ENHANCING THE PREPARATION OF SPECIAL EDUCATORS THROUGH SERVICE LEARNING:
EVIDENCE FROM TWO PRESERVICE COURSES

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A challenge for teacher educators in special education is to impact the beliefs and attitudes of preservice teachers in ways that cultivate or strengthen dispositions and inform practice. This study investigated the impact of service-learning experiences on the development of professional dispositions by undergraduate students in two preservice special education courses. A constant comparative analysis of student focus-group transcripts and reflective journal entries uncovered two convergent themes. First, students in both courses developed a sense of professional efficacy. Secondly, students developed positive regard for the abilities of students with disabilities and the contributions of parents as partners in their children's education. Recommendations are provided for designing service-learning experiences in ways that maximize the impact of the experiences on preservice teachers' perceptions and attitudes toward working with students with disabilities and their families.

Historically, student teaching provided the sole opportunity for preservice candidates to practice and demonstrate teaching skills. Over the last 20 years, teacher educators have increasingly sought to enhance the learning of teacher candidates through multiple opportunities to apply what they have learned in real-world contexts. Today, preservice candidates can expect to have numerous field experiences prior to student teaching (Prater & Sileo, 2004).

A body of research evidence supports the benefits of field experiences in teacher preparation programs (Aiken & Day, 1999; McLoughlin & Maslak, 2003; Whitney, Golez, Nagel, & Nieto, 2002). For example, practicing skills learned in the classroom in relevant situations has been shown to increase the confidence of preservice teachers (Darling-Hammond, Chung, & Frelow, 2002). In addition, working directly with students gives preservice teachers an appreciation of student differences and diversity (McLoughlin & Maslak, 2003). In a survey study conducted by Washburn-Moses (2005), teachers of students with learning disabilities identified field experiences as the best way to prepare individuals to become special education teachers. Respondents both in the Washburn-Moses study and in another study of practicing teachers (Prater & Sileo, 2004) recommended that preservice special educators be given additional opportunities to apply firsthand what they learn in their university coursework.

A pedagogical approach touted to provide the benefits of traditional field experiences, plus added benefits such as increasing student social responsibility and addressing human and community needs, is service learning (Mayhew & Welch, 2001). The application of service learning has gained increasing momentum in higher education (Astin, Vogelgesang, Ikeda, & Yee, 2000; Eyler, Giles, & Braxton, 1997) and teacher preparation (Billig, 2000; Wade, 1995). Citing Boyer's (1994) call for higher education to reestablish its commitment to service, Mayhew and Welch advocate the implementation and evaluation of service learning in special educator preparation programs. The authors draw a distinction between traditional field experiences and service learning. They contend that the focus of traditional field experiences is on the teacher candidate, who is closely supervised by an expert teacher as he or she practices the skills of the teaching profession. For the most part, the teacher candidate is perceived as the recipient of knowledge and skills and is the only beneficiary of the interaction. In

contrast, the focus of service learning is to provide reciprocal benefit to the teacher candidate and a community partner (Jacoby, 2003).

Research examining the application of service learning within special education teacher preparation programs is limited (Mayhew & Welch, 2001). A recent study conducted by Gonsier-Gerdin and Royce-Davis (2005) examined the development of advocacy and leadership skills by 15 preservice special educators participating in courses that included service-learning projects. Data were collected from field notes, written reflections, artifacts, course evaluations, follow-up interviews, and surveys. This data indicated that service learning influenced students' awareness of social justice issues, confidence in leadership skills, commitment to advocacy and leadership roles, and professionalism.

In another study, Kamens, Dolyniuk, and Dinardo (2003) examined prospective teachers' attitudes toward and knowledge of individuals with disabilities in a service-learning program in which 26 university students coached 17 high-school students with disabilities performing various jobs on campus. Several themes emerged from university student journals, instructor field notes, questionnaires, and course assignments. Students demonstrated an increased awareness of the public's attitude toward and treatment of individuals with disabilities, an appreciation of the benefits of firsthand experiences, and awareness of the capabilities of individuals with disabilities as well as effective ways to teach and work with them. Kamens et al. summarized the impact of the service-learning project by stating, *We discovered that integrating experience and service into a teacher preparation course enhanced reflection and the construction of new knowledge* (pp. 116-117).

While varying definitions of service learning are currently found within the literature, Bringle and Hatcher's (1995) definition has been adopted by our university and will be applied in this article. They define service learning as follows:

> [Service learning is] a credit-bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs and (b) reflect on the service activity as a means of gaining a deeper understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. (p. 112)

Regardless of the definition used, three common characteristics describe an authentic service-learning experience. First, the experience involves a reciprocal relationship that meets an identified need within the community. Secondly, academic content is integrated into the service experience. Finally, participants are encouraged to reflect and connect the experience and content to their personal perspectives.

