January 2017

Teacher Candidates Dig Deep: Professional Development from Project-Based Exploration and Classroom Application of Reading Strategies

LeAnn Johnson
Shepherd University

Rebecca Mercado
Shepherd University

Karin Spencer
Shepherd University

Follow this and additional works at: https://scholar.stjohns.edu/thereadingprofessor

Part of the Language and Literacy Education Commons

Recommended Citation
Johnson, LeAnn; Mercado, Rebecca; and Spencer, Karin (2017) "Teacher Candidates Dig Deep: Professional Development from Project-Based Exploration and Classroom Application of Reading Strategies," The Reading Professor: Vol. 40 : Iss. 2 , Article 21.
Available at: https://scholar.stjohns.edu/thereadingprofessor/vol40/iss2/21

This Article is brought to you for free and open access by St. John's Scholar. It has been accepted for inclusion in The Reading Professor by an authorized editor of St. John's Scholar. For more information, please contact fazzinol@stjohns.edu.
Teacher Candidates Dig Deep: Professional Development from Project-Based Exploration and Classroom Application of Reading Strategies

LeAnn A. Johnson, Rebecca Mercado, and Karin Spencer

Abstract

In order to achieve deep processing and application of research-based literacy teaching with undergraduate teacher candidates, restructuring of literacy methods courses included a project-based focus that utilizes Universal Design for Learning (UDL) principles for representation, engagement, and demonstration of learning. Using on-line learning communities and other supports for accessing research, teacher candidates engaged in a project that required them to translate a researched instructional practice into lesson plans appropriate for students in their assigned field placement classroom. Analysis of the implemented practice was presented in the form of a mock conference poster session with top projects receiving faculty endorsement for presenting at a regional conference. This article outlines the underlying thinking for the changes implemented, challenges faced, and results of this new way of engaging teacher candidates in deep understanding and application of literacy practices.

As literacy teacher educators, our ultimate goal is to provide instruction that enables teacher candidates to translate theory into practice in order to deliver effective instruction for their future students. We also seek to cultivate teacher candidates’ responsibility for their own ongoing professional development as part of a commitment to lifelong learning and engagement in their profession. However, the challenge of bridging the gap between university coursework and professional practice can be constrained by student expectations, limitations within our established courses, and by the nature of field practicum experiences.

Specifically, literacy methods course instructors must guard against the practice of covering vast amounts of critical course content, which may result in teaching characterized as “a mile wide and an inch deep” (Herrmann & Sarracino, 1991). Sometimes undergraduate teacher candidates anticipate instructors who will ask them to memorize facts and information about every topic they might face on teacher qualifying exams, while at the same time extolling the errors of “teaching to the test.” Unaware of the truly complex nature of teaching, they expect “recipes” for teaching that require little engagement of their own thinking. Smith and Colby (2007) provide some clarification of this type of superficial learning, in which students seem most interested in retaining the information they might be tested on later.

In our own literacy methods courses, the authors recognized the limitations of talking about a variety of reading strategies in class without engaging students in their own construction of knowledge and application of the concepts. We recalled an example of multiple candidates not retaining knowledge of a specific strategy across semesters because none of the students had actually seen it implemented or practiced it in a field placement classroom. We believed that active exploration and application of concepts were needed. Additionally, we recognized that the opportunities to apply practices in field placements do not always match the sequence of concepts and strategies learned in the methods course, creating possible time gaps between when the learning first takes place and when the teacher candidates are able to experience it with students. Lack of opportunities for timely, authentic application can often result in the limited transfer of learning needed for deep and lasting understanding. Smith and Colby (2007) illuminate this more effective type of learning:

A deep approach to learning involves an intention to understand and impose meaning. Here, the student focuses on relationships between various aspects of the content, formulates hypotheses or beliefs about the structures of the problem or concept, and relates more to obtaining an intrinsic interest in learning and understanding (p. 206).

