Community partnerships: Leveraging service learning in small teacher preparation programs

AUTHORS
Donna M. Ploessl
William Hooper IV
Catherine G. Raulston

Journal of Special Education Preparation
2(2), 60-68

DOI: 10.33043/JOSEP.2.2.60-68
openjournals.bsu.edu/JOSEP

ABSTRACT

During semester-long courses in inclusive methods and beginning reading instruction, pre-service teacher candidates participate in weekly tutoring sessions with elementary students in grades K-5. We outline principles identified for effective service-learning and describe how to embed them to integrate community service. We discuss service-learning with academic skills and content in mind, as well as reflection related to the experience, while ensuring the service-learning partnership includes the voice of the community partner. Lastly, a phase-by-phase guide for teacher educators is presented that we used in our small teacher preparation program through literacy instruction.

KEYWORDS

Practice-based learning, pre-service teachers, , reflection, service-learning, tutoring

It is a sunny March afternoon as Lucy Rivers packs up her "teacher bag." She has tripled checked her assessment materials, student interest inventory, and activity materials. This afternoon, she will meet two students that she will tutor through a partnership between her university and a local elementary school. Lucy is nervous and excited to have this opportunity to practice administering the assessments and use the information from them to plan individualized lessons for her students. She practiced administering the assessment with a classmate last week during class and with her roommate last night. Now it is showtime. She has all the tips her professors have given running through her mind.

Watching a practiced teacher orchestrate a literacy lesson makes the task look easy, but teaching is complex. Classroom observation during early coursework is common in teacher education programs. But is this practice effective? These placements, even with reflective notetaking, lack the practice-based learning opportunities that Pre-service Teacher Candidates (PTCs) need to be prepared to teach students with diverse needs and understand the complexities of lesson delivery (Kent & Giles, 2016). Placed in unstructured observation experiences, preconceived, and often stereotypical, assumptions of diverse students including those with exceptionalities can become cemented in the PTCs' view of the classroom (Hilton & McCleary, 2019; Milner & Laughter, 2015; Mundy & Leko, 2015). Additionally, novice special education teachers struggle to communicate effectively and lack practice in communicating the academic and social progress of students with disabilities to families (Santamaria Graff et al., 2021). Instead, practicum experiences should be enriched to expand PTCs' perceptions of, and experiences with, diverse students (Nagro & deBettencourt, 2017). Additionally, practicum experiences should promote thoughtful planning and implementation of evidence-based practices through practice-based learning opportunities (Nagro & deBettencourts, 2017). With the critical shortage of teachers and the knowledge that special

education teachers leave the field twice as often as general education teachers (Santamaria Graff et al., 2021), teacher preparation programs should provide service-learning experiences beginning early in their programs. Well-structured service-learning practicums provide PTCs with diverse opportunities to practice individualizing and targeting instruction to support individual students and effectively prepare PTCs for the challenges they will face in practice.

Service-learning is a long-standing teaching and learning strategy that uses a reciprocal relationship of field experience and community service by providing opportunities for PTCs to link academics to service benefiting both the PTCs and the local community (Shapiro, 2021). The intent of service-learning in teacher education programs is to provide PTCs with opportunities to engage with K-12 students who have life experiences culturally different from their own (Anderson et al., 2022), and opportunities to cultivate the dispositions of culturally relevant education identified by Kelly and Barrio (2021). In this way, small programs have the potential to provide PTCs with authentic field-based experiences prior to the student teaching semester or year. Service-learning experiences are typically course-based and require students to complete some sort of organized project to benefit the local community. Shapiro (2021) expanded previous definitions to include a teaching and learning strategy where instruction is integrated into community engagement. This way, PTCs connect and apply what they are learning in coursework to the world outside the higher education classroom while supporting the local diverse school population. The purpose of this article is to provide teacher education programs with a blueprint for integrating service-learning into early teacher education coursework in a way that benefits practice-based small teacher education programs and the local community.

> Well-structured service-learning practicums, provide preservice teacher candidates with diverse opportunities to practice individualizing and targeting instruction to support individual students.

Embedding Principles of Effective Service Learning into Teacher Preparation

Teacher education programs must recognize that PTCs' knowledge of students, schools, and teaching is an ongoing exchange between new experiences (in this case, a tutoring practicum setting), their own past school experiences, personal backgrounds, and personal dispositions and beliefs. Service-learning practicums are a means to supplement small teacher education programs by providing practice-based learning experiences to assist PTCs as they plan for and implement evidence-based teaching practices with diverse students.