The present study builds on past research by exploring the impact of incorporating service-learning experiences within two special education courses in a teacher preparation program at a mid-sized midwestern university. The two courses, *Collaboration and Consultation with Colleagues and Families* and *Supported Employment*, had previously followed a traditional lecture-and-discussion format with minimal interaction between university students and individuals with disabilities or their families. The three characteristics of service learning were integral to the redesign of both courses. These characteristics became objectives for course development. The first objective (establishing mutually beneficial partnerships) was met by collaborating with community agencies in the development and implementation of the service-learning experiences to ensure that both parties benefitted equally from the partnership. To effectively achieve the second objective (meaningfully connecting service-learning experiences to course goals), prospective teachers engaged in experiential learning closely tied to the subject matter of the courses (Munby & Hutchinson, 1998). The third objective (reflection and connection to personal perspectives) focused on the impact of the service-learning experience on the development of students' professional dispositions when working with individuals with disabilities and their families.

Service learning as pedagogy offers the potential to affect the beliefs and attitudes of preservice special educators. Service learning has been linked to the development of several key dispositions among professional educators, including commitment to teaching, democratic values, caring, and sensitivity to student differences (American Association on Colleges for Teacher Education, 2002). Renzaglia, Hutchins, and Lee (1997) assert that it is *teacher candidates' beliefs and attitudes that will serve to inform professional practice and decision-making throughout their careers* (p. 361). They go on to state, *We, as teacher educators, have not been very successful in affecting preservice teachers' beliefs and attitudes that establish dispositions and inform practice* (p. 361).

In this study, we explored the impact of service-learning experiences on candidate dispositions. Multiple data sources (focus-group transcripts, written journal reflections, and course evaluations) were used to assess the role of service-learning experiences in cultivating students' beliefs and attitudes toward individuals with disabilities and their parents. The remainder of this article will: (a) describe the service-learning courses, (b) detail the study method, (c) present the shared themes that emerged related to the development of professional dispositions, and (d) discuss common features of the courses that facilitated the preparation of preservice professionals.

Service-Learning Course Descriptions
EDIS 424: Collaboration and Consultation (Parent-Professional Partnerships)
EDIS 424: Collaboration and Consultation is a one-semester course required by the university for undergraduate students seeking licensure in K-12 special education. Students typically take the course in their third year of the special education program just prior to taking education methods courses and student teaching. Because effective partnerships between parents and professionals can result in improved outcomes and enhanced quality of life for children with disabilities (Forlin & Hopewell, 2006), the main objective of the course is to equip preservice candidates with effective strategies for working with families and colleagues.

Preservice educators often express feeling ill-equipped to partner effectively with parents (Murray, Curran, & Zellers, 2008). This feeling may be due, in part, to the structure of traditional preservice education programs, which limits the interaction between students and parents to a one-time parent guest speaker or parent story (Epstein, 2005). However, recent research indicates that ongoing interactions with families over time improves the likelihood that preservice educators will develop family-centered dispositions and have positive interactions with parents in the future (Murray & Mandell, 2004).

A service-learning component (i.e., Parent-Professional Partnerships) was added to the *Collaboration and Consultation* course to benefit our preservice teachers as well as a community partner, a large urban developmental disabilities agency. The community partner identified a need for opportunities to train parents of children with disabilities at the same time our special education program was looking for ways to teach students strategies to effectively partner with parents of children with disabilities. It was determined that both the needs of our preservice teachers and the community partner could be addressed by training parents and preservice special educators together.

Seven parents of children with diverse disabilities and ethnicities were recruited to participate in the course. The parents agreed to attend all 16 three-hour class sessions held at the university. They were not, however, asked to complete the course assignments. Parents received a stipend for their weekly attendance and participation in classes to help defray transportation and childcare costs, but they did not receive credit for the class. One of the parents, a father of a child with a disability, agreed to co-facilitate the course with the university instructor in order to model effective parent-professional partnerships for students and parents.

Prior to the start of the course, the instructor met with the parent co-facilitator and the parent participants to orient them to the university. The parents provided input into the development of the course content and thus the development of the syllabus. The parent co-facilitator met with the university instructor weekly to plan the class content, activities, discussions, and assessments. During the weekly three-hour class periods, the co-facilitators led discussions on the content as it applied to case studies, student experiences, and parents' real-life situations. The class was dynamic in nature with content changes made periodically throughout the semester in response to the co-facilitators' reflections as well as input from the parents and students in the class.