Part of the intrinsic interest in learning, we believe, comes from engagement in project-based exploration and immediate, meaningful, authentic application of that learning in a classroom with real students.

Several studies have addressed this need to augment teacher candidates’ deep learning and connection to professional development within methods courses. Cross and Bayazit (2014) developed revisions to methods course curriculum to increase the transfer of theory into practice using course reading, journal writing, and observational protocols in field placements. Another study described curriculum changes made to provide authentic professional development and collegial learning that resulted in pre-service teachers’ increased identity as teachers (Knipe, Walker, Beavis, McCabe, & Mitchell, 2008). Bauml (2016) recently reported an impact on the classroom practices of pre-service teachers long after their methods course through the teaching of conceptual tools. Our project embraced these goals by fully engaging our undergraduate teacher candidates in project-based inquiry and authentic application of their learning, both in field classrooms and then in professional presentations.

We began by restructuring major assignments to provide candidates with opportunities to research and apply knowledge of self-selected literacy strategies in field classrooms. Candidates then presented the results of their individualized application of this research as poster presentations in a session at a regional literacy conference for teachers held at the university.

This article explains the steps taken to change course curriculum as well as those taken in developing the professional development conference for in-service and pre-service teachers. Changes in the teacher candidates’ perceived value of the authentic assignments and presentations are described, and challenges and implications are discussed.
Context for Curriculum Changes in Literacy Methods

In addition to the value of incorporating a more authentic and constructivist stance in our literacy courses, a second motivating factor for the curriculum changes was the adoption of a teacher performance assessment (TPA) as a requirement for certification. In TPAs, teacher candidate’s knowledge of pedagogy is linked to planning, implementing, and assessing a sequence of instruction. The candidates must provide written commentary to support instructional decisions made 1) during lesson planning, 2) in analyzing their video-recorded instruction, and 3) to analyze and evaluate assessment data. TPA commentaries are designed to reveal ability to connect selection of instructional and assessment strategies for diverse learners to theory and research.

In some cases, candidates are required to identify the language demands inherent in their instruction and to describe the language supports they build into their lessons to meet student needs. Consequently, the need for a deep understanding of literacy in each content area became even more apparent than before work with the TPAs began. Research-based projects provided an effective way to scaffold students in preparing for this new way of measuring their competency (Lysaker & Thompson, 2013).

Three field-based literacy courses were the focus of this project: Language & Literacy in Pre-K/Kindergarten Education, Integrated Reading & Language Arts Pedagogy in Elementary Education, and Reading in the Content Areas for Secondary Education. The three course instructors conferred regarding the purpose, scope, and desired outcomes for the restructured assignments. While there were some differences in project expectations among the courses due to variations in typical classroom practice at each age/grade level, the final assignment for teacher candidates in all three courses included the following core elements:

- Identification of a research-based literacy practice appropriate to students and curriculum in the field placement classroom
- A review of current research regarding that practice
- Incorporation of the research-based practice in a content-based lesson designed for PK-12 students
- Collection of evidence documenting the impact of the practice on student learning
- Analysis of the strengths and weaknesses of the practice along with necessary modifications made for the context of implementation
- Sharing of the project in an authentic professional context.

Of the three courses involved in this project, Reading in the Content Areas, taught by the first author, represents the most significant development of the restructured assignments during the pilot semesters and, in this article, contributes to many of the detailed examples of implementation.

Scaffolding Candidates’ Learning

Teacher candidates in the Reading in the Content Areas course represent a variety of all-level and secondary certification areas including music, art, physical education, health, family & consumer sciences, mathematics, chemistry, biology, general science, social studies, and English. Candidates were introduced to the project-based assignment at the beginning of the semester, and time was routinely provided for class discussion and activities to support their selection of topics, literature search methods, understanding what was meant by “peer-reviewed source,” and comprehending published research. In the beginning, some candidates’ understanding of what pedagogy means was very shallow. For example, many candidates were initially attracted to online sites that contain ‘cute’ classroom ideas that were appealing to the age of students or appropriate to the content, though superficial and without evidence of effectiveness. For the project-based exploration to yield valuable results, the candidates needed to gain a deeper understanding of underlying principles connected to effective instruction.