Specifically, PTCs administer and interpret academic assessments then develop and carry-out instructional plans to address academic needs for diverse students. PTCs then log and journal through a structured model of reflection, adjust instruction, monitor progress, and complete structured parent communications. It is essential that the service happens with guidance of the school partners identifying the needs. The partnering school must identify and articulate the specific needs of their students (Bortolin, 2011; Shapiro, 2021). Dewey's (1938) principle of active learning or "learning by doing" forms the conceptual foundation for this type of service-learning (Salam et al., 2019). For the practice to be successful, professors must first ensure that academic credit is for learning, not service. Benefits of this type of learning are that PTCs engage in higher order critical thinking skills, solve real-time problems, communicate effectively, and differentiate teaching (Chan et al., 2019; Salam et al., 2019).

Anderson and her colleagues (2022) noted service-learning in their small program connected the program to community partners and supplemented their teacher education program. The transformation of service-learning from the notion of simple volunteerism and community service into a practice-based structured learning opportunity ensures the academic rigor of the teacher education program and assists PTCs to use evidence-based but new to them teaching practices (Anderson et al., 2022; Shapiro, 2021).

By meeting first with the elementary school principal and instructional partner, teacher education faculty establish the criteria for the selection of tutoring activities that fit the needs of the community as well as the teacher preparation program. Once the community needs are established, faculty target in-class instruction and evidence-based teaching and learning strategies that are likely to produce the greatest outcome for the community. The outlined program here identifies how one small program worked with the community to meet literacy needs in the local elementary school.

TABLE 1: Phase-by-Phase Timeline for Implementation

Phase	When	What	Who	Where
Phase 1	Prior to the semester or early in the semester	System Development Identify local need	LEA and University Faculty	LEA
Phase 2	Early semester	PTC instruction in and faculty modeling of evidence-based practices and assessment	Faculty and PTCs	University classroom
Phase 3	Mid semester	Weekly tutoring sessions and continued course instruction	PTCs, Coperating teachers, University Faculty	LEA University classroom
Phase 4	Late Semester	Data analysis/critical reflection Family communication	PTCs, Faculty	University classroom

PHASE-BY-PHASE GUIDE FOR TEACHER EDUCATORS

To implement a service-learning practicum into a small teacher education program like this one, we provide a phase-by-phase process that can be adapted to the structure of, and community needs in small programs. These phases are outlined in Table 1.

Phase 1: Prior to, or Early in Semester

Identify the Local Need

During this initial phase, it is important for faculty to build a trusting relationship with the Local Education Agency (LEA). Faculty schedule an initial meeting with the instructional partner(s) (reading/math coach) and administrator of the LEA. During this meeting, the group discusses the university's service-learning efforts, the need for PTCs to have structured practicum experiences, and the academic needs of the elementary school.

At our initial meeting, I introduced the idea of an after-school tutoring program where PTCs in my Inclusive Methods course could practice individualizing and differentiating instruction in a structured small group setting of two to three students. The principal introduced me to the schools' Instructional Partner (reading/math coach), Tonya, who presented school data included as part of the school's continuous improvement program. Tonya explained how teachers were able to assist students in math to reach grade level proficiency at a higher rate than they could in literacy. She explained that the high number of students whose primary language was something other than English contributed to this lag and recommended we focus weekly tutoring sessions to the English/Language Arts area. We discussed grade level participation, student recruitment techniques, location for tutoring sessions, start and end dates, and cooperating teacher support. I left the meeting understanding the needs of the LEA and with several ideas of the practices that my PTCs would need exposure to before we started tutoring.

Phase 2: Before Tutoring

Establish the Connection Between Teaching & Learning Strategies and Coursework

Once the semester starts and PTCs are enrolled in coursework, faculty begin teaching and modeling (a) instructional methods, (b) assessment methods, (c) literacy strategies, (d) behavior management, and (e) technology use. A timeline for tutoring lessons is then set based on the LEA's schedule and the need for PTC's university classroom instruction in assessment, differentiation, and evidence-based literacy strategies. Throughout this phase, PTCs meet with their university professors for class during the week.

