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Increasing the Literacy Knowledge of Teacher Candidates: Why Service-Learning Matters

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Educator preparation programs seek to provide teacher candidates with authentic learning experiences that support the learning process, and one means is to engage teacher candidates in service-learning. Elementary schools are tasked with improving the literacy outcomes of struggling readers, and community-based programs focused on literacy, seek to improve the literacy achievement of its' citizens. This work explores how an educator preparation program collaborated with a community-based organization to provide elementary, struggling readers with 1:1 literacy instruction via teacher candidates from the local university. The aim is to showcase the process, procedures, and benefits of universities partnering with local PK-12 schools and community-based organizations.

Keywords: community-university-school partnerships; literacy development; service-learning; teacher preparation

Two challenges face the implementation of service-learning in educator preparation programs: how to effectively impact the community and how to integrate praxis into the experience (Skinner & Chapman, 1999). The authors of this paper sought to identify meaningful ways to engage teacher candidates through a learning experience that impacts the community and in turn, produce meaningful outcomes for kindergarten-third (K-3rd) grade learners. Research shows that it is more beneficial to provide interventions to K-3rd grade students who struggle with reading during the Learning to Read stages of reading (Chall, 1983). Third grade students are more apt to experience Matthew Effects in reading (Stanovich, 1986), which means students who fail at reading in the early grades will read less while their counterparts read more, thus improving their literacy skills while the students who struggle do not improve their literacy skills.

Given the importance of early intervention, one such community-based organization, SA Reads, currently provides community members with opportunities to tutor K-3rd grade students in literacy to improve students' literacy attainment and combat Matthew Effects. Given this match between the researchers' objectives and SA Reads' mission, the researchers sought to explore the following research questions: Does service-learning, via SA Reads, increase the acquisition of literacy knowledge and skills of teacher candidates, and does service-learning, via SA Reads, increase the efficacy of teacher candidates to teach literacy to K-3rd grade students. The researchers were particularly interested in knowing whether service learning benefitted teacher candidates by increasing their literacy knowledge, skills, and efficacy. Research has consistently shown that many in-service teachers are not prepared to teach literacy (Pittman, Zhang, Binks-Cantrell, Hudson, & Joshi, 2019; Joshi et. al, 2009; Moats, 1999); therefore, the researchers were interested in determining if service learning would increase teacher candidates in the aforementioned areas through a service-learning experience.

This paper frames service-learning, specifically in teacher preparation; explores extant literature pertaining to service-learning and community partnerships; provides an overview of a service-learning project in literacy; and discusses the results of a research study that examines the efficacy of such partnerships. Although the literature suggests that several studies have examined service learning and teacher candidates (Cone, 2012; Harrison, 2013; Wade, 2000; Wall, 2017), few have examined ways in which service learning impacts teacher candidates' literacy knowledge, skills, and efficacy. This study intends to fill gaps in the

literature by focusing on literacy service-learning and teacher candidates. Examining the impact of service-learning on the preparation of teachers is an important topic as teacher preparation programs become increasingly taxed with reducing credit hours, implementing outside standards, and meeting the needs of developing high-quality educators. Teacher preparation programs must, therefore, account for every experience candidates have and when an opportunity exists to meet needs on multiple levels, as it does in service-learning, aligning all outcomes becomes crucial. Additionally, this alignment is critical because teacher candidates need to be prepared to teach, with efficacy, the more than 60% of students who are not reading at a level of proficiency when they reach fourth grade (National Assessment of Educational Progress, 2017).

Service Learning

Service-learning is an integral part of experiential learning for students. The concept builds upon Dewey's (1938) idea of giving students opportunities to learn through experiential learning and experiences versus a traditional approach to education, where students are responsible for gaining the knowledge through lecture and readings. This knowledge demonstration through service-learning provides authentic hands-on learning opportunities for teacher candidates. Skinner and Chapman (1999) define service-learning as "curriculum-based community service that integrates classroom instruction with community service activities" (p. 3). Service-learning requires clear learning objectives, addresses the needs of the community over time, and supports critically analytic activities. These activities are incorporated into classroom discussions, presentations, or directed writing (Skinner & Chapman, 1999).

Traditional teacher preparation programs implement clinical practice as part of teacher candidate preparation. Clinical practices generally include field-based observations and student-teaching/clinical-teaching. Service-learning is often missing in teacher candidates' experiences. Community-based, service-learning provides an exceptional opportunity through which teacher candidates develop skills and strategies in controlled settings that will influence teacher-student interaction when they enter the education profession. Teacher-student interaction is a valuable experience for teacher candidates' development because it is one of the significant advantages to supporting student learning and development (Pianta, 2016). It also increases student engagement (Pianta, Hamre, & Allen, 2012) and possibly curtails behavior problems (Hamre & Pianta, 2006). Each of these interactions positively impact student achievement, which is the ultimate goal of education. Allen, Gregory, Makami, Hamre, & Pianta (2013) found that students achieved when the class offered high quality teacher-student interactions with an encouraging emotional climate, used varied and engaging instructional learning experiences, and emphasized inquiry and problem solving.

