed the research team to check for profession-specific bias during the initial coding process. Each team member used an open coding process, during which codes emerged based on the contents of the data. After the individual coding, each team gathered to engage in extensive discussion and recording of emerging patterns reflected in the data. From these discussions, an overall coding scheme was developed that was applied to each data set. Once the coding scheme was established, passages were coded twice. Individual team members first independently coded each data set, and then teams met to finalize codes by consensus. When coders disagreed on the code for any data point, discrepancies were discussed and a final decision was made on the appropriate code. Team members then created data arrays for the outcomes in which the data were arranged by code. After re-reading each of the data arrays, some coding categories were combined as connections between them became clearer, and in some instances codes were re-organized and the data sets were re-arrayed. For instance, initially there was a fourth major category of learning titled "learning about self," but in the final analysis we determined that those elements of learning were related either to developing inquiry skills or learning about the community, so outcomes were re-categorized under those other two major categories. In all, a total of 323 data points were coded and included in this analysis. *Data point refers* to a segment of data that includes a complete thought or concept that was identifiable and assigned to a coding category. In some cases, a data point might be coded in more than one category if the participant articulated two or more clearly distinct conceptually understandings in a single response.

Results

A total of 323 data points were coded for the MIT students. Analysis of the combined data from all preservice teachers, across all data sets, indicates that their community inquiry projects helped to facilitate learning in three main categories: (1) inquiry skill development, (2) understanding collaboration, and (3) learning about the community. These results are summarized in Table 1. See Appendix B for

Table 1
Learning Outcomes for Master's in Teaching Students

	Coded Category		Total (*n* of data points = 323)
1. Inquiry Skill Development	Process of Community Inquiry		83
	Time/structure of implementing inquiry		42
	Product/process of inquiry		17
	Conducting real research		14
	Importance of communication		5
	Role balance		5
	Inquiry Skills Developed		41
	Creating surveys		16
	Research skills		11
	Interview/focus groups		7
	Personal awareness		4
	Listening & observation skills		3
		Total	124
2. Understanding Collaboration	Navigating student group dynamics		53
	Collaborative process		35
	Working with community factions		17
		Total	105
3. Learning About Community	People and Contexts		71
	Involved community members		45
	Community context & impact on students		11
	Descriptive details about community		10
	Community concerns/issues		5
	Awareness of Social Services		14
	Community-school relations		9
	Services provided		5
	Personal/Professioanl Role in the Community		9
		Total	94

Note. N of data points = 323

additional data samples related to each category discussed below.

Inquiry Skills

The most prevalent finding was that preservice teachers gained skills in doing inquiry (*N* = 124). This included two sub-categories: understanding the "process of community inquiry" (*n* = 83) and "building inquiry skills" (*n* = 41). Data coded as understanding the community inquiry process reflected preservice teachers' thinking about actually engaging in community inquiry, as well as what they learned from the process of doing research with their community partners. Preservice teachers commented on the structure and timing of such projects, communication among themselves and stakeholders, issues that arose related to the tension between process and product outcomes, and the experience of doing real research. Time and structure elements of the process were most often commented upon, typically reflecting a level of challenge that engaging in such open-ended work posed for students. Many students wrote that they felt they needed more structured guidelines to help them feel successful; others wrote about adapting to the changing or shifting ideas and expectations of group members or the difficulty of engaging in such a complicated project within the constraints of an 11-week quarter.

Students also commented about what it was like to do research in the real world, as opposed to studying it in class. "There is more to the design and construction of a research method than can be described in a book or discussion," said one student; another observed the following:

> We worked on designing a business survey, it was interesting, something that seems to be so simple, how long of a process it actually was, to actually design the survey, make sure the survey includes things the group wanted, and then trying to

> interpret what the group wanted to have in a survey . . . something that simple, a one-page handout is going to be talked about and re-worked over and over and over and that's just part of the process.

In addition, students reflected on the challenges and necessity of communicating clearly with all constituents, as well as balancing their roles as students/participants in the work.