Meanwhile, classroom teachers and the LEA's instructional partner invite students to participate in an after-school tutoring program. The university's faculty provide a list of tutors who are partnered with a group of two to four students from the LEA as they enroll in the tutoring program. Keep in mind that students from the LEA should be paired with PTCs based on age/grade level, not ability level. This provides PTCs the opportunity to support students of the same age/grade with very different

abilities. The stage is then set for structured tutoring in reading and language arts.

Phase 3: During Tutoring

PTC Planning, Student Interactions/ Tutoring, and Reflection

Once the tutoring sessions begin, one weekly university class session each week is abbreviated to include a short instructional session in an area of need or concern identified by PTCs or the university faculty. Tutoring at the LEA makes up the rest of the class time. Cooperating teachers from the LEA volunteer to serve as mentors and support for the PTCs while they carry-out tutoring sessions one day a week for eight-ten weeks beginning five weeks into the semester. This timeline varies with the university and LEA fall and spring semesters.

During the first tutoring session, PTCs administer a fluency and comprehension assessment to determine each student's present level of performance prior to instruction. PTCs also administer student interest inventories and spend time meeting and learning about the preferences of their individual students. In the program we are using as a model, PTCs administer the National Center on Intensive Intervention Phonics Inventory (available at: https://intensiveintervention.org/tools-charts/example-diagnostic-tools) an inventory of regular invented words that fall into 10 phonetic patterns during the first tutoring session. Additionally, an Informal Reading Inventory (IRI) provides individual comprehension and accuracy/fluency levels for students in grades 1-5. (McGraw-Hill, n.d. available at: https://intensiveintervention.org/tools-charts/example-diagnostic-tools).

The baseline information provides a starting point so that PTCs can plan to meet the students at their current levels of performance and identify learning activities to assist the students to progress in word identification, fluency, and/or comprehension skills based on their individual needs. Additionally, this provides practice with students rather than peers in the administration of these assessments early in the program and while the PTCs are learning through their university coursework how teachers use assessment to plan instruction.

As I moved through the room monitoring my teacher candidates administer the phonics inventory, I noticed that Lucy was asking the student to name a word that rhymed with the phonetic nonsense word. I asked Lucy if I could work with the student for a moment and then sat down to model the correct way to administer the assessment. When we were walking to the parking lot after the session, Lucy caught up to me and thanked me for showing her the correct way to give the assessment. She said that she had practiced with her roommate the previous night, but just was nervous and forgot what to do when he sat down with a second-grade student for the first time. I told Lucy that she did a great job with giving the assessment after my feedback and reinforced the idea that she was learning new skills and my role was to support her learning and make sure she had those skills before she had her own classroom.

The PTCs then develop individualized weekly one-hour tutoring lessons focused on the areas of need for their students. As part of the tutoring process, PTCs design weekly, progress monitoring, formative assessments to guide planning for the following week. The PTCs monitor individual student's progress using these formative assessments and learn to adjust activities for and between students within their tutoring group as they became more fluent and relaxed with their own teaching practices. After each session, PTCs complete structured self-reflections where they identify strengths and areas for growth in teaching and identify areas of adjustment in instructional strategies for the following session. The professor attends all tutoring sessions to (a) monitor, (b) provide coaching, (c) gain insight into adjustments of instruction provided to the PTCs, (d) model fidelity to instructional strategies, and (e) familiarize PTCs with the relationship of assessment and progress monitoring and how they drive instruction.

At the final tutoring session, the PTCs repeat the assessments administered at the first meeting to collect post-tutoring data. This strategy is used to illustrate the difference between formative (often grain-sized progress) and summative (grade-level progress) for the PTCs. It helps PTCs understand that progress toward a goal may take small steps and students who are making progress daily may not be reaching grade-level proficiency after only this short time.