There were two major assignments in this course that utilized service learning to assist in the development of partnership skills between students and parents. The first assignment, *Virtual Family*, was a longitudinal case study in which teams of five students and one parent birthed or adopted a *virtual* child with a given disability. The parent assigned to each group used his or her own child as the subject for the group's virtual family project. Moreover, it was the parents who identified the topics and issues that the students would explore and respond to throughout the semester. These were the exact issues that the parents had encountered as their child aged. As the virtual child aged throughout the semester, each student was required to individually research the issues presented (e.g., medical, educational, and recreational) and develop an extensive plan for *their* child and family. The students

shared their plans with their team members, and then each team presented a compilation plan to the entire class. The parents shared their real-life experiences with their team members as well as with the full class throughout the virtual family project. Students and parents experienced partnerships firsthand by working together to raise their *virtual child*.

The second assignment, the *Community Teaming Project*, was a 30-minute small-group presentation conducted in a community setting for parents and professionals working with families of children with disabilities. The presentation topics were selected by student groups from a list of current and relevant information needs generated through a survey of parents and professionals in the community. The primary objective of these community training projects was to serve as a vehicle to help students learn the teaming process; secondarily, these projects were intended to provide needed training and information to families of children with disabilities and professionals in the local community. The community presentation projects were semi-structured and required students and parents to collaborate; share ideas, resources, and strategies; and meet both in class and outside of class throughout the semester.

The two assignments provided students and parents with opportunities to learn together, develop relationships, and experience parent-professional partnerships through class discussions as well as through the formal and informal group meetings required to complete assignments. The specific student competencies addressed in the service-learning experiences were as follows:
1. Understand family systems, family stress and coping, and social support.
2. Be aware of the social, emotional, and economic issues facing family members when one member of the family has a disability and how these issues change over the course of development (child and family).
3. Understand the influences of culture and diversity on families with children who have disabilities.
4. Understand the process of collaboration between professionals and families of individuals with disabilities.

In the end, the developmental disability agency met its goal of providing intensive training to seven parents of children with disabilities, and the university succeeded in giving preservice special educators authentic parent-professional partnership experiences.

EDIS 485: Supported Employment (Campus Works)
EDIS 485: Supported Employment is a course designed to introduce students to the transition of youths with significant disabilities from school to the competitive workforce. University students enrolled in the semester-long course were primarily preservice educators or other students preparing for or considering careers in the disability field. Secondary special educators nationally report receiving little training on how to develop and implement vocational programs (Wolfe, Boone, & Blanchett, 1998), and they are often poorly prepared to deliver transition services (Knott & Asselin, 1999). Thus, a critical need for preservice teachers is to learn to implement work-based and other community-based transition programs (Anderson, et al., 2003; Johnson, Stodden, Emanuel, Luecking, & Mack, 2002).

Campus Works, the service-learning component of the course, is a partnership established between the university and a career-technical center serving high-school students from five surrounding counties. The partnership was developed to provide community-based training for youth with multiple disabilities while at the same time preparing preservice special educators and rehabilitation professionals to provide this training. Program activities were linked to learning outcomes for both the secondary and postsecondary students.

University students enrolled in the *Supported Employment* course served as job coaches to the high-school students at customized work experience sites on the university campus. The high-school students (hereafter referred to as *trainees* in order to distinguish them from the university students) worked two mornings per week for two-and-a-half hours in various departments across campus. The career interests and goals of each student trainee drove the selection of training sites. For example, a young man with a strong interest in art worked as a gallery assistant in the Fine Arts Center Galleries, where he prepared materials for art exhibitions. Another trainee with plans to pursue a career in law enforcement worked in the Parking and Traffic Office. Other campus worksites included the Student Recreation Center, the Office of Residence Life, and a residence hall.

The course consisted of two phases. The first phase was ten weeks of in-class instruction and learning activities intended to provide students with an overview of the conceptual, philosophical, and instructional foundations of supported employment and school-to-work transition. During this phase, students read the relevant literature, participated in discussions focused on current issues in the field, and were evaluated on their mastery of course content. The second phase of the course consisted of a five-week job-coaching component (i.e., service-learning experience). The job-coaching component of the course allowed students the opportunity to observe real-world practices, apply the skills and competencies gained through class lecture and discussion, and implement best practices in transition and supported employment. Specifically, students were required to demonstrate the following skills:

1. Apply person-centered career assessment and planning techniques.
2. Analyze job requirements and develop appropriate workplace accommodations.
3. Provide job skills instruction and social skills training.
4. Develop and apply positive behavior supports.
5. Identify and facilitate the use of environmental and coworker/employer supports occurring naturally in the workplace.
6. Display appropriate public relationships and create and maintain a positive rapport with student trainees and worksite personnel.