Another important learning outcome related to inquiry skill development was preservice teachers' identification of various inquiry skills that they developed. Since the preservice teachers were concurrently enrolled in a research methodology course, the skills they acquired ranged from learning the technical aspects of research, such as creating and implementing surveys or running focus groups, to gaining personal awareness of the role of researchers and developing listening and observation skills. The most frequent student comments were on how difficult it was to create an unbiased, accurate survey that would accurately address the questions that the students were interested in. During focus group interviews, one student said, "Ah, there's a LOT of editing! [We took] four weeks working on revising our survey." Another student agreed, stating, "Yes, and trying to ask the right questions, figuring out what it is that you actually want—not what we want, but what [the community members] want." Other research skills that the MIT students learned included listening and observation. In a final reflection, one student made the following comment:

> After this experience, I feel I have enriched my listening and observing skills. I feel that the ability to impartially observe a particular situation before choosing a course of action is a crucial part of action research. It was a challenge for me to patiently and quietly listen . . . without springing into action.

One student was able to tie her role as an observer in the community to her role in the classroom as a teacher: "Classroom observations are a part of my job, and for that reason the course content regarding observation was of particular interest." This primarily included visual observations of secondary students—mainly of how engaged they were in their classroom activities, as observations of off-task students could directly relate to circumstances outside of the classroom that the student may be dealing with. This was a strong connection for this student, as what is outwardly visible in secondary students is sometimes all teachers have to go on when assessing the needs of their students. Overall, data coded in this category indicated that preservice teachers learned that there can be a great deal of overlap between the process of classroom observation and the process of community-based inquiry.

Understanding Collaboration

The second most frequently mentioned outcome for MIT students was understanding collaboration (n = 105). Since the MIT students were concurrently enrolled in a traditional educational research methods course, they were very aware of the role that collaboration must play, both in terms of the process of collaboration, as well as working well with others. Three sub-categories included navigating student group dynamics (n = 53), general observations about the collaborative process (n = 35), and working with community factions (n = 17). Each data set included comments related to working together as a student research group, and most of these comments detailed the challenges inherent in such work. The idea of respectfully reaching a group consensus was mentioned often. One MIT student stated,

> There were a couple of times when we had one or two people who weren't quite on board with the rest of the group, and it's sort of a game . . . a process of how to be respectful so there was [no] miscommunication. You know, how to get everyone on the same page without steamrolling.

Another student agreed, adding, "It was good to just sort of negotiate [differing viewpoints] without being disrespectful or just going on and leaving somebody out." This student was not alone in seeing the good that can come from grappling with varying perspectives in the pursuit of a common goal. One student commented, "We really grew as a group in terms of identifying the way to make decisions or make things happen." Similarly, another student observed that when each person had a specific role to play, the process of gathering data was much easier:

> Each person had a task, even if it was a small one, like there was something that they were going to bring back to the larger group at the next meeting. . . . We each had a piece and then we'd come back and sort of puzzle it together.

For many MIT students, differences of opinions were seen as both a challenge and a benefit; these ideas came through in the subcategories of "collaborative process" and "community factions." Students indicated that the challenges were related to navigating the various perspectives or goals of group members. One stated, "The single most important aspect of the Community Inquiry Project was perspective. I am

taking away a greater understanding of what it is like to work in an environment with various and often conflicting requirements and agendas." For some, the awareness of the need to be sensitive to community politics was frustrating, and this was a task that these students felt unequipped to handle. For example, after working with members of the Kandale community, preservice teachers were struck by the tensions between the Slavic and non-Slavic members. Rather than building a community center, it was recommended that holding events to bring the groups together should serve as the focus of a community project. One student stated, "The sensitivity of issues in community politics was very frustrating to witness and undermined the research learning that was supposed to take place during this project." Some students commented that by working with so many people, there was no central goal, or that their goal was perceived as being "compromised" in some way as to appease all parties involved. This could suggest that not all students bought into the inquiry process, and this will aid in informing future research.