Phase 4: After Tutoring

Data Analysis, Critical Reflection, & Communication

Once tutoring sessions are complete, PTCs build individual progress reports to practice effective communication of student growth, areas of continued need, and behavioral feedback to families. This activity provides PTCs the opportunity to practice communication with families in appropriate voice and format. The emphasis here is appropriate communication. PTCs use complete sentences and language that an adult family member would understand. In this way, faculty can provide critical feedback that impacts positive communication with families to PTCs before they enter classrooms. PTCs also report student's progress to the university professor in a professional manner. This communication includes

TABLE 2: Weekly Structure of the Tutoring Sessions

Tutoring Component	Description
Homework assistance	Homework assistance for students in upper elementary grades when identified as a need for individual students
Review	Review of skills from previous instructional week and tutoring session
Introduction of specific skills	For each skill students completed the following noting instructional strategies for use (i.e., direct instruction, scaffolding, task analysis, etc.) Teacher modeling with examples Guided practice with examples Independent practice with examples
Closing activity	A closing activity to include a review of skills taught during the tutoring session
Assessment	Weekly assessment of skills (formal or informal) included with each lesson plan
Accommodations	Accommodations when necessary (consider assistive technologies, communication, behavioral, cultural, intellectual, sensory and physical needs). If no accommodations are needed, state the rationale for not including accommodations.
Materials	A list of all materials and supplies needed for each tutoring session
Reflection	Reflection of the tutoring session including a complete description of student's strengths and areas for needed improvement

a professional narrative and a graphic representation of pre and post assessment results with suggested next steps in instruction for each student. The written report includes an analysis of the student's baseline data, goals, progress monitoring toward identified goals, and post assessment results. A complete analysis includes gains or lack thereof, anecdotal observations of strengths and needs of the student which supports the quantitative data collected as informal weekly progress monitoring and reflections. In their reflective analysis, PTCs provide information not only related to next steps for instruction but how the service-learning experience impacts their personal growth and development as a future educator.

Lucy reflected on her time with Alice and how it impacted her thoughts when working with diverse students. "Tutoring Alice has increased my patience and empathy when working with students who deal with anxiety. I have learned how to meet students where they are rather than setting expectations, they feel incapable of meeting. Alice thrived when she felt like the situation was not threatening. She is not a child who excels under pressure; rather, she shuts down. To accommodate for these struggles, I had to utilize explicit instruction more often than I anticipated. I also modeled the new skill at every lesson. I had to pay close attention to Alice's non-verbal cues. When she became quiet and withdrawn, I realized I could not wait very long before assisting her with the answer."

Tools for Implementation

As this is an early field experience for PTCs, we created a structured field-based assignment that included several components. PTCs are assigned to a small group (2-4) of students that they tutor throughout the semester. Dispositions assessments include arriving on time to the tutoring sessions; maintaining confidentiality when discussing individual student information; and conducting oneself professionally at all times-including sharing materials, refraining from cell phone use, and dressing appropriately. All assignments identified below reside in an electronic tutoring notebook that faculty check weekly throughout the semester and PTCs submit for final review at the end of the semester.

Tutoring plans and daily reflections

TABLE 3: Key practices and strategies to improve word recognition skills

Objectives	Activities and Strategies
Sequencing	Break down the task (e.g., start by having the child break an unknown word into separate sounds or parts they can sound out) Provide prompts or cues as needed Model sequencing activities for students with short and intentional activities (e.g., breaking a whole group lesson into parts, I do, we do, you do) Provide students with step-by-step prompts
Segmenting	Break down the targeted skill (e.g., identifying a speech or letter sound) into smaller units or component parts (e.g., sounding out each speech or letter sound in that word) Segment or synthesize component parts (e.g., sounds out each phoneme in a word, then blends the sounds together)
Organizers	Direct children to look over material prior to instruction Direct children to focus on specific information Provide students with prior information about tasks Tell students the objectives of instruction upfront

During each tutoring session, PTCs review and reinforce skills the students are taught during regular classroom instruction each week. PTCs then re-teach any pre-requisite skills the students have not mastered. PTCs (a) print weekly tutoring plans, (b) gather resources, and (c) organize all materials needed for each tutoring session. The practice in materials management helps PTCs understand that they will be responsible for supplying all materials when the classroom belongs to them. The sequence of instruction and tutoring components followed a structured format identified in Table 2.

Comprehensive Tutoring Reflection

At the completion of all tutoring sessions, PTCs write a reflective paper summarizing the overall tutoring experience. The paper includes the following sections: identification of what each PTCs learned personally and professionally from tutoring, the types of learning difficulties individual students experienced, how PTCs addressed individual students' difficulties including how they met the needs of English Language learners, how analysis of the students' errors guided instruction, interpretation of the results of pre/post assessments, and how this experience will impact the PTCs as a teacher in the future. The overall tutoring reflection is evaluated based on the depth of reflections and the ability of the PTC to articulate each point.