Furthermore, the notion of service-learning also increases engagement with community organizations whereas teacher candidates gain high quality learning experiences while providing service for the partnering organization.

Service-Learning and Teacher Candidates

Harrison (2013) found that a service-learning project could provide a space for teacher candidates to have meaningful conversations about their cultural deficit perspectives. Silverman (2011) defines "cultural deficit perspective" as a view that individuals from certain cultural groups lack the ability to succeed due to their cultural background. Harrison (2013) suggests that the critical interpersonal reflection of teacher candidates' cultural deficit perspectives provide candidates strengths-based ways to begin to know their students and their families.

Additionally, Wade (2000) asserted service-learning in diverse communities allowed teacher candidates to become more culturally competent by increasing diversity awareness, questioning any subjectivities or pre-conceived ideas about race and ethnicity, and eventually to learn to affirm and approach the topic of diversity with their students and families they serve. Becoming culturally competent is vital to teacher candidates' understanding of diversity, as Paine (1990) theorizes a framework for understanding the varied levels of diversity and how these levels, which include: individual differences (e.g., overweight, thin, short, shy), categorical differences (e.g., social class, race, gender), contextual differences (extends the first two differences but examines the cause of the difference), and pedagogical perspective (implications-consequences for both teaching and learning) are hierarchical and can intersect one another.

Moreover, Wall (2017) found that providing service-learning with diverse populations as a pedagogical approach connects the understanding of diverse learners for predominately White undergraduate students. Through guided reflections, the teacher candidates disclosed that the students were "less different" than they anticipated. Ladson-Billings (2006), therefore, asserts that high expectations should be established for all students with the consideration that achievement is diverse for each student. Lastly, Cone (2012) posits

that community-based, service-learning provides teacher candidates opportunities to forge relevant connections to learning and appreciate cultural capital of diverse learners.

Bernadowski, Perry, and Del Greco (2013) compared teacher candidates who participated in service-learning connected to a course and those who volunteered to participate in service-learning projects. Results revealed that the teacher candidates who participated in service-learning connected to a course felt better prepared to teach students. In turn, teacher candidates demonstrated higher confidence in their approach to teaching.

Self-efficacy is one's belief that he or she can achieve a task (Bandura, 1977). Teacher efficacy is a teachers' confidence in engaging and encouraging student learning (Hoy, 2000). Several studies have found that teacher candidates' self-efficacy increases due to their engagement with service-learning opportunities (Cone, 2009; Guo, Piasta, Justice, & Kaderavek, 2010). Service-learning opportunities give teacher candidates opportunities to gain mastery experiences which may ultimately improve their teaching efficacy (Bandura, 1977). Cone (2009) further asserted that community-based, service-learning experiences increased teacher candidates' sense of self-efficacy regarding teaching and learning in an equitable manner. Comparably, Guo, Piasta, Justice, and Kaderavek (2010) examined the relations among teachers' self-efficacy, classroom quality, and children's academic gains and found that self-efficacy and classroom quality was a positive predictor to children's literacy gains. Furthermore, service-learning provides teacher candidates opportunities to engage in rich and authentic learning experiences while connecting theory to practice. Service-learning provides valuable experiences with engaging diverse learners, and also helps build teacher candidates self-efficacy (Cone, 2009).

Why Service-Learning Matters

Teacher candidates are often challenged when understanding explicit, systematic literacy instruction that focuses on concepts such as phonological and phonemic awareness and phonics (Pittman & Dorel, 2014). For many teacher candidates, these concepts seem new to them and impede their understanding of how they will help struggling readers understand these concepts when, in fact, many of them cannot fully grasp these concepts themselves with just a lecture and in-class activities.

Additionally, teacher candidates need to be provided opportunities to apply the knowledge learned through textbooks, lectures, and in-class activities with actual students. This theory to practice approach will support the evidence which suggests that teacher candidates improve their content knowledge and self-efficacy to teach reading when they are provided with community-based, service-learning tutoring experiences (Haverback & Parault, 2008; Stewart, Allen, & Bai, 2011). Wasserman (2009) investigated the impact of service-learning on teacher candidates' teaching of reading. The analysis revealed that teacher candidates enrolled in the course that had a highly structured service-learning experience significantly increased their self-efficacy by the end of the course. Indeed, the teacher candidates' self-efficacy allowed them opportunity to explore and implement, with confidence, course content during their student teaching experiences.