However, not all students found differences of opinion frustrating. Some welcomed the diverse perspectives, recognizing that differing opinions often mean a broader outlook on a topic or situation:

> It always amazes me how many differences of opinion exist in environments where one would expect professionals to have a shared set of goals. This diversity can be viewed as a deficit to be overcome, or as an asset to be taken advantage of.

Other students shared this asset-based perspective. One stated,

> We would not move forward with a plan of action until all of us were on board with the idea. I found it valuable to have a group of people with diverse backgrounds working together for a common goal, because we all had something different and interesting to bring to the project. This process of collaboration was personally enriching for my own professional development.

Learning about the Community

As seen in Table 1, a total of 94 data points were coded "learning about the community." Under the broad category of "learning about the community" there were three sub-categories: "people and community contexts" (n = 71),"awareness of social services" (n = 14), and "personal/professional role in the community (n = 9).

The first subcategory of learning, "people and community context," reflected specific details about the communities in which students worked. These included learning about which community members were involved, understanding how community contexts impact students, and getting to know more about community issues and concerns.

Of those outcomes, the most prevalent was becoming more familiar with the people who live and work in surrounding areas. As one student commented,

> I also think it's important, as a student in general and a future teacher in particular, that I participate in activities that connect me to people in . . . [name of city] and . . . Whatcom County that I would not otherwise have a chance to work with.

Another student noted that it was interesting to find there are "people in communities who are taking charge to some degree to try to address different problems in the community." A peer added, "I'm impressed that there's people who are so invested in their community."

The second most prevalent finding about people and context was a deepened understanding of how the context of a community may have an impact on students in schools. The following quote is illustrative preservice teacher initial awareness that students will be coming from diverse backgrounds:

> It was really interesting for me to see the ["Kandale"] community because we took a field trip out there and to see like, normal structure houses next to trailers and how families live in, that was something that I've never really seen before, so I thought that was really eye-opening to me that I might have students that come from, like depending on where I go, I'll have students who come from this situation, one or the other.

Other students echoed this learning, saying, "I now have a much better understanding of how communities affect the schools and vice versa," and, "I believe that by participating in community activities an educator can gain a better understanding of who their students are, where they are coming from, and what challenges many of them may be facing." Clearly, these preservice teachers articulated recognition that the community context will impact their students' lives and that this is something they will need to consider as educators. In addition, students learned specific details about the communities in which they worked, such as the demographics or geography, as well as the issues and concerns encountered by community members.

The second major sub-category of "learning about the community," is labeled "awareness of social services," which includes understanding of how school and community relationships can be fostered and knowing the types of services and organizations that exist. Two student comments illustrate this point:

"Through this project I was able to get a grasp of the way the schools and the surrounding community work together for the benefit of students" and "I also learned some of how to work with social services and other service providers to help my students, and their families, get the help they need."

The third subcategory of learning about the community includes preservice teachers' recognition of their personal and professional roles in the community. Many MIT students focused on their professional role, noting that there is a direct relationship between schools and community. As one student said, "The school is part of a community, and [teachers] should try to help out and be involved in the community." Other students agreed, stating that teachers are unique members of the community, because their interactions span multiple interest groups. For one student, the most important part of being involved with the community inquiry project "was the realization of how far a teacher's job extends beyond the classroom."

Discussion

Findings both reinforce ideas previously explored in the literature on community-based learning and interprofessional development and provide several interesting new findings worthy of further exploration. First, conducting research in the "real world" deepened the MIT students' understanding of how community inquiry works. Much of the MIT students' understanding of the process of community inquiry was brought to the forefront as a result of their participation. This underscores Owens and Wang's (1996) conclusions about the efficacy of community-based learning. Second, the community-based learning experiences resulted in students' better understanding of the collaborative skills necessary to move community development forward, including both group dynamics and recognizing their personal and professional role as future classroom teachers. Finally, participation in interprofessional community development helped shape preservice teachers' understanding of community, including the people and processes involved. These findings suggest that such interprofessional activities may positively contribute to the development of the skills and knowledge related to professional teaching standards.