University students worked in pairs to provide job coaching and support to trainees. Each student coached one morning per week, which required the two coaches to coordinate their schedules and share information about trainee progress. Each day a coach was present at the training site, he or she completed: (a) an objective daily progress log, (b) a reflective journal entry, (c) a task analysis data recording form, and (d) a work-related competencies evaluation form. Student pairs worked together to complete a job analysis and summative work experience report that synthesized assessment data collected on a trainee over the course of the work experience.

An essential component of the course was the connections students made between their job-coaching experiences and the academic content of the course. These connections were established through reflective journaling as well as in-class and online group discussions about job-coaching experiences. Students submitted a weekly journal of job-coaching activities and learning experiences. During class discussion, students often presented examples from their job-coaching experiences to illustrate or clarify points made in the readings or to seek assistance in resolving a training issue they experienced at the jobsite.

In sum, Campus Works was designed to meet the needs of all program partners and participants—the university students, the high-school student trainees, and the campus community. University students gained practical job-coaching experience. High-school trainees received training in employability skills and specific job skills, and they gained authentic work experience to assist them in making informed decisions regarding future career paths. Finally, the campus community benefited from exposure to, and interaction with, youths with disabilities performing meaningful work roles. A banquet held at the conclusion of the work experience recognized the contributions of worksite supervisors and celebrated the successes of the participating students.

Method
Participants
Study participants were drawn from the 25 students enrolled in the *Collaboration and Consultation* course and the 15 students enrolled in the *Supported Employment* course. All students in the *Collaboration and Consultation* course were preservice teachers while the *Supported Employment* course consisted of six preservice teachers, five preservice rehabilitation professionals, three psychology students, and one business student. The *Collaboration and Consultation* instructor requested the participation of students who felt they could commit to both pre- and post-intervention discussions; nine students volunteered. Participants in both courses reported having limited experiences working with individuals with disabilities and their parents. The majority of study participants were female (87.5%) and Caucasian (87.5%). A small number of participants comprised the following ethnicities: Hispanic (4.2%), African American (4.2%), and Asian/Pacific Islander (4.2%). All participants were between the ages of 19 and 25, and all were in the last two years of their programs.

Research Design
This qualitative study employed a phenomenological research design in order to understand the meaning students made of their experiential service-learning opportunities in two special education

courses. Specifically, we examined the impact of the students' experiences on their beliefs and attitudes toward individuals with intellectual disabilities and their families. Data collection methods included focus-group dialogue and student-composed reflective journals.

Data Collection

For the *Collaboration and Consultation* course, focus groups were conducted during the first and last weeks of the semester to solicit students' perspectives about how embedding parents in the course impacted their competencies and dispositions regarding parent-professional partnerships. The first focus-group discussion lasted one and one half hours, and the second lasted two hours. A qualitative researcher unassociated with the course led both focus-group discussions; the professor who taught the course was not present at either focus group. Pre-intervention focus-group questions included the following:

1. Do you think there are differences in the expectations of parents and professionals in parent-professional partnerships?
2. Can you identify (and discuss) one positive experience you've had working with parents of children with special needs?
3. Can you identify (and discuss) one negative experience you've had working with parents of children with special needs?

Questions utilized in the post-intervention focus group included the following:

1. Before this class, how did you feel about working with parents and families of children with special needs?
2. Was there a specific time or incident when you could tell that your views about working with parents and families had changed?
3. Overall, what are you going to take from this class?

Focus-group discussions were transcribed from audio recordings to facilitate the reliability and validity of data analysis and interpretation.

For the *Supported Employment* course, students were required to prepare weekly journals reflecting on their job-coaching experiences. Students were instructed to include in each journal entry a discussion of their student trainee's progress, a description of experiences viewed as successful and unsuccessful, reflections about what they observed, and questions for the instructor. At the end of the semester, students were asked to provide their overall reflections on the course, particularly their reflections related to the service-learning component of the course. Two questions guided student reflections:

1. What aspects of the course or work experience did you find most useful?
2. What changes would you suggest be made to the course or Campus Works?

All journal entries were submitted to the instructor through the Blackboard online course management system. In total, 62 journal entries were posted, with an average post length of one-half page. Entries were later downloaded into a word-processing program in order to be analyzed.