Pre and Post Assessment Results

On the first and last day of tutoring, PTCs administer, evaluate, and score assessments identifying the students' academic ability, considering the needs of English language learners as they administer the assessments. The pre-assessment will enable the PTCs to determine students' academic strengths and deficits and assist in preparing individualized lessons. The post assessment will enable the PTCs to evaluate the students' progress. At the end of tutoring, PTCs submit the scored pre and post assessments administered as well as a graph or chart documenting the results.

Student Progress Reports

Using reflections and daily student work as a reference, PTCs summarize the growth of each student on individual progress reports. Reports include recommendations for addressing any continued areas of student difficulty. The reports are provided to teachers to distribute to parents after approval by the professor and the site-based tutoring supervisor.

Tutoring Notebook

PTCs submit an electronic tutoring log at the end of the semester with all the above information. Below is the table of contents required for each PTC to follow.

Table of Contents:

TABLE 4: Key practices and strategies to improve reading comprehension

Objectives	Activities and Strategies
Directed response/questioning	Use open-ended questioning
	Provide opportunities for student-led questioning
	Incorporate dialogue activities (both independent and collaborative)
Control difficulty of processing demands of task	Provide assistance
	Use explicit and molded instruction
	Sequence task based on reading/ability level
	Present easy steps or concepts first and move on to progressively more difficult steps or concepts (task analysis)
	Allow student to control level of difficulty
	Keep activities short and intentional
Elaboration	Provide students with additional information or explanation about concepts, steps, or procedures
	Use redundant text or repetition within text
Modeling	Teacher explicitly demonstrates the processes or steps
Group instruction	Small group instruction composed with teacher-student engagement
Strategy cues	Teacher prompts the student to use strategies or multiple steps
	Teacher explains steps or procedures for solving problems
	Use of "think aloud" and other critical thinking models
	Explicitly list the benefits of a strategy or procedures

- Tutoring Notebook rubric
- Background information about student(s): grade, age, interests, academic strengths and areas of difficulty, behavioral strengths/concerns.
- Pre/post tutoring assessment with graph
- Lessons with student work, formative assessments, notes about errors, and personal notes
- Final tutoring reflection
- Progress reports

Identifying

Instructional Supports

Within the field of education, there is a need to provide supports for identifying and improving literacy instruction. Explicit and systemic instruction for literacy development and supporting students with developmental reading delays has gained attention and provided results for students and educators alike (Moats, 2019). These practices come down to continuous and intentional instructional strategies that include providing daily reviews of content, embedded instructional objectives, teachers' intentional presentation of new material, opportunities for guided practice, independent practice, and formative evaluations (i.e., assessment materials and practices). Implemented properly, these practices have supported intervention programs and are reflected in several of the new educational policies and legislation around literacy instruction in the elementary school settings (Moats, 2019).

When discussing literacy development, and as referenced within this service-learning experience, there are typically three key areas of literacy development that are identified as areas of

growth for students and teachers both which include word recognition skills (i.e., decoding, phonics, phonemic awareness, encoding), comprehension skills, and evaluation of instructional practices (Moats, 2019).

Word Recognition

Explicit instruction is a beneficial approach for supporting word recognition skills and development in students with learning disabilities (Moats, 2019). Explicit instruction, often called direct instruction, refers to teaching skills in an explicit, direct fashion. It involves drill/repetition/practice and can be delivered to one child or to a small group of students at the same time (Kuhn, 2020). When assessing teaching practices that provided measurable improvements in word recognition skills for students with identified learning disabilities, we identified three key practices that support student growth. These three practices include a focus on sequencing, segmenting, and the use of advance organizers to model skills for students. Table 3 lists activities and strategies identified for each key practice.

Reading Comprehension

Identified supports for improving reading comprehension skills in students with learning disabilities include a paired approach consisting of explicit instruction and strategy instruction. Strategy instruction, much like explicit instruction and word recognition skills, includes supporting students' understanding and establishment of a plan to pick out patterns in words and to identify key information and the main idea in each. Once a student understands specific strategies, they are then able to generalize and implement them in combination with other comprehension skills (Kurniaman, 2018). Instructional practices known to improve comprehension skills include (a) directed response/questions (i.e., open-ended questioning), (b) controlled difficulty or processing task demands, (c) elaboration, (d) teacher modeling, (e) group instruction (i.e., shared reading and shared writing), and (f) strategy cues (Kuhn, 2020; Kurniaman, 2018). Table 4 lists activities and strategies for each of these instructional practices.