Understanding the Process of Community Inquiry

In terms of learning about the process of community inquiry, students realized that there was quite a transfer of skills that could occur from the community platform to the classroom platform. Many students recognized that the skill set required to conduct quality community inquiry is the same set required to effectively conduct a well-run classroom. For example, one student commented, "Classroom observations are part of my job, and for that reason the course content regarding observation was of particular interest." And observing is not the only skill that is transferable. From the trial and error of creating valid assessments to the importance of really listening, the parallels between conducting community inquiry and running a classroom are undeniable. To this end, another student commented, "The single most important aspect of the Community Inquiry Project was perspective." Be these perspectives of differing community interests or student perspectives in the classroom, careful understanding of positionality benefits everyone involved. The same can be said for successfully negotiating classroom conflicts: observing, accurately assessing, and listening deeply to differing perspectives are all key components of both quality community inquiry and successful classroom management.

Understanding and Development of Collaborative Skills

Findings indicate that students developed a wide range of professional skills, including the ability to work collaboratively with others, which is consistent with previous research (Hammick et al., 2007). As suggested above, collaborative skills help to add a sense of perspective in problem-solving situations. It was particularly encouraging to see that students did not view differences of perspective as a necessarily negative obstacle to be overcome. Rather, they treated differing perspectives as something to be embraced, or, as one student put it, "an asset to be taken advantage of." Again, the students related this skill back to working in their future classrooms. In some instances, the students appreciated having specific roles, or tasks, to complete. This aspect of working as a group, in an organized fashion, has direct implications for a classroom teacher. By actually engaging in the kinds of projects that they may be asking of their future students, preservice teachers have the opportunity first-hand to see how important it is for everyone in a group to have a clear goal when working together on a common project.

Understanding of Community

The project described here speaks to the value of IPE through, community-based learning experiences. Part of the project's success can be attributed to the fact that both teacher education and human services programs are housed within the College of Education and maintain deep ties with the local community. By engaging preservice teachers, human services professionals, agency representatives, and community

stakeholders in a field-based learning experience that models methods of inclusivity and opportunities for all participants to learn from one another, this project provided preservice teachers enrolled in a research methods class with the opportunity to situate their role as future classroom teachers within the greater community at large. For some students, this connection was eye-opening: "I believe that by participating in community activities, an educator can gain a better understanding of who their students are, where they are coming from, and what challenges many of them may be facing." The importance of this realization should not be under-emphasized. For many preservice teachers, it is difficult to look beyond life outside the walls of their future classrooms. However, the earlier that they understand that they are part of a much larger, intertwined whole, the sooner they can provide assistance to students who might be in need. In addition, involving preservice teachers in inquiry projects provides them the opportunity to examine their own biases and to hear the voices of their students, the parents, and the community at large. In an example cited previously, one preservice teacher used the word "normal" to describe a house, as opposed to the trailers in which some of her students lived. This reveals a great deal about the bias that dwells within many of our preservice teachers. In future studies, a greater emphasis should be placed upon the biases that students (both preservice teachers and K-12) bring into the classroom, how those biases affect varying perceptions, and how they play out in classroom situations. Perhaps more important for per-service teachers, an awareness of the structures and community-based services available to children and families is paramount to providing excellent instruction.

Despite the strengths of this project, student involvement with community was limited to a one-quarter experience in a traditional research methods course. Ideally, involvement with community-based learning should be infused throughout the scope and sequence of preservice education and incorporated into internships so that preservice teachers can infuse community-based learning into classroom practice. As future teachers become aware of the community's strengths, challenges and resources throughout the course of their professional education they will be better prepared to partner with other professionals and community members to meet the needs of children in their classroom.

Implications for Professional Teaching Standards

In a relatively recent statement to the press, Education Secretary Arne Duncan called for "revolutionary change" in the way teacher education programs prepare our future teachers (Field, 2009). According to Duncan, our teacher candidates need to be data-driven decision makers, able to use data to improve student learning. That is exactly what the MIT students involved in this class were doing—collecting data in the community to better inform their interactions with students, parents, and the community at large. Duncan also called for far more field-based experiences embedded throughout teacher preparation programs. Again, participation in this class placed our MIT students directly into the communities in which they could one day be teaching.