The results of these studies yield a promising structure for improving the literacy praxis of teacher candidates in this study. The literature, therefore, provides the theoretical underpinnings in which the researchers grounded this study. Using general qualitative research through the use of Kolb's (2014) framework for utilizing reflections in experiential learning, the researchers designed this study to address the impact of service-learning on teacher candidates' literacy knowledge, skills, and efficacy by asking the following research questions: Does service-learning, via SA Reads, increase the acquisition of literacy knowledge and skills of teacher candidates, and does service-learning, via SA Reads, increase the efficacy of teacher candidates to teach literacy to K-3rd grade students.

Method

The Service-Learning Partnership

Texas' literacy results are similar to nation-wide results in reading. Not only are students having difficulty reading proficiently, the city of San Antonio's literacy rate was rated 70th among 77 U.S. cities (McClurg, 2015). San Antonio is the nation's seventh largest city. In 2010, with the knowledge of the effects of illiteracy on the social well-being of people, city officials felt that various concerns needed to be addressed to ensure that San Antonio's citizens can live productive lives. City officials and citizens developed a plan, SA 2020, which charted 11 areas (e.g., civic engagement, education, environmental sustainability, health, and fitness, etc.) to focus on within the next 10 years (SA2020). One of the main goals for the education component was to increase the literacy levels of youth so that all students would be on-grade level readers by third grade. This goal resulted in San Antonio Reads (SA Reads), which is a non-profit organization established by Pamela

Toman, a philanthropist in San Antonio. SA Reads provides the structure to develop the literacy skills of below grade-level readers. SA Reads is a subsidiary of Literacy San Antonio, Inc. (LSA) whose mission is to increase literacy and educational attainment in Bexar County (Literacy San Antonio).

Because of the fundamental value of increasing the literacy achievement of struggling readers in San Antonio, SA Reads approached education faculty at the local university to determine if the instructors would be interested in forming a partnership to help increase the literacy outcomes for elementary students in San Antonio. The faculty members regarded the partnership as beneficial since the teacher candidates needed experiences tutoring struggling readers, and the struggling readers would benefit from additional instruction in reading.

Although a purpose had been established, both parties had to reach a mutual agreement about clear and concise objectives. Not only were objectives required from local university and SA Reads, but partnership objectives were needed from the local school district. This triad aligned their objectives to ensure that the experience positively impacted all learners. SA Reads' main objective was to improve the elementary school students' literacy skills through scientific-based reading instruction (SBRI). The partner university's objective was to give teacher candidates experiences instructing struggling readers using SBRI, while the school district's key objective was to provide additional support to students who were struggling to read proficiently in hopes of increasing their literacy proficiency.

At the conception, SA Reads acted as the liaison between the local school district and university. SA Reads provided supports, such as: (1) delivering the professional development about the tutoring experience to the teacher candidates; (2) fingerprinting each teacher candidate; (3) developing the lesson sequence with guidance from the university's faculty; (4) matching each of the teaching candidates with two elementary students in one of the 11 schools; (5) maintaining office space and office hours at the university to support students by being available to answer any questions that arose; and (6) providing two feedback/focus group sessions per semester for teacher candidates, so they could reflect on the experience, practice, and procedures. Numbers five and six came later in the semester when the university's faculty felt that the teacher candidates had many issues that needed resolving immediately, as is the case with many new implementations. The major implementation problems at the beginning included: (1) teacher candidates not receiving their placement in a timely fashion; (2) teacher candidates not being able to reach the SA Reads staff on the telephone when a problem arose; (3) teacher candidates not being able to receive the time they wanted; (4) teacher candidates not being able to tutor, at all; and (5) teacher candidates who did not have transportation. The university's faculty, therefore, met with SA Reads' staff to alert them that service-learning could not proceed unless numbers five and six of the SA Reads supports were applied. SA Reads immediately employed the changes.

SA Reads' staff held office hours, which alleviated teacher candidates' discussions during class time that focused on complications about placements, transportation, and communication, and not the tutoring experience itself. The teacher candidates could visit SA Reads' staff during office hours to solve any problems. For example, if a teacher candidate did not have transportation, the teacher candidate could visit the SA Reads on-campus office to be placed with a classmate at the same school at the same time. These potential roadblocks were greatly lessened with the establishment of SA Reads' on-campus and holding at least two feedback sessions throughout a semester.

The reading faculty redesigned an early literacy course to include the service-learning component needed to validate the SA Reads experience. The early literacy course focuses on science of teaching reading to students in grades kindergarten through third (K-3) grade. Each stakeholder agreed that teacher candidates who were pursuing Early Childhood (EC)-6th Grade, EC-6th Bilingual, and Special Education certifications, would complete ten hours of service-learning. The ten hours of service-learning was inclusive of a one-hour of professional development on the implementation of the service-learning requirement and nine hours of actual tutoring experiences. Within the nine tutoring hours, teacher candidates tutored two K-3rd grade struggling readers for 30 minutes each week using the phonological awareness and phonics materials from the Florida Center for Reading Research (FCRR) Student Center Activities (Florida Center for Reading Research) which are SBRI activities. In addition, the teacher candidates conducted a read aloud or a partner reading with the student and asked higher level comprehension questions about the reading. Based upon school data, each of these skills was selected during the service-learning experience because the K-3 grade students were struggling in these areas.