The course instructor worked to redirect cognition from shallow to deep understanding by providing in-class, collaborative opportunities for candidates to discover decision-making based on application of research and sound theory rather than on surface-level appeal. Small groups analyzed practices for their instructional power. For example, one candidate shared a picture of a storytelling glove. She thought it would be perfect for her young learners because it was colorful and appealing; however, she was frustrated at not being able to find any research on storytelling gloves. After analysis with her peers, she identified visual support for clarifying character actions, translating meaning from text to action, and retelling to measure comprehension as areas of instructional power associated with how she might use the glove. These concepts became potential areas of research for her review and decision-making and deepened her level of understanding of how to determine appropriate strategies.

In addition to class activities, the online course management system used on campus was set up to help candidates as they moved through check-points contributing to project completion. More scaffolding was provided to assist candidates with successful literature searches using the university library’s electronic resources to locate appropriate scholarly research articles. A discussion forum was also opened to provide an electronic anchor chart of possible areas to research. This collaborative resource was particularly effective because as candidates began their research, they often ran across articles potentially valuable to a peer and were able to post helpful links to the associated conversation in the forum.

Throughout the research phase of the project, the course instructor emphasized the need to think flexibly in the application of what candidates were learning about regarding particular methods of instruction. For example, an elementary candidate and a secondary music candidate were each researching annotating text during close reading. Although they began with the same literacy strategy, their implementation of the instructional practice was very different. Elementary students taught by the first candidate used the system to identify key points in a science passage, while high school music students taught by the second candidate applied a modified version to annotate a score of music prior...
to their initial sight reading of the piece.

Secondary and all-level teacher candidates were placed in small, heterogeneous groups to broaden exposure to how instructional methods could be applied. Candidates in a group regularly shared what they were learning in electronic forums or engaged in collaborative problem-solving face-to-face. To encourage divergent thinking, for example, a physical education major who was reviewing research on the impact of restatements was grouped with an art major who was reviewing the development of key vocabulary to guide oral critiques, a math major who was exploring comprehension strategies for analyzing algebraic word problems, and a science major who was researching the use of graphic organizers.

Prompts were provided to engage candidates not only in sharing what they learned from the research but also in collaborating on how that research could translate into effective lesson plans, help determine appropriate assessment for the lesson, contribute to analysis of artifacts representing learning, and clarify the problem-solving needed to make the application of the research effective for diverse learners. Over the course of the semester, strong learning communities emerged within each of these small groups, and candidates found themselves learning meaningfully in multiple areas of literacy.

Teacher Candidates’ Motivation

While some of the most important factors that influence pre-service teachers’ use of conceptual and practical reading tools are access to knowledge and opportunities to put that knowledge into practice, a critical factor is motivation to assimilate knowledge (Leko & Brownell, 2011). Motivation to assimilate knowledge was addressed by employing principles of the Universal Design for Learning (UDL) (Meyer & Rose, 2015).

UDL seeks to make curriculum accessible to all learners by designing learning opportunities that present new content in multiple ways, provide multiple means for learners to engage with the content, and allow for individual learners to demonstrate learning in different ways. While commonly used in PK-12 special education, the application of UDL to university coursework is a significant departure from typical instruction in which a professor introduces a new method, provides examples of that method, and then tests learning on an end of course exam.

Choice is foundational to UDL. Teacher candidates were encouraged to choose topics of personal interest and relevance to practicum classrooms, to access knowledge of selected topics from a variety of sources, and to apply the selected topic with real students. This differentiated instruction and the opportunity to critically think about research and practice in a strong supportive learning environment created a learning environment that contributed to maximum motivation for learning about other group members’ topics as well as their own chosen strategy.