Data from these preservice teachers indicates that their community-based experiences did indeed help them to develop knowledge and skills indicated in teacher education professional standards. The preservice teachers in this sample gained knowledge of who lives and works in communities and of how students' home and neighborhood contexts may shape their learning. As Cooper (2007) proposes, this may enhance the bond between teachers and students. They also gained an understanding of schools and how they interact within the larger community context. This helps to address the NCATE and INTASC standards that focus on understanding how communities, schools, and families interact and influence student learning. Furthermore, the community-based experiences resulted in students exploring their personal and professional roles within community settings. Students developed a more holistic way of looking at both communities and their roles within them as a result of this learning experience. In future research it would be valuable to determine if and how preservice teachers carry these lessons in to their profession.

These findings have implications for ways that relationships can be built between schools, communities, and community-based agencies. Interprofessional community-based educational experiences provide opportunities for students to connect across a variety of professions that have traditionally focused on the well-being of children, families, and communities. This model helps to meet needs for increased community understanding (Koerner & Abdul-Tawwab, 2006) called for in teacher education. Students commented on their increased awareness of who works within communities and how people from a variety of vantage points can come together to support children and families. Building interprofessional relationships within community-based settings during the period when professional identity is formed and/or transformed has the potential of producing more effective teachers. The findings also speak to the important role that higher education can play in creating meaningful learning experiences with community-based partners that are relevant to professional practice and impact the wellbeing of children, families, schools, and communities.

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TRULA MOREHEAD NICHOLAS is Assistant Professor of Human Services at Western Washington University, with areas of teaching and scholarship focusing on community well-being through university-community partnerships, through diversity and social justice, and through healthy nonprofits. Trula can be reached at Trula.Nicholas@wwu.edu

JACQUELYN BAKER-SENNETT is Associate Professor of Human Services at Western Washington University, with areas of teaching and scholarship focusing on human services and childhood studies. Jacquelyn can be reached at bakersj@wwu.edu.

LAUREN MCCLANAHAN is Associate Professor of Secondary Education at Western Washington University, with areas of teaching focusing on developmental reading, writing and learning in the secondary school.

ANGELA HARWOOD is Professor of Secondary Education at Western Washington University, with areas of teaching and scholarship focusing on service-learning.

Appendix A
Instructor-Generated Survey

MIT Field Experiences Questionnaire

This quarter you have been involved in a number of learning experiences in school and community settings. We are very interested in your responses to both types of field experience you have had during your first quarter in the MIT program. We have designed this questionnaire and the upcoming focus groups to give you a chance to share your insights. There are three parts to this questionnaire, to allow you to give input about your community-based research experience and school-based experience separately and in conjunction with the overall design of the MIT program.

The questionnaire is anonymous; please answer the following questions with candor. Thank you!

Background Information

1. In which of the following courses were you enrolled this quarter?
(please check all that apply)
_____SEC 501
_____SEC 525
_____SEC 531
_____SEC 450

2. What was your undergraduate major?_____Year:_____

3. In which of the following areas do you plan to earn an endorsement?
(please check all that apply)
_____Social Studies (any area)
_____Sciences (any area)
_____Mathematics
_____English
_____Middle School Humanities
_____Teaching English to Speakers of Other Languages
_____World Languages
_____Visual Arts
_____Theater Arts
_____Music
_____Special Education
_____Health and Fitness
_____Other (specify)
_____Other (specify)

SEC 501 Community-Based Inquiry Experience

1. On which Community-Based Inquiry team did you participate in SEC 501?
   _____R_____ Neighborhood

   _____F_____ Community

   _____K_____

2. Please list and briefly describe the activities in which you engaged in conjunction with the Community-Based Inquiry project:

3. Please estimate the average number of minutes you spent each week in the following activities related to the Community Based Inquiry project

Activity	Minutes/Week
In meetings with community members	
In meetings with your SEC 501 team members	
Meeting with Whatcom Family and Community Network contacts	
Conducting library or INTERNET research directly related to the Community Inquiry Project	
Developing data collection instruments	
Collecting data in community settings	
Traveling to and from Community Inquiry sites	
Attending community meetings or events during evening or weekend hours	
Other (please specify)	
Other (please specify)	

4. Please describe (briefly) any work or volunteer experiences you had prior to entering the MIT program that you feel helped prepare you for the school or community-based projects in which you participated this quarter.