Simultaneously, teacher candidates were learning the theory of reading development in the early literacy course. The teacher candidates, therefore, were responsible for planning instruction prior to meeting the students each week. The teacher candidates had to use data to determine the appropriate instruction each

student needed, since the students were receiving individualized instruction. The teacher candidates were able to apply theory using practical lessons to help the struggling readers.

Using this model also helped teacher candidates confirm their knowledge of how best to teach difficult literacy concepts to students. The teacher candidates benefitted from the service-learning experience, as evidenced by the hours logged into the SA Reads login digital platform, which required a reflection after each tutoring session. SA Reads shared the login data and reflections with the faculty. Additionally, teacher candidates had to complete a reflection of the overall experience and discuss their experience during in-class discussions. The service-learning requirement counted for 15% of a teacher candidate's grade in the course.

The school district had a need to increase the students' literacy abilities since the students were continually performing below grade level in reading. SA Reads sought the target district because of the low performance on the state mandated State of Texas Assessment of Academic Readiness (STAAR) test and diagnostic screening tests in the earlier grades. Additionally, the school district has 11 elementary schools and student demographics which are indicative of the area where the district is geographically located: 91.1% Hispanic, 5% Caucasian, 1.6% African American, 1% (2 or more races/ethnicities), <1% Asian, <1% American Indian, and <1% Pacific Islander. Because of the location of the school district in relation to the university, the partnership was feasible since the teacher candidates could reach the schools within a few miles.

The program matched approximately 104 teacher candidates to two students each. The large number of students receiving tutoring services received customized reading instruction. It would be difficult for the classroom teacher to instruct each struggling reader one-on-one during class time, as the need is so high within the district. Hence, the partnership benefits the students and the teachers within the school district.

Reciprocity

Each party benefitted from the service-learning experience. First, SA Reads, a non-profit organization, was able to operate at a larger scale due to the ability to partner with the local university to provide tutoring to young students. Partnering with the university allowed SA Reads to maximize their efforts by serving a larger number of struggling readers. Although the SA Reads organization allowed the San Antonio community an opportunity to volunteer to tutor, the volume of tutors came from the teacher candidates enrolled in the abovementioned courses at the university.

Likewise, the university's teacher candidates benefitted because they were able to support a community-based organization to tutor students in literacy, which allowed teacher candidates an ability to gain experiences in teaching struggling readers. The experience was necessary because the majority of the teacher candidates at the university remain in Texas once they become certified teachers. Based upon state and city data, the teacher candidates need a vast array of experiences instructing struggling readers, as the teacher candidates will encounter many struggling readers once employed, and experiences such as this builds teacher candidates self-efficacy to teach reading to struggling readers.

Lastly, the service-learning experience was advantageous for the elementary students because the students were able to receive personalized instruction. Outside of the one-on-one instruction the students received, they were able to have an ally in the teacher candidate who was interested in supporting their learning. The teacher candidates built rapport with the students, which encouraged the students to become motivated. At the tutoring experience, the students received additional practice on skills that they had not mastered. The students were able to practice these skills using engaging activities. Additionally, the students were able to practice reading aloud to one empathic listener saving them from possible embarrassment that many struggling readers feel when reading aloud in the classroom. Overall, the students were able to expand their literacy attainment by participating in the experience.

Program Sustainability and Expansion

The service-learning experience positively impacted both the teacher candidates and students. With the K-3 success, it was recommended that the experience be expanded to teacher candidates who were enrolled in a literacy course focused on grades four through eight (4–8). Since the procedures and processes were in place, the expansion was fairly easy to implement. Teacher candidates pursuing the aforementioned degree plans took both courses, generally in two separate semesters with enrollment in the early literacy course first. The emphasis of the tutoring was on fourth grade students, as leadership at the school district felt that tutoring fourth graders would be valuable as the focus was on writing and comprehension; areas that are tested in fourth grade. The tutoring sessions included extensive instruction centered around vocabulary development, comprehension, and writing. The processes and procedures were the same as the tutoring, which were established for the K-3 grade students and the teacher candidates. At the beginning of each

academic year, the SA Reads staff meet with university faculty to determine if any revision to the program needs to be executed. A careful review of the experience is always warranted, as a review is necessary to sustain the program. Overall, the experience at the various grade levels gave teacher candidates opportunities to learn about literacy development at two different grade levels. Furthermore, it allowed teacher candidates to address real needs in the school district over sustained time.