Data Analysis

The data analyzed for this study were the pre- and post-intervention focus-group transcripts from the *Collaboration and Consultation* course and the weekly reflective journals from students in the *Supported Employment* course. Content analysis was employed with the data from both courses, allowing researchers to examine the development of professional dispositions by students working with individuals with disabilities and their parents. For both courses, the primary research question was as follows: *What impact do service-learning experiences (e.g., parent partnerships and job coaching) have upon the development of professional dispositions by preservice special educators?*

Systematic data analysis followed a constant comparative analysis procedure (Corbin & Stauss, 2008). To establish a general sense of the data, transcripts of the focus-group discussions and the reflective journals were separately read multiple times by the authors. A researcher unassociated with data collection then read both data sets. The researchers independently generated codes to unitize and categorize the data. The independent analyses were then shared and discussed by all readers, who together then identified shared similarities and differences in coding and categorization (Patton, 1990). From the shared categories, patterns related to student development of professional dispositions were identified, and overall assertions that tied together the patterns found in the data were developed. The patterns, categories, and assertions generated from each focus group and the reflective journals were then compared to identify changes in student dispositions from before to after the service-learning experiences.

Results

Two emergent themes were particularly strong and consistent across both courses. Both service-learning experiences imparted to preservice teachers (a) a greater sense of professional efficacy and (b) positive regard for the abilities of students with disabilities and the contributions of parents as partners in their children's education.

Theme 1: Professional Preparedness and Efficacy
Parent-Professional Partnerships: From judgment to empathy. During the pre-intervention focus group, preservice teachers in the *Collaboration and Consultation* course reported that they had minimal experience working with parents of children with disabilities predominately through volunteerism or work with summer camps and day-care facilities for children and adults with significant disabilities. Even though they had few experiences upon which to base their beliefs and dispositions, students initially appeared to hold pessimistic and often contradictory attitudes toward families of children with disabilities. On the one hand, students indicated that parents were uninvolved and uncaring. One student stated, *There were parents who you could tell did not care.* Another student echoed this sentiment: *There were a lot of parents who weren't involved at all, that I never saw. And I know, talking to the teacher, they have a lot of problems with parent involvement.* A final student went on to say, *They* [parents] *make excuses and place blame somewhere else.*

On the other hand, several students indicated that parents can be overly involved, almost enabling, in the care of their children. One student stated, *Parents don't know when to step back. They don't know when to let go.* Another student affirmed, *The parents treat them* [children with disabilities] *like babies from the time they're born until the time they're done raising them. These children are treated like everything is done for them.*

The contradictions found within the discussion from the first focus group indicate that while students were not certain whether parents of children with disabilities are over-involved or under-involved in their children's education, they perceived parental involvement negatively. Either way, the actions of parents were interpreted by the preservice educators as barriers to the education and development of their children.

Student comments during the post-intervention focus group signified an empathic shift in students' interpretations of parental roles and responsibilities in the partnership dynamic. One student stated, *I didn't feel like I was insensitive before the class started, but I feel like the class has made me more sensitive.* Another student echoed this statement by saying; *It just made me more sensitive to the fact that I'm going to be dealing with parents. I needed to be thinking about this in a more professional sense.* Analogous comments by focus-group participants underscored the difficulties parents face: *That* [an individualized education plan meeting with professionals] *is terrifying, probably, for a parent, and then they're not going to be able to think of anything at the time because they feel so intimidated* and *I know I'm not going to judge families anymore.*

Through the development of empathy for the parents of children with disabilities, students began to understand the dynamic and didactic nature of parent-professional partnerships. Many students came to the realization that their own attitudes, beliefs, and practices play a critical role in forging effective partnerships. One student disclosed, *This is the first time that I've sat down with multiple parents to see their frustration working with teachers. I actually get to see both sides of the story now that I've had this class.* Yet another student learned what it is like to walk in the shoes of a parent of a child with a disability. She stated:

> *You have to be sensitive to the fact that, if this did happen to me and I did have a child with a disability, I would want the teacher of my son or daughter to put as much effort as they could into it. I think it [this class] just gave me a new view of how to approach things as a teacher.*

Campus Works: From apprehensiveness to confidence. Despite ten weeks of classroom instruction on supported employment and strategies for supporting individuals with disabilities in community jobs, students in the *Supported Employment* course voiced apprehension about their ability to provide one-on-one support to high-school trainees with multiple disabilities at their campus work experience sites. *What if?* questions became more frequent as the first day of job coaching approached. Students wanted to be prepared for every possible contingency. By the end of the semester, students' initial lack of confidence was replaced by a real sense of efficacy regarding their ability to provide effective instruction and support to the high-school students. For example, one student stated,

At first I was very nervous and extremely afraid that I would not be useful because I did not have any experience or that I would be uncomfortable in the situation. To my surprise, neither predicament came true! ... Before I was actually on the site, I thought that I would treat [the student trainee] differently by trying to not treat her differently. This did not happen either; I treated her as a person.