The final element contributing to motivation came through the creation of authentic venues for students to present what they had learned in a collegial environment with peers and practicing teachers. By incorporating the concept of professional development into the requirements of the restructured assignment and assessment, candidates became excited about how to display and describe their learning to others.

Creating Professional Venues for Shared Learning

The first effort in creating a professional application of candidates’ learning was replacing the final exam for the course with a mock poster session using a gallery walk format (Kagan, 2009). Candidates chose between a trifold display or an electronic display of required elements that were assessed with a rubric. The assessment rated the candidate’s understanding of a researched instructional method, application of the method into practice, analysis of learning evidence, and conclusions as to the method’s strengths, weaknesses, and options for expanded application. The gallery walk was open to all interested education faculty and students. Most teacher candidates had never attended a professional conference, so it was necessary to provide details about poster sessions and elements of a good visual display.

The poster session was divided into two segments, giving presenters an opportunity both to exhibit their posters and to act as conference attendees. In addition, each class member was assigned two posters from different peer groups to evaluate along with his or her own poster. Anonymous peer feedback was provided to presenters following the mock conference, and the final project grade represented the assessment by the course instructor.

The second element contributing to candidate motivation to excel on this project was an opportunity for outstanding posters to receive faculty endorsement to submit a proposal to the literacy conference, sponsored by the university department of education and a local reading council. In university courses, the vast majority of assignments are completed for an audience of one, the instructor. At best, recognition for a candidate’s excellent work might come from the wider audience of peers in the class, but for undergraduate teacher candidates to have a venue for sharing their legitimate professional contributions beyond a course grade is rare. Making such an opportunity available on campus was a significant factor in motivating the candidates to produce their highest quality work on the project. Since no limit was placed on how many candidates could be endorsed for proposal submission, only the candidate’s motivation to dig deep and produce a worthy presentation determined who was selected and who was not. As each semester has passed, the prestige of being selected to present at the conference has become more widely known and sought by teacher candidates.

The Literacy Leaders Conference

Leaders of a local reading council affiliated with the International Literacy Association had been encouraging the university to collaborate in order to develop a literacy conference on campus because the annual state literacy conference was held at a location more than five hours away, making attendance by teachers and pre-service teachers in our area quite challenging. The restructuring of the literacy
methods course assignments provided the university with renewed impetus to help establish a regional professional development conference. Jay (2015) reminds those of us in higher education of our responsibility to be literacy leaders:

> It is essential for higher education professionals to participate in the larger educational community to share their expertise, exhibit leadership qualities, and enhance their own and other’s instructional practices. Participation in professional organizations, regional school visits, university-sponsored conferences, and the mentoring of K-12 teachers are strongly encouraged.

(p. 8)

We found ourselves “digging deep” to begin the process, forming a steering committee comprised of literacy methods instructors, teacher candidate representatives, and officers of the reading council. This committee added information on the reading council website to promote the spring conference, accept proposals for workshops and posters, and handle registration. The registration fee was set at $20 per teacher and $10 per teacher candidate to provide accessibility to all and promote sustainability from year to year. Registration logistics, the buffet lunch, travel expenses for a keynote speaker, and other miscellaneous costs were covered by the reading council from the fee. The university provided the building space, programming decisions by education faculty, and costs of morning and afternoon snacks for the Saturday one-day conference.

The conference theme was published in September along with a call for workshop proposals. Workshop proposals came from faculty, teachers, and school administrators in the region. Teacher candidates whose projects had been faculty-endorsed submitted their poster presentation proposals as well. A sub-committee comprised of university faculty, invited teachers, and teacher candidates from the three areas of concentration (early education, elementary education, secondary education), together reviewed and selected proposals for the conference sessions. In January, the committee sent invitations to the accepted proposal writers, and the final schedule of workshops was published soon thereafter.