Through ongoing semesters, teacher preparation instructors continue to require service-learning in partnership with SA Reads. The service-learning experience includes each of the criteria asserted by Skinner and Chapman (1999), which includes being a curriculum-based community service that integrates classroom instruction with community service activities. Additionally, the service-learning experience had clear learning objectives, addressed the community over time, and supported critically analytic activities. Lastly, the experience included classroom discussions and written reflections.

Data Collection

The data explored were part of a larger set of data collected over multiple semesters of participation in SA Reads. For the purpose of this study, one semester was selected in which 104 teacher candidates participated in SA Reads. As student enrollment in the early literacy courses is diverse each semester, the authors posit this is a purposeful sample representative of the larger data set. All teacher candidates enrolled in a total of four sections of the early literacy course were required to participate in the reflection portion of SA Reads. Thus, the authors sought a representative sample of teacher candidates through a purposeful sampling of those teacher candidates who were working with early literacy students. The researchers in this study were not teaching any of the early literacy classes during the collection period, increasing the privacy of the candidates and confidentiality of the responses.

The reflections examined in this study were paired with a pre and post survey that measured candidate's efficacy when teaching literacy skills, creating a mixed-methods structure. The purpose of this paper is to explore the impact of the SA Reads service-learning experience on the learners, community, and candidates' praxis in literacy. Therefore, the researchers/authors focused on the reflections of the participants.

Reflections

Upon completion of the 9-week tutoring sessions, teacher candidates sent a reflection to a password protected email address. The prompt invited teacher candidates to write about their experience with service-learning through SA Reads. Participants received in class reminders to send their reflections by the end of the semester, since one of the "Eight Principles of Best Practice for All Experiential Learning Activities" (National Society for Experimental Education, 2013) is to include reflection as it is vital to transforming the unexamined experience to a learning experience and tweaking the experience and assessing the outcomes. The researchers collected 104 reflections towards the end of the 16-week semester, and each reflection was numbered from one to 104. Using a random number generator, 25 of the reflections were selected for analysis.

Results

The qualitative nature of this study provided the researchers with rich and authentic data that is indicative of what was gained in the classroom during the service-learning. The data were analyzed using NVivo software, with two researchers coding data to increase interrater reliability. The following themes emerged: *strength in literacy instruction*, *knowledge of practice*, and *tutoring and strategies*.

Strength in Literacy

Strength in literacy instruction was a theme that many participants identified as an area of growth. One participant stated, "as for me, I gained being able to work one on one with the students and realizing what their weaknesses were. It's different from just seeing on the computer what their weaknesses are from working with them in person". This idea is one that teacher candidates often have as they begin to enter classrooms with little to no experience. When teacher candidates, therefore, understand their weaknesses, it allows them the opportunity to begin to address them prior to certification. Steps, such as these, align with increasing their confidence in teaching, thus their self-efficacy (Bandura, 1977; Cone, 2009).

Knowledge of Practice

The second theme, *knowledge of practice*, was evident as the participants gained knowledge of not only literacy instructional practices but also effective pedagogical practices. For example, the idea of time management and flexibility was outlined throughout. One participant stated, "I learned that I have to be flexible,

just as I had to do in order to figure out how to do what needed to get done in the short timeframe". Another participant reflected:

This experience taught me how to teach in different methods to different students. It also taught me how to adapt to new settings and jump right into the lesson at hand. I strongly suggest student teachers should take full advantage of this mandatory program one must fulfill. Everyone should be exposed to this program because working with a few students will prepare you for working with a hand-full and working with a hand-full, will eventually prepare you for not being shy or intimidated by the time you teach a class full of students.

The service-learning opportunity allowed for students to experience first-hand the demands of time and how teachers have to manage time and allow for flexibility in their time. This opportunity provided an authentic experience for teacher candidates (National Society for Experiential Learning, 2013).

Tutoring and Strategies

Finally, the third theme was *tutoring and strategies*, specifically, how students gained knowledge of different strategies through the tutoring experiences. Participants described their lack of experience prior to this service-learning opportunity as being minimal. One participant began by stating, "I have never tutored a child in any subject until this semester and I was overwhelmed at the thought of doing it". She went on to describe her feelings after the experience,

I felt completely unprepared and thought there was no way I was going to be able to help these kids become better readers when I had no idea what I was doing. I learned a lot from this experience, specifically about resources I knew nothing about prior to tutoring

Another participant reflected,

As a tutor, SA Reads encouraged higher levels of thinking by helping me understand the concepts of reading and developing my own study strategies. The program increased my motivation to learn more in order to maintain a new role and also encouraged a higher level of thinking. It built a relationship between me, the teachers, and the librarian. It prepared me for my future educational career.