For another student, recognizing that the high-school trainee was likely experiencing similar feelings of apprehension helped her overcome her own nervousness. Following the first day of job coaching, she made the following journal entry: *I was really nervous about starting job coaching. Once I met [the student trainee], I calmed a little. He was really friendly. He seemed a little shy or nervous too.*

Students indicated that they intended to apply the knowledge and skills they gained through the job-coaching experience to their future career roles. A preservice teacher reflected on several ways in which the course helped her prepare to become a special educator:

It has giving [sic] me a chance to collaborate and network with peers and the community. It made me think! This experience made me use the knowledge that I have gained through other classes…. Most importantly, it gave me a chance to work with people with disabilities.

Another student shared,

The actual hands-on experience of the class is definitely something that puts it one step ahead of most other college courses. It was great to learn about a job and then actually be able to apply all that was learned within the same semester.

Such comments illustrate students' recognition of the value of service-learning experiences in preparing them to work with students with disabilities.

The hands-on application enriched the learning experience not only of students pursuing careers in special education but also of students preparing for careers in general education. The reflections of a preservice general education teacher highlight the impact that even a brief service-learning experience can have on educators who will likely have students with disabilities in their classrooms someday:

This course has been especially beneficial to me, as an education major and future teacher, because it has provided me with the only real opportunity I've ever had to interact with, teach, and learn from individuals with disabilities…. I wasn't entirely sure how I would feel working with someone with a disability, if I was prepared enough, or if I would know how to approach the situation in the best possible way. Now, because of the experience component of job coaching I know that when I have a student with a disability in my own classroom someday, I won't be afraid to learn from them and to teach them.

Theme 2: Positive Regard and High Expectations
Parent-Professional Partnerships: From service recipients to partners. Students in the pre-intervention focus group perceived parents as subordinate in a hierarchical relationship with teachers. One student stated, *I think sometimes parents just need to stop and listen to the teacher a little bit more.* This quotation reinforces the notion that teachers know best and that parents should defer to the expertise of teachers. The students in the pre-intervention focus group perceived parents as having other priorities that superseded their concern for their children's education. One student stated, *I have a parent who is more concerned with her daughter's clothes being dirty than with meeting the* [IEP] *goals.* Yet another student described parents' interest in their children's educational progress this way: *I don't want to say they don't care, but it seems like they are so nonchalant about it. It is not their top priority.* This preservice teacher did not understand that parents set their priorities based on a number of factors that may not involve school or the child's education. Another student described a family as *not wanting to help their child.* This again indicates difficulty assimilating another individual's perspective and determining why parents may appear to be unable or unwilling to help their children.

Post-focus-group comments indicated that students came to see parents as competent members of the partnership. Parents went from being viewed as simply recipients of services to contributing members of the educational team. In contrast to the pre-focus group when students stated that parents were uninterested, a student in the post-focus group stated, *I think sometimes that parents just want what's best for their kids. They want the best of the best of the best.* Another student realized through the class that *they* [parents] *know a lot,* while another student was surprised that *they* [parents] *do research too.* Students' views had changed. Parents were now looked at as caring, competent individuals, and many students no longer felt that they were the professionals in a hierarchical relationship with parents.

The concept of a partnership was evident when one student stated, *Nobody knows their child better than the parent.* Another student felt that having the parents' perspectives in class helped them see parents as partners. This student stated, *I actually get to see both sides of the story now that I've had this class.* Another student's eyes were opened to the importance of working with parents: *I think I just realized how much more important working with parents is.* Trust and honesty, tenants of an effective partnership, were realized by one student, who said, *It was good to realize that the more honest you are between teacher and parent, or vice versa, either way, the more trustworthy everyone's going to be towards you.*

Students mentioned equality or parity, a critical component of an effective relationship. Comments included, *During this class, we learned mostly to listen to what the parents want to say about their kids and pretty much to be equal with other professionals* and *You just have to make yourself an equal.* Another student clearly defined the partnership by stating, *It's like you both have to lean on each other a little bit.* This statement indicates that the student sees parents as a contributing member of the team. There is both a give and take to the parent-professional relationship; for many students, this relationship was no longer one-sided but now a partnership.

Campus Works: From disabled *to* able. The Campus Works service-learning experience gave university students in the *Supported Employment* course a window into the lives of persons with significant disabilities that is seldom afforded in lecture courses. It enabled them to see beyond the trainees' labels and functional limitations to see their strengths, individuality, and personhood. Although students acknowledged the functional limitations and support needs of the high-school trainees, their descriptions of the trainees were framed predominantly in terms of personal strengths, interests, and abilities.