The deadline for student poster proposals was set much later, just a few weeks before the conference, to allow students from both fall and spring literacy methods courses to submit a proposal if they had a faculty endorsement. These proposals were reviewed by the steering committee and only the highest quality posters were accepted. Now headed into its fifth year, the Literacy Leaders Conference is an established campus event with a high satisfaction rating by attendees (average 4.74/5) and strong teacher candidate involvement. See Table 1 below for candidate participation in conference presentations by course and year.

Conference presentations by Pre-K/Kindergarten teacher candidates and elementary teacher candidates have been uneven; however, secondary candidates have continued to increase in conference presentations each subsequent year. The early education program (Pre-K/K) was not offered before 2013-14, so no candidates were able to participate in the conference before that date. Elementary candidates were introduced to the restructured assignment and its connection to conference presentations in 2012-13, and secondary candidates were introduced to possible conference presentations, but it was an option not tied to a course assignment.

The Early Education program began in 2013-14, and candidates were introduced to the restructured assignment and connection to conference presentation in the spring semester only when Language & Literacy is taught. That year, the restructured assignment and connection to conference presentation were formally integrated into the Elementary and Secondary literacy courses in both fall and spring semesters.

In 2014-15, the conference date was problematic for many Early Education candidates due to a conflict with a long-standing Early Education event. Additionally, the Elementary Integrated Reading & Language Arts Pedagogy class was taught by an adjunct professor with limited commitment and understanding of how the assignment should connect to the literacy conference, and most candidates were unmotivated to participate without faculty support. Only the Secondary Reading in the Content Areas candidates increased their participation due to the consistency of the course instructor’s commitment to the project and growing candidate interest in presenting at a professional conference.

In 2015-16, participation remained strong for the secondary students, however, elementary teacher candidate’s participation remained problematic due to continued changes in course instructors. Although total numbers of teacher candidates remained substantially smaller for early education, which is only in its second year, a surprising number of these students produced a quality product that was accepted for conference presentation. One factor that appears to have had a substantial impact on quality is class size. The early education class only contained 12 students in a single section, secondary class sizes had a mean of 10 students in each section, whereas elementary course sections ranged from 17 to 24 students. As seen in Table 1, it appears that when class size is small, the proportion of those students who are able to achieve the quality required for conference participation is greater.

**Progress over Time: The Challenges and Successes**

An early challenge was to change teacher candidate expectations of course-required projects. Rather than directly presenting, discussing, and testing knowledge of strategies, instructors began to require independent but scaffolded exploration on individually chosen strategies for application in their specific field placement classroom. Because the candidates were required to teach and assess their chosen strategy in a field classroom, understanding the nature of good assessment became important. Two themes emerged as the question of how to assess learning arose. Some candidates tried to justify the assumption that all students understood what only one student had demonstrated, stating that they were using ‘formative’ assessment. “The students were all busy, and I could just tell they got it” was typical in this group. Others stated, “I will give them a test at the end of the week.” These candidates felt that assessment took time away from instruction and did not recognize the purpose for tracking progress daily and making adjustments
to instruction as needed towards objectives. As instructors, we have worked to provide more opportunities for understanding the ongoing nature of assessment and its relationship to instruction. Both groups of teacher candidates required much support in learning about the many ways to collect evidence of learning, that daily assessment does not require a major reduction in instructional time, and that assessment provides valuable information allowing for modifications to increase the effectiveness of instruction for all students.

Along with the peer collaboration and sharing of their professional contributions, candidates began to accept the project assignment and recognize the value it brought them as teachers. Candidate feedback in the courses that changed from traditional to more constructivist assessment of learning has been uniformly positive, as exemplified in anonymous end of course feedback below:

“Being able to move around and look at other’s work helped me learn way more than I would have had [sic] with a test. I liked being able to ask and answer questions about things I didn’t know.”