These themes were relevant across the reflections analyzed and support the earlier study's premise (Pittman & Dorel, 2014), that hands-on learning is equally, if not more, important as in class learning when shaping future teachers' perspectives. Additionally, the teacher candidates stated they increased their knowledge through the experience, and Skinner and Chapman (1999) posit that knowledge should expand as a positive impact of service learning.

Discussion

A critical piece to implementing service-learning into any course requires a relationship with a partner or community-based organization that demonstrates a great need. As Skinner and Chapman (1999) assert, there must be clear goals tied to the course and service-learning collaborative; therefore, it is essential for one to know how the course content relates to the service-learning opportunity. Once the instructor is clear about the objectives and the goals that candidates are to accomplish, then the instructor should research local community-based organizations to integrate service-learning into the course. Each of these processes was utilized in the community partnership. Because of maintaining clear goals and collaborative efforts, 1,600 teacher candidates and 1,300 students (kindergarten-4th grade) have participated in SA Reads in the eight-year partnership. The teacher candidates change from Fall semester to Spring semester, while the students remain in SA Reads for the entire academic year. It means, that a student will receive two tutors for the academic year.

The research had a positive impact on teacher candidates. The first research question was does service-learning, via SA Reads, increase the acquisition of literacy knowledge and skills of teacher candidates. As evidenced by the reflections, the teacher candidates were able to learn about new resources to aid in tutoring students in literacy. The FCRR Student Center Activities have been widely used across the nation and are often cited as a major resource for improving students' literacy attainment (Donelson & Donelson, 2009; Rief & Stern, 2010) In addition, the teacher candidates were able to determine the literacy strengths and

weaknesses of the students. This knowledge is pivotal in preparing students to become better readers. If a teacher cannot tell what reading problem(s) the student is having, it would be difficult to provide support for that student. Moreover, one teacher candidate even stated that the teacher candidate increased his/her own knowledge of literacy concepts and is able to use the literacy skills as his/her own study strategies.

Likewise, the teacher candidates were able to increase their efficacy in teaching literacy to K-3rd grade students. The second research question does service-learning, via SA Reads, increase the efficacy of teacher candidates to teach literacy to K-3rd grade students, was answered by teacher candidates. One student reflected upon her growth from feeling unprepared to feeling more prepared to teach reading. Additionally, a teacher candidate stated that she was motivated to learn more about teaching reading. Lastly, a student stated that this experience prepares teacher candidates to work with a few students, but the experience will, then, help with teaching literacy to a full-class of students.

SA Reads is a partnership that works. As the reflections reveal, the teacher candidates built their confidence through SA Reads and built their literacy knowledge, evidenced by how candidates related the course content (theory) to the service-learning (practice). Barnes and Caprino (2016) suggest that through student reflections they are able to make connections between this notion of theory to practice and that instructors should encourage students to reflect through a critical lens to help achieve academic and personal growth through this experience. The goal of the SA Reads reflections was for teacher candidates to examine their growth as a professional and to determine whether SA Reads tutoring aided in their personal and professional development.

Implications

Service-learning opportunities provide teacher candidates with experiences that reflect what they may encounter once they become a certified teacher. Dewey (1938) recommends giving students those realistic experiences. Additionally, the National Society for Experiential Education (2013) recommends that these experiences have authenticity, whereas service-learning must have a real world perspective and/or be valuable and significant in regards to a realistic setting or situation, including relationships within the experience. The collaboration between the university and SA Reads provided teacher candidates with authentic experiences, especially in tutoring struggling readers in literacy given the city's undesirable literacy rates.

It is critically important that teacher candidates build self-efficacy (Bandura, 1977) in teaching, especially teaching literacy. Comprehending text is an important skill that students must master in order to be successful in other content areas. When a teacher lacks self-efficacy in teaching literacy, it can hinder a student from being successful in all of her classes because the student may not be fully prepared by the teacher. Given the national literacy deficits, whereas nearly 60% of United States' fourth grade students are not reaching a level of proficiency in reading (National Assessment of Educational Progress, 2017), it was important for the partnership to give teacher candidates experiences that would help build their self-efficacy in teaching reading, thus making them more confident teachers.

Furthermore, it was important to place the teacher candidates in an urban environment with a diverse student population. Because many of the teacher candidates remain in the local area after graduating, teacher candidates needed experiences with students who may be culturally different from them. The premise was to ensure that teacher candidates were aware of the biases, explicit and/or implicit, that they may have towards students who, for various reasons, may be different than them. Being aware of these biases can lead teacher candidates to being culturally competent, which initiates the process of teachers removing any cultural deficits and begin aiming for social justice teaching (Bell, Horn, & Roxas, 2007).