All of the high-school trainees had multiple disabilities. The list of their disability labels read much like the table of contents in an introductory special education textbook: mental retardation, physical disabilities, emotional and behavioral disorders, attention-deficit/hyperactivity disorder, autism, Tourette's syndrome, and Down syndrome. Despite this fact, university students did not use disability labels when discussing the trainees with whom they worked. Instead, they described trainees as *perceptive and imaginative; very smart; kind and upbeat; able to adjust to problems; self-aware;* and *not afraid to ask questions, learn something new, or to talk with people.*

Students may have focused on the positive attributes of trainees, in part, because the attributes they observed at the job sites stood in stark contrast to their initial expectations of the trainees' abilities. Over the course of the semester, students learned that the trainees were more capable than they had initially expected. This newfound confidence in trainees' abilities manifested itself in higher expectations of the trainees' future careers and quality-of-life potential. In support of this interpretation are comments such as, *I now know that* [the student trainee] *is capable of much more than I expected* and *I know they have more capabilities and should have more opportunities than the average citizen thinks is possible.* Further support is provided by an entry in the journal of a third student:

> *She even talked to me today about her disability. She said that sometimes people couldn't understand her because she mumbles her words. She seems to be very self-aware and knows her limitations yet push herself all the way to those limits. I become more confident that* [the student trainee] *will make it on her own with every day I spend with her.*

Two other students discussed the importance of maintaining high expectations. Observing youth with significant disabilities performing valuable work roles led one student who worked in a group home to reexamine his expectations regarding the abilities of the individuals with whom he worked in the group home. He described the impact of the service-learning experience this way:

> *I found it very informative to work with the same population in a different setting. I know a lot of the time at the home we try to do a lot of things for them, but this program made me realize that people with disabilities are a lot more independent than what I originally thought. I think this course would be a great learning experience for anyone who is thinking about working with people with disabilities.*

Another student entered these concluding remarks in her journal:

> *I believe I learned a lot this semester, and I know* [the student trainee] *taught me a lot about putting faith into what people are capable of. I hope that* [she] *learned a lot also and that I had something to do with that.*

This student's reflections typify the essence of the mutually beneficial relationships that Campus Works was designed to create.

Discussion and Implications
Despite independent design, implementation, and evaluation of the service-learning experiences in the two courses, the resulting changes in the perceptions and attitudes of preservice teachers bore striking similarities. Several common aspects of the service-learning experiences contributed directly to students' development of a sense of professional efficacy and positive regard for the abilities of students with disabilities and the contributions of their parents. The keys to the development of professional dispositions and other course features central to the success of the projects are discussed in the paragraphs that follow. These include addressing student misconceptions; promoting active student participation; matching program participants; and providing opportunities for collaboration, first-hand experience, and reflection.

Identifying and Challenging Student Misconceptions
Prior to the service-learning experiences, students in both courses had misconceptions about working with individuals with disabilities and their parents. Misconceptions included the idea that parents of children with disabilities do not care about their children or their children's outcomes and the idea that individuals with disabilities are not capable of successfully working within the community. In designing the courses, the instructors recognized these potential misconceptions and designed the service-learning activities to challenge them. Following the service-learning experiences, students no longer voiced their initial misconceptions. And, in fact, rather than saying that parents were uncaring, students in the *Collaboration and Consultation* course recognized that parents had priorities that were different from their own as instructors. Similarly, students in the *Supported Employment* course indicated that the high-school trainees with multiple disabilities were far more capable than they had originally anticipated. This suggests that students, through interactions with individuals with disabilities and their parents, discovered that their initial perceptions of these two groups were inaccurate.

Student Control of the Service-learning Experience
Seifer and Connors (2007) have indicated that students are more likely to achieve the learning goals of a service-learning course if they have substantial input into the design and implementation of their service-learning experiences. When students are in charge of their own learning experiences, they gain a sense of empowerment that often translates into more significant changes in attitudes and perceptions. At the beginning of the semester, instructors of both courses provided students with a working syllabus that laid out the basic service-learning activities planned for the semester. These syllabi were, however, dynamic documents that evolved as the courses unfolded.

When determining topics for the community presentations, groups in the *Collaboration and Consultation* course were encouraged to choose topics that utilized the unique expertise of individual parents (e.g., person-centered planning, fetal alcohol syndrome). In the *Supported Employment* course, both high school and university students had input into the selection of job coach-student trainee pairs. Additionally, students shared primary responsibility for developing worksite training plans, building the agenda for the Campus Works orientation meetings, and planning the semester-end banquet.

Matching Program Participants for Maximum Mutual Benefit
Careful consideration was given to matching students with members of the community in ways that were intended to provide members of both groups with opportunities to develop meaningful, mutually beneficial relationships. In assigning the parent-professional partnerships, instructors took into account students' ages, races and ethnicities, geographic locations, and prior experiences with individuals with disabilities. For example, a student who had a sibling with autism was paired with a parent who had a child with autism. Similarly, effort was made to pair students with a parent of the same ethnicity.