“Although tests do measure knowledge learned, I felt like this assignment was more interactive and real life [sic] and so [it] was more beneficial to my future as an educator.”

“This is a lot more hands on [sic] than taking a test and [it] makes you learn and apply things instead of just memorizing [them] for an exam.”

“This [gallery walk presentation] was great! It made me feel important, and I got so many ideas from other students as well. Amazing experience allowing me to pull together all of what we have learned [sic] this past semester.”

“It was really fun to see everyone’s ideas and learn about research-based methods to incorporate into your own lessons.”

“I liked this rather than a formal speech. The informal presentation was more fun and the one to one contact let you get your point across. It made me want to go to conferences in the future.”

“I really enjoy being able to show off my work while seeing other peoples’ ideas and asking them questions about their projects.”

Perhaps the most telling course feedback came from a secondary social studies education major:

“I honestly would have preferred a test, but this project forces us to learn more than just studying a textbook and to [sic] demonstrate our knowledge and application simultaneously.”

Due to the increasingly rigorous standards expected for the acceptance of a conference poster, topics teacher candidates chose to research have improved over the common strategies connected to a single book or story we saw in the first year. Recent poster presentation titles have included these more complex ideas:

- I Spy Nouns: A UDL Designed Method for First Grade
- RAPping in Gym: Modifying the RAP strategy for Listening Comprehension in P.E.
- Making Literacy Stick: Active Reading with Sticky Notes in Health
- Drawing Conclusions: Critical Literacy of Historical Photos and Documents
- Inside/Outside: Supporting Inference of Character Traits
- Gallery Wall: Collaborative Writing in Gym
- Book It: Using Picture Books to Develop Schema in Middle School Choir

The timing of poster proposals was a challenge that had to be overcome during spring semester the first year. The conference was scheduled late in the semester, but the proposal deadline did not give spring semester candidates time to complete the full project before proposals were due. To get around this difficulty, the gallery walk poster session was held at midterm (rather than as a final project), with candidates presenting their research and how they proposed to apply it in the field classroom, and then adding their field experiences with students shortly before the conference.

This past year, our first group of teacher candidates completed the commercial teacher performance assessments being piloted in the state. Student teaching course evaluations included unsolicited comments regarding the impact the research-based project from the literacy methods courses had on this challenging task as shown below:

“The project we did last semester really helped me put it all together for the [TPA].”

“Because we had to integrate research and practice before [completing the TPA], I felt like I did a better job on it.”

“The practice I got last semester, justifying my analysis of student learning with research and theory, helped me with the [TPA] commentary.”

“The [TPA] was overwhelming on top of everything else we had to do for student teaching. I was glad I already had at least some experience identifying support to justify why something I chose to do in my teaching segment worked.”

One unexpected challenge came in year three when teaching assignments for participating faculty were shifted, and adjuncts who had not been part of the restructuring dialogue were hired to teach the elementary literacy courses. The importance of clear and regular communication regarding the conference and the link between the course expectations and conference opportunity became clear when only one elementary student created a project that met the stringent criteria required for selected participation.

**Where We Are Now**

In the first four years, 495 students have participated in the research-based project in one or more of their literacy methods courses. Approximately 10% of these students have gone on to present their poster at the Literacy Leaders Conference, which has had an average attendance of 158
teachers, teacher candidates, and school administrators each year. In addition to poster presentations, 19 undergraduate and graduate teacher candidates have co-presented in workshop sessions with faculty and classroom teachers, three secondary poster presenters formed a presentation group with a faculty member to present their strategies at the state literacy conference, and one teacher candidate was invited to develop her poster presentation into an hour-long workshop, which she presented at the neighboring state's Council for Exceptional Children conference. Two teacher candidates applied information they learned at the conference to design a summer academic camp on campus for middle-school students. They taught them to analyze complex texts, translate them into screenplays, and then dramatize them in short video presentations. While some challenges continue, the positive outcomes contribute to the authors’ commitment to continue fine-tuning the literacy courses’ assignments to continue increasing the number of undergraduates presenting conference posters.