The benefits of incorporating service-learning into courses must have a positive impact on learning. Recommendations include following the service-learning guidelines set forth by Skinner and Chapman (1999) and dedicating time to finding service-learning experiences that will clearly allow teacher candidates to expand their knowledge of key concepts in the designated course, while making a positive difference in the lives of children or adults in the process. Successful implementation requires proper pre-planning, which includes researching, building the partnership with the organization(s), and defining goal(s) on both accounts. The authors only had access to the reflections of the teacher candidates, therefore, the teacher candidates' reflections could only be analyzed.

Furthermore, studies on the benefits of service-learning and teacher self-efficacy would be beneficial to the field. Research should include collecting longitudinal data on whether the teacher candidates, once graduated and certified, use the knowledge learned through their service-learning experience(s) to improve the literacy outcomes for the students enrolled in their class(es). In addition, research should focus on the

impact of service-learning opportunities in mentoring other teachers in areas of diversity, self-efficacy and literacy knowledge. Another area for exploration would be whether or not service-learning decreases the cultural deficit perspective that teacher candidates sometimes possess.

Conclusion

This article aimed to: (1) explain how service-learning is mutually beneficial to teacher candidates, students, and the service provider(s); (2) explain why service-learning with reflection matters in improving teacher candidates' literacy knowledge; and (3) provide a service-learning partnership example that involved teacher candidates, students, and a local organization. Service-learning opportunities, such as SA Reads, have positive impacts on participants, the tutor, and the tutee. The goal is to encourage instructors to consider service-learning as a valuable source for connecting knowledge to practical application. This notion of theory to practice will motivate teacher candidates to continue to strive to increase their learning and knowledge in literacy education, for a relationship exists between teachers' knowledge, teachers' observed teaching capability, and classroom reading achievement levels (Moats & Foorman, 2003).

Service-learning experiences, such as SA Reads, give teacher candidates opportunities to build confidence in their knowledge and teaching competence to thereby increase students' reading achievement levels. If more teacher preparation programs offered similar experiences for teacher candidates, the teacher candidates could increase their content knowledge prior to certification, thus giving them the confidence and self-efficacy to remain in the classroom, as teacher retention continues to be a problem in schools in the United States.

Competing Interests

The authors have no competing interests to declare.

References

- Allen, J., Gregory, A., Mikami, A., Lun, J., Hamre, B., & Pianta, R.** (2013). Observations of effective teacher-student interactions in secondary school classrooms: Predicting student achievement with the classroom assessment scoring system-secondary. *School Psychology Review, 42*(1), 76–98.
- Bandura, A.** (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215. <https://doi.org/10.1037/0033-295x.84.2.191>
- Barnes, M. E. & Caprino, K.** (2016). Analyzing service-learning reflections through Fink's taxonomy. *Teaching in Higher Education, 21*(5), 557–575. <https://doi.org/10.1080/13562517.2016.1160221>
- Bell, C. A., Horn, B. R., & Roxas, K. C.** (2007). We know it's service, but what are they learning? Preservice teachers understanding of diversity. *Equity & Excellence in Education, 40*(2), 123–133. <https://doi.org/10.1080/10665680701218467>
- Bernadowski, C., Perry, R., & Del Greco, R.** (2013). Improving preservice teachers' self-efficacy through service-learning: Lessons learned. *International Journal of Instruction, 6*(2), 67–86.
- Chall, J. S.** (1983). *Stages of reading development*. New York, NY: McGraw-Hill.
- Cone, N.** (2009). Community-based service-learning as a source of personal self-efficacy: Preparing preservice elementary teachers to teach science for diversity. *School Science and Mathematics, 109*(1), 20–30. <https://doi.org/10.1111/j.1949-8594.2009.tb17859.x>
- Cone, N.** (2012). The effects of community-based service-learning on preservice teachers' beliefs about the characteristics of effective science teachers of diverse students. *Journal of Science Teacher Education, 23*(8), 889–907. <https://doi.org/10.1007/s10972-012-9305-0>
- Dewey, J.** (1938). *Experience and education*. New York, NY: Collier.
- Donelson, W. J. & Donelson, R. W.** (2009). *Implementing response to intervention*. Huntington Beach, CA: Shell Education.
- Florida Center for Reading Research** (n.d.). Retrieved from <http://fcrr.org/>
- Guo, Y., Piasta, S. B., Justice, L. M., & Kaderavek, J. N.** (2010). Relations among preschool teachers' self-efficacy, classroom quality, and children's language and literacy gains. *Teaching and Teacher Education, 26*(4), 1094–1103. <https://doi.org/10.1016/j.tate.2009.11.005>
- Hamre, B. K., & Pianta, R. C.** (2006). Student-teacher relationships. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 59–71). Bethesda, MD: National Association of School Psychologists.
- Harrison, L. M.** (2013). Service-learning and its impact on middle level preservice teachers' learning from field experiences. *Middle Grades Research Journal, 8*(3), 23–38.