In Campus Works, job coaches were matched with student trainees based upon the rapport observed during an initial icebreaker activity. Students with similar hobbies, interests, and interaction styles tended to show genuine interest in getting to know one another. Following the icebreaker, all participants were asked to list those with whom they wished to work. Stated preferences were given considerable weight in the matching process as were the past experiences and skill sets of individual participants. For example, a young man from the career-technical center who loved sports completed his work experience at the student recreation center. Speech impairments made it difficult for others to

understand the student's speech upon initially meeting him, and he was very quiet around new people and in new situations. One of the student's IEP goals was to initiate conversations. He was paired with a job coach who was a member of the university football team. Within a short time, and with a little encouragement from his job coach, the student began discussing the latest sporting events with employees and patrons of the recreation center.

Opportunities for Collaboration and Teaming
Effective special educators exhibit a high level of skill in collaboration and teaming (Friend & Cook, 2007). The service-learning experiences embedded into the *Collaboration and Consultation* and *Supported Employment* courses afforded students ongoing opportunities to practice these essential skills. Students in the *Collaboration and Consultation* course teamed with a parent and several other preservice teachers to prepare their community presentations. They also worked closely with community agencies to organize and publicize the symposium. Collaboration between parents and professionals is a win-win situation for educators, children, and families alike (Epstein & Sanders, 2006).

Students in the *Supported Employment* course were required to work closely with student trainees and to collaborate effectively with other job coaches to monitor trainee progress. In addition, expectations for developing and maintaining positive relationships with worksite personnel were reinforced through course readings and class discussion. The research evidence supports the powerful effects on learning that result from processing the service-learning experiences with others (Astin et al., 2000).

Firsthand Experience with Students with Disabilities and Their Parents
In both service-learning projects*,* students had opportunities to interact in meaningful ways with individuals with disabilities or their parents. This interaction instilled in students a deeper understanding and more positive outlook about working with individuals with disabilities and their families. In the *Collaboration and Consultation* course*,* students initially voiced a lack of confidence in their abilities to work with parents of children with disabilities, often stating, *I'm not sure*. At the end of the service-learning experience, students exuded a newfound confidence in themselves and in their abilities to effectively collaborate with families of children with disabilities. Students indicated that this confidence was due to their multiple opportunities to interact with parents throughout the course. Students in the *Supported Employment* course echoed this increase in skills, knowledge, and confidence. These students also began with a feeling of uneasiness and a lack of confidence about working with individuals with intellectual disabilities. However, through their extended interactions with the trainees at their campus worksites, students grew personally and professionally.

Student Reflection on Practice
Both courses utilized reflection as a central component of the service-learning experience. This focus is consistent with research evidence demonstrating the power of reflection to connect service experiences to the academic content of a course (Astin et al., 2000; Eyler & Giles, 1999). In the *Collaboration and Consultation* course, at least 20 minutes of each class period were devoted to discussing issues and processing course content together with parents. Case studies and journaling were also utilized as methods for encouraging reflection on practice. In the *Supported Employment* course, the challenges of providing effective supports in real-world settings were discussed in class and through online journaling. Having students work in job-coach pairs allowed structured opportunities for students to reflect together upon the perceptions of worksite personnel and on the progress of individual student trainees.

Conclusions
The purpose of this study was to examine the impact of service-learning experiences in two preservice special education courses on the development of professional dispositions by preservice teachers. The positive learning outcomes achieved by students in both courses attest to the value of incorporating service-learning experiences into teacher education programs. While this study provides insight into the value of implementing service-learning activities within special education programs, several limitations must be mentioned. This study is limited by its reliance on self-report data (e.g., focus groups and journals) as well as it small sample size. Therefore, caution must be used when generalizing the results beyond the particular courses, instructors, and students involved in the service-learning projects presented. Follow-up studies with additional preservice students in other teacher education programs are warranted.

As recommended by Mayhew and Welch (2001), the evaluation of service-learning courses should involve multiple measures of effectiveness. While this study evaluated the impact of service-learning activities on dispositions, the researchers did not directly assess students' development of the knowledge and skills required of professional educators. To thoroughly investigate the impact of service-learning experiences on the knowledge and skills of preservice special educators, additional studies involving multiple data sources need to be undertaken. Additionally, this study was conducted in individual classes over the course of a single semester. The efficacy of service-learning experiences would be further illuminated by longitudinal studies of student dispositions throughout their preservice program as well as following their entry into the teaching profession.

The findings of this study are consistent with those reported in the service-learning literature (Astin et al., 2000) and provide additional insights into the value and process of incorporating service-learning experiences into preservice special educator programs. As seen in this study, service-learning experiences serve as rich opportunities through which teacher candidates can develop a sense of professional efficacy and a focus on the abilities of students with disabilities and the positive contributions of their parents.

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