Evaluation and Reflective Practice

Continuous evaluation of instructional practices is a critical component of continuous improvement for teachers and supports the ability for teachers to identify opportunities for intervention and prevention (Yaman, 2016). Practice-based intervention and prevention service-learning practicum provide PTCs a means to assess the effectiveness of their instruction while also being able to better identify specific areas or skills where a student may be struggling (Kuhn, 2020; Moats, 2019; Yaman, 2016). For students with an identified learning disability, these practices include using student assessments to pinpoint specific skill deficits and instructional strategies to support these deficits. These practices focus on evaluating the success of both the improvement of the student and the instructional practices.

Another strategy that teachers can use to continuously evaluate the effectiveness of instructional practices is professional reflection. Much like within this service-learning experience, having the opportunity to reflect critically about lived experiences provides the opportunity for continued self-evaluation and improvement. Taking the time to reflect on (a) student learning (highlights and challenges); (b) moments that went as planned and others that didn't; (c) what was used to evaluate what students learned; and (d) what skills were used and the success of those skills, provides opportunities for PTCs to think critically about their role and practices in relation to student performance which strengthens instructional practices and student learning as a whole (Yaman, 2016). When implemented properly and routinely, these identified practices for instruction, reflection, and student support offer PTCs the knowledge and skill set needed to assess their literacy instruction and student development, especially for those teachers serving struggling readers.

Conclusion

The focus of this article was to provide insight as to how a small teacher education program can integrate a tutoring service-learning project into early teacher education coursework to benefit the local community. Through service-learning opportunities, PTCs are given the chance to apply content taught in the university setting and make connections with students, therefore preparing them to be stronger future teachers. While this model uses literacy instruction, tutoring interventions could be implemented using any content area based on the need of the local community. It is important for the university to choose the model that works best with the group of students and partnering community LEA.

PTCs need practice-based structured early field experiences prior to internships rather than unstructured practicum attempts. Through these types of low-risk practical, real world teaching experiences PTCs gain greater confidence and connect theory taught in university classrooms with the students in today's elementary environments. Artifacts that provide evidence of PTCs as well as K-5 student learning are expressed in statements provided in PTCs reflections such as Lucy's. By integrating these experiences through service-learning opportunities, PTCs can apply their passion for teaching in

ABOUT THE AUTHORS

Donna M. Ploessl

Donna M. Ploessl, Ph.D. is interim dean and an Associate Professor of Special Education at the University of Montevallo. She has over twenty-five years in education, specializing in educational practices for individuals with exceptionalities. Her primary areas of research are focused in two strands: the collaboration between general and special education teachers with specific interest in high-quality professional development followed by coaching, and effective means to recruit and retain a diverse teaching population. She also has an interest in immediate feedback and coaching to impact teacher preparation and P-12 student learning.

William Hooper

William Hooper IV, Ph.D. is an Assistant Professor of Early Childhood Education at the University of Montevallo. He has over fourteen years of experience in the field of early childhood education and administration, specializing in social and emotional development, teacher preparation, and culture and diversity in early childhood. He currently teaches early childhood and elementary method courses. His primary research interests are focused on social and emotional development, teacher preparation, and culture and diversity in early childhood education. His current research initiatives focus on teacher/child relationships, social and emotional development, social and emotional classroom resources, and diversity and equity in education.

Catherine G. Raulston

Catherine G. Raulston, Ph.D. is an Associate Professor of Elementary Education in the College of Education and Human Development at The University of Montevallo. She earned her B.S. degree in Elementary Education/ Early Childhood from The University of Alabama as well as her M.Ed. and Ed.S. in Special Education with an emphasis in Gifted Education. She also obtained her Ph.D. in Instructional Leadership with an emphasis in Instructional Technology from The University of Alabama. At the University of Montevallo, Dr. Raulston serves as the Department Chair for Teaching, Leadership, and Technology. She teaches in the Elementary, Secondary, and Instructional Technology programs. Previously, Dr. Raulston was a Gifted Education Specialist, Instructional Technology Specialist, and developed various training for educators.

a real-world setting while promoting change in the community.