- Haverback, H. R. & Parault, S. J.** (2008). Pre-service reading teacher efficacy and tutoring: A review. *Educational Psychology Review*, 20(3), 237–255. <https://doi.org/10.1080/13611260903050171>
- Hoy, A. W.** (2000). *Changes in teacher efficacy during the early years of teaching*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
- Joshi, R. M., Binks, E., Hougen, M., Dahlgren, M. E., Ocker-Dean, E., & Smith, D. L.** (2009). Why elementary teachers might be inadequately prepared to teach reading. *Journal of Learning Disabilities*, 42(5), 392–402. <https://doi.org/10.1177/0022219409338736>
- Kolb, D. A.** (2014). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Upper Saddle River, NJ: Pearson.
- Ladson-Billings, G.** (2006). It's not the culture of poverty, it's the poverty of culture: The problem with teacher education. *Anthropology and Education Quarterly*, 37(2), 104–109. <https://doi.org/10.1525/aeq.2006.37.2.104>
- Literacy San Antonio** (n.d.) Retrieved from <http://www.literacysanantonio.com/>
- Moats, L.C.** (1999). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do*. Washington, DC: American Federation of Teachers.
- Moats, L. C., & Foorman, B. R.** (2003). Measuring teachers' content knowledge of language and reading. *Annals of Dyslexia*, 53, 23–45. <https://doi.org/10.1007/s11881-003-0003-7>
- McClurg, J.** (2015, April 10). *Minneapolis ranked most literate city*. USA Today. Retrieved from <http://www.usatoday.com/story/life/books/2015/04/10/americas-most-literate-cities-minneapolis/25531751/>
- National Assessment of Educational Progress** (2017). *The nation's report card: Reading 2017*. Washington, DC: National Center for Educational Statistics.
- National Society for Experiential Education.** (2013). Eight principles of best practice for all experiential learning activities. Retrieved from <https://www.nsee.org/8-principles>
- Paine, L.** (1990). Orientation towards diversity: What do prospective teachers bring? Report 89-9. National Center for Research on Teacher Education, East Lansing, MI.
- Pianta, R. C.** (2016). Teacher–student interactions: Measurement, impacts, improvement, and policy. *Policy Insights from the Behavioral and Brain Sciences*, 3(1), 98–105. <https://doi.org/10.1177/2372732215622457>
- Pianta, R.C., Hamre B.K., Allen J.P.** (2012) Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In: Christenson S., Reschly A., Wylie C. (Eds.) *Handbook of research on student engagement*. Boston, MA: Springer.
- Pittman, R. T., & Dorel, T. G.** (2014). Experiential learning and literacy: Preservice teachers' perspectives. *Journal of Literacy and Language Education*, 10(2), 87–98.
- Pittman, R. T., Zhang, S., Binks-Cantrell, E., Hudson, A., Joshi, R. M.** (2019). Teachers' knowledge about language constructs related to literacy skills and student achievement in low socio-economic status schools. *Dyslexia*, 25(3), 1–20. <https://doi.org/10.1002/dys.1628>
- Rief, S. F. & Stern, J. M.** (2010). *The dyslexia checklist: A practical reference for parents and teachers*. San Francisco, CA: Jossey-Bass.
- SA2020.** (n.d.) Retrieved from <https://www.sa2020.org/>
- Silverman, S.K.** (2011) Cultural deficit perspective. In: Goldstein S., Naglieri J.A. (Eds.) *Encyclopedia of child behavior and development*. Boston, MA: Springer.
- Skinner, R., & Chapman, C.** (1999). *National center for education statistics: Service-learning and community service in K-12 public schools*. Rockville, MD: U.S. Department of Education, Office of Research and Improvement.
- Stanovich, K. E.** (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21(4), 360–406. <https://doi.org/10.1598/rrq.21.4.1>
- Stewart, T., Allen, K. W., & Bai, H.** (2011). The effects of service-learning participation on pre-internship educators' teachers' sense of efficacy. *Alberta Journal of Educational Research*, 57(3), 298–316.
- Wade, R. C.** (2000). Service-learning for multicultural teaching competency: Insights from the literature for teacher educators. *Equity & Excellence in Education*, 33(3), 21–29. <https://doi.org/10.1080/1066568000330304>
- Wall, C. R. G.** (2017). Bridging understanding between preservice teachers and diverse students through service-learning. *Teaching Education*, 28(20), 178–193. <https://doi.org/10.1080/10476210.2016.1236784>
- Wasserman, K. B.** (2009). The role of service-learning in transforming teacher candidates' teaching of reading. *Teaching and Teacher Education*, 25(8), 1043–1050. <https://doi.org/10.1016/j.tate.2009.04.001>

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