5. What were the most important things you learned *about the community with which you worked*?

6. What were the most important things you learned *about yourself* as a result of your work in the community?

7. In what ways do you think your work on the Community Inquiry Project contributed to *your development as a teacher*?

8. In what ways do you think your work on the Community Inquiry Project contributed to the *community in which you worked*?

9. About which course concepts did you learn the most as a result of your work with the Community-Based Inquiry Project?

   a. SEC 501:

   b. SEC 525:

   c. SEC 531:

   d. SEC 450:

Please indicate the extent to which you agree with each of the following statements:

Statement	Don't Know	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
1. Teachers should be involved in community development work.	○	○	○	○	○	○
2. Teachers should understand the community context in which their students live.	○	○	○	○	○	○
3. The classroom practice of P-12 teachers should be linked to the local community.	○	○	○	○	○	○
4. Teachers should be knowledgeable about the various agencies outside of school with which families interact.	○	○	○	○	○	○
5. Teachers should understand the challenges that families encounter in accessing services in the community.	○	○	○	○	○	○
6. Community-based inquiry should be part of the pre service program for teachers.	○	○	○	○	○	○

10. What additional thoughts or comments do you have about the statements in items 10-15 above?

Appendix B
Sampling of Data Points

INQUIRY SKILL DEVELOPMENT

PROCESS OF COMMUNITY INQUIRY

- "That it takes a lot of time to build relationships to actually accomplish any work together as a cohesive community"
- "Long process due to conflicting schedules, both key informants and members of res. group"
- "It's hard to coordinate schedules"
- "During the class I was frustrated with how difficult it was to connect with a community and produce data in such a short time. Looking back on it at this point, I find that I learned how time-consuming community development is. I also am able to understand that community development is a slow and continuous process."
- "It is difficult for a group of students to jump into for only three months, but it was rewarding to the community and to our professional development."

INQUIRY SKILLS DEVELOPED

- "I have already put my community research skills to the test in my practicum class this quarter. We are researching MYSPACE use among middle school aged students. We are collecting data from surveys and discussing them this week."
- "We have organized a survey time for businesses. School surveys are soon to be implemented."

UNDERSTANDING COLLABORATION

- "they can come together for a common purpose"
- "I have learned that this is all a very long process. Community development takes lots of time and patience, as well as a great deal of energy and enthusiasm."
- "Focus on small things first, then move towards larger goals."
- "I won't be able to implement my creative ideas all the time."
- "Networking and personal relationship building was involved more, which isn't necessarily bad."

LEARNING ABOUT COMMUNITY

PEOPLE AND CONTEXTS

- "There are dedicated, smart, and passionate people living there and they want to see "R" [name of neighborhood] improve. They take pride in their neighborhood."
- "People want to improve the image of the community"
- "That I learned it is important to be aware of a communities' culture and socioeconomic standing"
- "Learning the importance of impact the community has on students"
- "opened my eyes to the consideration of where students come from"

AWARENESS OF SOCIAL SERVICES

- "the community lacks services that could be provided"
- "We learn what assets are located throughout the city we live in."
- "shifted my view towards 'asset based'"

PERSONAL/PROFESSIONAL ROLE IN CMTY

- "as a teacher you are a part of the community you work in."
- "I realized how much I can aid in a child's development and life situations"
- "I learned that teaching = community development"
- "Teaching = community development; teachers = community resources"
- "It helped prepare me for things I may face as a teacher, as well as how I can get involved with the community."