References

Anderson, K. L., Pierce, M. E., & McNamara, K. M. (2022). NUMB3Rs revisited: Long-term impacts of reimagining service learning. *Journal of Experiential Education,* 45(1), 51-67. https://doi.org/10.1177/1053825920973692

Bortolin, K. (2011). Serving ourselves: How the discourse on community engagement privileges the university over the community. *Michigan Journal of Community Service Learning,* 18, 49-58.

Chan, S., Ngai, G., & Kwan, K. (2019). Mandatory service-learning at university: Do less inclined students learn from it? *Active Learning in Higher Education*, 20(3), 189-202. https://doi.org/10.1177%2F1469787417742019

Dewey, J. (1938). *Experience and education*. Macmillan.

Hilton, J. T., & McCleary. M., (2019). Preconceived notions about poverty held by preservice teachers. *Journal of Teacher Education and Educators*, 8(2), 95-114.

Kelly J., & Barrio, B. (2021). Disability at the intersections: Expanding reflective practices within special education teacher preparation, *Journal of Special Education Preparation*, 1(2), 6-15. https://doi.org/10.33043/JOSEP.1.2.6-15

Kent, A. M., & Giles, R. M. (2016). Dual certification in general and special education: What is the role of field experience in preservice teacher preparation? *The Professional Educator*, 40(2), 1-15. https://files.eric.ed.gov/fulltext/EJ1120324.pdf

Kuhn, M. R. (2020). Whole class or small group fluency instruction: A tutorial of four effective approaches. *Education Sciences,* 10(5), Article 145. https://doi.org/10.3390/educsci10050145

Kurniaman, O., Zufriady, Z., Mulyani1, E. A., & Simulyasih SB, N. (2018). Reading comprehension skill using graphic organizer for elementary school students. *Journal of Teaching and Learning in Elementary Education*, 75-80. https://jtlee.ejournal.unri.ac.id/index.php/JTLEE/issue/view/648

Milner, H. R., & Laughter, J. C. (2015). But good intentions are not enough: Preparing teachers to center race and poverty. *Urban Review: Issues and Ideas in Public Education,* 47(2), 341-363. https://doi.org/10.1007/s11256-014-0295-4

Moats, L. (2019). Structured Literacy™: Effective instruction for students with Dyslexia and related reading difficulties. *Perspectives on Language and Literacy,* 45(2) 9-11.

Mundy, C. A., & Leko, M. M. (2015). Uncovering and informing preservice teachers' prior knowledge about poverty. *Networks: An Online Journal for Teacher Research,* 17(1), 1-10. https://dx.doi.org/10.4148/2470-6353.1035

Nagro, S. A., & deBettencourt, L. U. (2017). Reviewing special education teacher preparation field experience placements, activities, and research: Do we know the difference maker? *Teacher Education Quarterly,* 44(3), 7-33. https://www.jstor.org/stable/90010901

National Center on Intensive Intervention (n.d.) *Example Diagnostic Tools* https://intensiveintervention.org/tools-charts/example-diagnostic-tools

Salam, M., Awang Iskandar, D. N., Ibrahim, D. H. A., & Farooq, M. S. (2019). Service learning in higher education: A systematic literature review. *Asia Pacific Education Review,* 20(4), 573-593. https://doi.org/10.1007/s12564-019-09580-6

Santamaria Graff, C., Manlove, J., Studckey, S., & Foley, M. (2021). Examining pre-service special education teachers' biases and evolving understandings about families through a family as faculty approach. *Preventing School Failure: Alternative Education for Children and Youth,* 65(1), 20-37. https://doi.org/10.1080/1049 8x.2020.1811626

Shapiro, R. (2021). Redesigning a university class in classroom behavior support: Social emotional learning and positive behavior support strategies taught through service-learning. *Journal of Service-Learning in Higher Education,* 12, 72-82.

Velex, A. L., Ngaruiya, K. M., & Ozkan, D. S. (2021). At the annex of service and higher education: A multidisciplinary assessment of the role of service learning. *Journal of Nonprofit Education and Leadership,* 11(4), 80-99. https://doi.org/10.18666/JNEL-2020-9649

Yaman, S. (2016). A study on reflection as a source of teacher development: Pre-service and experienced teachers. *Educational Research and Reviews,* 11(7), 437-448. https://doi.org/10.5897/ERR2016.2634