The Powerful Transfer of Learning

One final, powerful example serves to illustrate how the restructuring of coursework around a research-based applied project with authentic opportunities for professional sharing can benefit teacher candidates' deep understanding of translating best practices into real classroom practice.

Vicky [pseudonym] was a social studies education major assigned to a middle school classroom for her literacy methods field placement. For her research focus, she explored the impact of summarization on student learning. In seeking to apply this to her own lessons, she asked students to summarize what they learned from her lesson by creating a “hashtag,” such as those used on social media sites to categorize conversation threads, and then write a justification for it. Only five minutes remained at the end of the lesson for the writing task, yet students were deeply engaged and unwilling to stop when the bell rang. At least one student was overheard discussing the activity with a peer in the hallway as he went into his next class.

Vicky’s poster was subsequently presented in the gallery walk and at the Literacy Leaders Conference, where attending area teachers viewed it. The conference steering committee later received the following unsolicited comment via email from one of the teachers who had viewed Vicky’s poster:

I wanted to let you know how much I enjoyed attending the conference. I actually found perhaps [sic] my best and most applicable “take-away” from the conference, not in a specific workshop, but rather through the very helpful and informative poster presentations that were prepared by [the university’s] students of education. I was especially impressed with [Vicky’s] poster. I felt that her hash tag activity would be perfect for my high school special education students who love their social media. I tried it with great results, then [I] shared it with another teacher in our school who is very ‘old school.’ He didn’t know what a hash tag was, but I convinced him to give it a try. His students loved it and he is now planning to keep using it as well. Thanks.

Smith and Colby (2007) have reminded us that by setting challenging tasks and providing feedback that encourages deeper processing, we as teacher educators are more likely to produce high-quality learning outcomes in our teacher candidates. In turn, sharing professionally as an undergraduate teacher candidate encourages a commitment to the profession at the beginning of their careers.

References


Table 1: Teacher Candidate Conference Presentation Summary

<table>
<thead>
<tr>
<th>Course</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
<th>2015-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants/Total Candidates</td>
<td>P/T</td>
<td>%</td>
<td>P/T</td>
<td>%</td>
</tr>
<tr>
<td>Language &amp; Literacy [Pre-K &amp; Kindergarten]</td>
<td>n/a</td>
<td>3/14</td>
<td>21%</td>
<td>1/8</td>
</tr>
<tr>
<td>Integrated Reading &amp; Language Arts Pedagogy [Elementary K-6]</td>
<td>8/83</td>
<td>10%</td>
<td>9/82</td>
<td>11%</td>
</tr>
<tr>
<td>Reading in the Content Areas [Secondary]</td>
<td>1/41</td>
<td>2%</td>
<td>5/42</td>
<td>12%</td>
</tr>
</tbody>
</table>

About the Authors

Dr. LeAnn Johnson worked as a special education teacher in New York before moving to Maryland where she completed a MS in Reading Instruction and a PhD in Learning Disabilities with an emphasis in Reading and Writing. She now serves as the Director of Teacher Education at Shepherd University where she teaches literacy and special education courses.

Dr. Rebecca Mercado is Associate Professor of Literacy Education and Elementary Specialization Coordinator at Shepherd University. She teaches the Integrated Reading/Language Arts Pedagogy and Foundations of Literacy courses. Previously, Dr. Mercado taught 17 years in elementary classrooms and served as a K-5 Title One Reading Specialist before completing her PhD in Reading Instruction from the University of Maryland.

Dr. Karin Spencer is the Early Education Coordinator at Shepherd University. She has nearly 20 years of experience in the field of early childhood education as a practitioner, program administrator, and teacher educator. She has a master degree and Ed. from The George Washington University in early childhood special education with a focus on inclusive practice and taught in inclusive early childhood settings.